COVID-19 INFECTION CONTROL AND PREVENTION IN OPHTHALMOLOGY OFFICES

PRE- APPROVED TEMPLATE

Title: Eye Physicians PC COVID-19 Safety and Precautions Implementation

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Project Description	In order to provide a safe environment for patients and staff, safety measures and protocols have been developed to comply with CDC and AAO guidelines. Furthermore, these measures were tailored for our specific ophthalmology practice and patient population.
Background Information	Eye Physicians PC is a group consisting of comprehensive ophthalmologists and optometrists located in a rural setting. At the time of initiating the protocols, no confirmed cases of COVID-19 were present in our county of practice.
Project Setting	Group Practice
Study Population	Every aspect of our practice has been involved in implementing these protocols from the front desk scheduling to technician work-up. **SCHEDULIING** **Routine Optometry Group** • Front Business Office will reschedule all routine exams on the schedule for at least 3 weeks out. Any patients NEW or ESTABLISHED that call in to schedule a routine exam need to be scheduled 4 weeks out. **Medical Group** • Anyone that is an urgent or emergent case needs to be scheduled only after consulting with the provider in the office unless it is for an obvious reason such as foreign body, sudden loss of vision, etc. • Doctors will review their remaining patients weekly schedule and determine if the remaining patients need to be seen or not using the guidelines of whether they are "Sight Threatening/Urgent/Emergent/Post Op". If a patient needs to be seen but is in a high-risk category because of their age for example, extra safety precautions will be used including using surgical masks and gloves around them and on them during their exam. Many of our retina patients who receive injections are in the high-risk age group. If doctor determines a patient in this high-risk group needs to be rescheduled, the doctor will make the phone call to explain to the patient. Then they can pass the list to the Front Business Office staff to actually find a future appointment time. **Patient Screening:** All patients are to be meet in the building entrance where a screening would be performed. • Questions about cough/cold/fever. Any patient not feeling well would be rescheduled. • Questions about recent travel to areas of concern highlighted by CDC. Any patient from a high-risk area would be rescheduled. • Temperature would be taken and if elevated would be rescheduled.

	• Only the patient would be allowed into building, transportation would be asked to wait out in the parking lot. • The patient would then be advised to have a mask placed. **Triage:** • Because of the concern for COVID related conjunctivitis, all "red eye" add-on patients would send a picture to the MD who would screen for viral conjunctivitis. • All triage patients were discussed with the MD to determine if the condition appeared to be urgent/emergent or whether management could be performed without in person evaluation. **Distancing:** • The waiting area was rearranged such that chairs were 6 feet apart. **Technician work-up:** • All technicians would perform work-ups with masks in place. • Each room was cleaned with approved healthcare cleaners that were effective toward COVID-19 before each patient encounter **Physician evaluation:** • Each physician would examine patients with a mask in place. • All slit lamps were fitted with shields. • The physician would evaluate the patient and then determine appropriate management and follow-up All of the above processes involved bi-weekly meetings with the staff involved and appropriate training.
Quality Measures	Planning portion pre-COVID: - No determination if patient was urgent/emergent or sight threating disease.- No screening at front door.- Other family members were allowed in with patient.- Seating area was not separated by 6 feet.- Face masks only for patients with cough.- Each room was sanitized but with new protocols, the rooms were sanitized in plain view of the patient.- Patients were double booked, new protocols called for appointments every 30 minutes to allow for distancing. Change in care process:- Upon initiation of the protocol there were no known cases in the county of the practice.- Protocols were created with the guidance of CDC, AOA, AOA, and local DHS.- Everyday the protocol is adjusted as new recommendations would become available (travel restrictions, etc.)- Providers would have a weekly conference to determine any significant changes that would be needed for the next week.
Project Interventions and Improvement Period	**Changes to care processes:** • Hand hygiene: education about washing with soap and water for 20 seconds, using >60% alcohol based hand sanitizer, additional sites of sanitizer dispensers were installed. • Surface cleaning: diligent cleaning of all surfaces with a disinfectant appropriate for COVID-19 as mentioned above, professional cleaning of office daily with a "deep" clean on weekends. • Screening: screening methods as mentioned above. • Scheduling: increasing time between visits to allow for crowd mitigation • Staffing models: consideration of shift work 14 days at a time to reduce exposure of the entire workforce to a potential infected patient. • Telemedicine: doctors call patients who may be able to reschedule at a

	later date, pictures sent to doctor to determine if patient could be managed without physical evaluation, the EMR in which our practice uses is currently working on an appropriate HIPPA telemedicine platform.
Project Team	• Practice partners: discuss protocols on a daily basis, perform weekly meetings to readdress develops and need for protocol updates. • Practice administrator: communicate with staff the changes in the protocols. • Clinical supervisor: educate and train technicians on protocols and protocol changes. • Front desk supervisor: educate and train technicians on protocols and protocol changes

