

**COVID-19 INFECTION CONTROL AND PREVENTION IN OPHTHALMOLOGY OFFICES**  
**PRE- APPROVED TEMPLATE**

**Title:** Ophthalmology Clinical Practice Patterns to Reduce COVID-19 Infections

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<b>Project Description</b>	To implement practice patterns in a retina clinic to protect patient and staff from exposure to COVID-19. Description and assessment of practice patterns aimed at reducing clinic exposure time for patients, inter-personal exposure, and droplet safety measures.
<b>Background Information</b>	Due to the ongoing COVID-19 pandemic, social distancing and limiting inter-personal spread has become paramount. Continuing to practice during this critical time is strategically aimed at reducing the transmission risk and has thus led to numerous changes to our practice patterns. Such changes include reducing the volume of patient visits to urgent, emergent, and to procedures needed to sustain vision. Week to week we will see our practice standards shift as the community exposure risk evolve.
<b>Project Setting</b>	Group Practice
<b>Study Population</b>	We are a five physician vitreo-retina only practice. Our practice has implemented numerous protocols including patient facing staff to wear masks, providers to additionally wear eye protection, exam rooms to be wiped down with disinfectants after each patient and implement large slit lamp shields. Patient exposure to the clinic has been streamlined to reduce foot traffic and length of visit by reducing patient volume to decrease wait time, having the patient wait in their car in lieu of the waiting room and being called directly into the room via their cellphone, and reduced ophthalmic imaging unless absolutely necessary. Physicians are assigned staff to limit circulation of staff between physician clinics as well. Due to our volume of neovascular age related macular degeneration patients requiring ongoing anti-VEGF injections to sustain their visual function, we hope to assess the impact of practice pattern adjustments aimed at decreasing total clinic exposure time in this high-risk population.

<b>Quality Measures</b>	To compare total office visit time before and after implemented practice patterns during the COVID-19 pandemic aimed at shortening visit time in an effort to mitigate infectious risk for neovascular degeneration patients requiring ongoing anti-VEGF injections.
<b>Project Interventions and Improvement Period</b>	Patient facing staff to wear masks, providers to additionally wear eye protection, frequent hand washing, exam rooms to be wiped down with disinfectants after each patient, implement large slit lamp shields, Gloves during procedures, reduced patient volume, nullify the waiting room and have patients wait in their cars and directly telephoned into the exam room, restrict unnecessary visitors, providers and staff to wear scrubs that are washed daily, reused masks cleaned by 30 minute UV light sterilization, dramatically reduce photography and imaging, clean counters every 30 minutes. For anti-VEGF injection visits for neovascular age related macular degeneration, limited work-up to only vision +/- IOP without serial OCT or dilation.
<b>Project Team</b>	My four partners and I will be participating in the practice pattern adjustments and I will be collecting and analyzing the data of patient clinic exposure time per visit comparing before and after pandemic related adjustments were made.

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**Section 2. Project Evaluation**

<b>PROJECT SUMMARY</b>	Review the effect and adjustment of implementing the policy changes after a minimum of 30-days and in the following sections, please prepare a brief summary of the project highlighting the data collected, effectiveness of the measurement approach, interventions and the overall impact of the project.
<b>BASELINE DATA</b>	Just prior to the implementation of our outlined COVID-19 related safety measures, the average injection-only visit over a consecutive 10-day period from time of check-in to check-out of our five-retina physician group was 77 minutes (SD 26.9 minutes). Additionally, the average follow-up time visit was 87.6 minutes (SD 34.4).
<b>FOLLOW-UP DATA</b>	Following implementation of the outlined COVID-19 related clinic safety measures, the average injection-only visit over a consecutive 10-day period from time of check-in to check-out of our five retina physician group was 61.6 minutes (SD 17.6 minutes), a reduction of 15.4 minutes. Additionally, the average follow-up time visit was 70 minutes (SD 86), a reduction of 17.6 minutes. These reported times include the initial patient wait period after checking in, in which the patient waited in his or her personal car thus additionally minimizing clinic exposure time.
<b>PROJECT IMPACT</b>	The clinic measures aimed at reducing the patients' total clinic exposure time were successful. By reducing a patient's visit time, it is reasonable to suspect a reduced patient and staff exposure risk. The average injection-only visit time was reduced by 15.4 minutes. The follow-up visit time was reduced by 17.6 minutes. The patients' clinic exposure time was additionally reduced by having the patients wait in their vehicle and called in once ready to be directed straight into an exam room. This wait time is not reflected in the times reported due to difficulty in reporting accurately. Additionally, the follow-up appointments during the height of the pandemic were limited to more urgent chief concerns and thus can be expected to require longer visits.
<b>PROJECT REFLECTION</b>	<ul style="list-style-type: none"> <li>• <b>Do you feel that the project was worthwhile, effective?</b> Yes</li> <li>• <b>How might you have performed the project differently?</b> A significant portion of the reported visit time was spent with the patient waiting in his or her car, thus safely away from continuous clinic exposure. We were unable to accurately record this wait time, of which would even more reduce the total reported time a patient spent in the clinic per visit type. If this were done differently, I would have the front staff record both check in time and re-entry time.</li> <li>• <b>Please offer suggestions for other ophthalmologists undertaking a similar project.</b> Select one local major hospital, one local/state medical society and one national medical authority plus the CDC and use their guidelines as your template. Too much information is tiring and conflicting. Keep staff well informed and employed to reduce the fear factor and promote staff stability If a similar project is undertaken, analyzing the patient's wait time in his or her car to subtract from the total visit exposure duration would more accurately reflect</li> </ul>

	the total clinic exposure time following the implemented COVID-19 related safety measures.
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