

COVID-19 INFECTION CONTROL AND PREVENTION IN OPHTHALMOLOGY OFFICES

PRE- APPROVED TEMPLATE

Title: Protecting Retina Patients from Transmittable Diseases Through Increasing Hygiene and the Flow in the Clinic

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Project Description	A modification on the patient flow through the office and enhanced cleaning after each examination will be done to maintain zero cases of COVID-19 acquired in the office.
Background Information	In a world where globalization has settled and constant moving of people and goods from different countries in short period of time, the amount of transmittable diseases is going to increase. No matter where the practice is located in the United States, there are going to be people that traveled abroad and/or there will be products that came from other countries. Recognizing this, health care providers should always screen patients regardless their age or condition. Patient flow through the office should be strategically developed for diminish the interaction between patients including seating on waiting areas, work up and imaging studies. At the end of the visit, the rooms should be cleaned including under the arm rest of the chair, doorknobs, and all the equipment used for the examination.
Project Setting	Multi-Specialty Group
Study Population	<p>The population to be studied will be consisting of retina patients that could not stop their treatment with injections. Also, patients that require emergency treatment.</p> <p>To keep the practice open and to see and keep patients safe, changes were done on the schedule, front desk and the flow for the patient to be worked up including imaging test.</p> <ol style="list-style-type: none">1. Schedule. The schedule was reduced to only have the patients described above. More time in between visits was added to prevent conglomeration. The patient can only come in when is the time of the visit without any companion (unless the patient is incapacitated). If they arrive prior to the visit, they will be asked to wait in the car. The follow up was stretched in average of two to four weeks for the injections. The postop examination has been also modified to same day of surgery exam, then a week later and a month later on average.2. Personnel. The front desk personnel got modified. There is one person right at the main door doing screening (questions, temperature). If someone has is positive for symptoms or traveling, then the patient is sent back home and

instructed to call their primary care provider. The patient is already pre-registered, so no interaction with the desk personnel. Work up and treatment is done in a pod system. So, the patient is brought into one room only. If needed to get testing, same technician takes the patient to and from the diagnosis room. Once the patient is examined and/or treated, he or she is escorted to the exit. The check out and billing is done through the mail or phone.

3. Disinfection. After each encounter with the patient, the room is disinfected. This includes the chair, under the arm rest, head support. The slit lamp including the chin rest, forehead band, handles, barrier between patient and doctor, joystick, knobs, etc... Lenses are cleaned with antiseptic. Doorknobs and side of the door is also cleaned.

At all times, everyone that is working in the office is required to use a protective mask, examination gloves (if interaction with a patient is expected).

<p>Quality Measures</p>	<p>Increasing the protective measures from the previous protocols (full-face barrier on the slit lamp, cleaning the chair in more detail, using a mask at all times, improving patient flow and limiting the people that can come into the office) will prevent or diminish the possibility of spreading the disease to patients, co-workers, and physician.</p>
<p>Project Interventions and Improvement Period</p>	<ol style="list-style-type: none"> 1. Schedule modification 2. Flow improvement 3. Decrease patient time in the building 4. The usage of masks at all times 5. Cleaning room after each patient encounter including chairs, door edge and knobs 6. Pre-check in and mail check-out/billing 7. Washing hands with soap and water and/or alcohol base hand sanitizer
<p>Project Team</p>	<ul style="list-style-type: none"> • I'm the active physician examining and treating the patients. Also checking all of the protocols are in place at the beginning of the day. Also available to support people on the front desk if there are questions. • Technicians are in charge of escorting the patient, workup, imaging, and cleaning the room. Also, to monitor that the protocol is been follow. • Front desk personnel are the first line of screening and doorkeeper.

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Section 2. Project Evaluation

PROJECT SUMMARY	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.
BASELINE DATA	<ol style="list-style-type: none"> 1. Schedule modification (number of visits): 190 patients per week 2. Support staff: 11 people (Front desk, workup and technicians) 3. Disinfection examination room: 1 instrument (slit lamp) 4. Flow improvement (time in the building): 90 minutes 5. Handwashing time in between patients: 15 seconds
FOLLOW-UP DATA	<ol style="list-style-type: none"> 1. 1- Schedule modification (number of visits): 85 patients per week 2. Support staff: 8 people (Front desk, workup, and technicians) 3. Disinfection examination room: 5 areas (slit lamp, desk surface, computer keyboard/mouse, examination chair, entrance into the room door) 4. Flow improvement (time in the building): 65 minutes 5. Handwashing time in between patients: 20 seconds
PROJECT IMPACT	<p>Comparison of the modified parameters pre and post (6 weeks after) whereas follow:</p> <ol style="list-style-type: none"> 1. Schedule modification (number of visits): (Post) 85 patients / (Pre) 190 patients per week = A decrease of patients seen to 45% 2. Support staff (Front desk, workup and technicians): (Post) 8 people / (Pre) 11 people = A decrease of personnel to 73% 3. Disinfection examination room: (Post) 5 areas / (Pre) 1 instrument = An increase of 500% of areas cleaned after each exam. 4. Flow improvement (time in the building): (Post) 65 minutes / (Pre) 90 minutes = A decrease of patient time in the building of 72% 5. Handwashing time in between patients: (Post) 20 second / (Pre) 15 seconds = An increase of washing time of 134%

PROJECT REFLECTION	<p>Overall, I felt the chosen parameters gave the opportunity to reassure me that it was safe to continue treating patients safely protecting the personnel and the patients. There were no COVID-19 cases reported on either side after 6 weeks of observation. What I would have done differently is the curbside check-in and remote check out. That would have decreased the time of the patient in the building and perhaps the number of support personnel.</p> <p>It is important to identify bottlenecks in the patient flow where there could be direct exposure and work on improving it. We started to work in pod systems, so the technicians were the ones working up the patients, doing imaging tests, and assisting (scribing or setting up and injection). It helped to reduce exposure time as well as the improvement of the patient flow. Also identifying surfaces that are touched on a regular basis (keyboards, computer mouse, doorknobs) as sources that need to be cleaned.</p>
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