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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	**Prescreened:** 110/121 (90.9%): Front desk staff called day prior to appointment to screen regarding exposure to COVID-19, personal positive result of COVID-19, family member COVID positive results, recent travel history out of state and to local county "hot spots." We also asked about fever, chills, cough, and other systemic symptoms. If the patient was positive for COVID-19 or had family members positive, the would be rescheduled in accordance with the local health district recommendations. If the patient had recently travelled to a local "hot spot," the person was rescheduled for 1 week. If the patient had symptoms, we advised them to contact their PCP and reschedule in accordance to the PCP's guidance. 11/121 (9.1%): Patients were unable to be contacted via phone, therefore the above screening was performed at the entrance of the building. Potential "walk-in" patients were managed in this manner as well. **Screening of Patients at Entrance:** 121/121 (100%): The prescreening questions were again asked at the entrance with the above rescheduling if required. Temperature via a forehead thermometer was then obtained. If temperature was >100 deg F, the patient was politely asked to contact their PCP and reschedule their appointment per the PCPs guidance. **Screening of Staff:** At the beginning of the day, each member of the practice had their temperature taken by another person. The temperature needed to be <100 degrees F in order to proceed into the building for the workday. A sheet was provided to document that temperatures had been obtained. **Staff Travel Ban:** Our practice mirrored the travel ban of our local community hospital. It started as "no travel outside of Nebraska." As more cases became prevalent, the ban changed to "no travel outside of the county you work or live." This ban will then be slowly lifted in accordance with the local health district and community hospital.
FOLLOW-UP DATA	**Social Distancing in Building:** 121/121 (100%): The waiting room, work-up rooms, imaging rooms, and exam rooms were all arranged such that no patient was ever in violation of the "6 feet apart" rule. In order to accomplish the social distancing, waiting room chairs were physically removed and seating areas were all arranged 6 feet apart. Most importantly, the flow of patients needed to be spaced out substantially. Scheduling was changed to 1 patient/30 minutes for retina injections and 1 patient/hour for all

	other urgent/emergent patients. Furthermore, unless needed for transferring, no additional people were allowed to come into the building with the patient. **Sanitation:** Each surface in which there was patient contact was cleaned with a CDC approved disinfectant prior to contact of that same surface by another patient. In order to provide patient comfort, exam rooms and imaging equipment were physically cleaned in front of the patient. **Determination of Urgent/Emergent Cases:** In accordance with the AAO guidelines, all non-urgent/emergent patients were rescheduled. Each provider was personally responsible for going through the upcoming weeks schedule and determining not only who was urgent/emergent but also determining appropriate reschedule dates for the other patients. **Viral Conjunctivitis Telemedicine:** 4/5 (80%): Upon antidotal reports of COVID-19 associated conjunctivitis, protocols were put in place to implement telemedicine for all "red eye" complaints. If a patient had the complaint of a "red eye," we instructed the patient to take a picture of their eye and send it to our EMR telemedicine platform for evaluation. Of the "red eye" complaints, 5 were determined to be consistent with viral conjunctivitis. However, one patient who was eventually determined to have viral conjunctivitis, made it all the way to in person physician evaluation. A root cause analysis was performed and determined that the screener proceeded to allow the patient into the building prior to verification that the physician had reviewed the telemedicine photo. **Telemedicine:** 32/32 (100 %): Prior to COVID-19, our practice did not have a platform in which to provide telemedicine services. In order to minimize patient travel and exposure risks, we implemented a protocol for telemedicine. All patient that called in or showed up with a "red, painful eye" would be instructed how to take a picture of their eye and send it to our telemedicine platform. The physician would then evaluate the picture and determine if the patient needed to be physically evaluated. 7/32 (21.8%): Required in person evaluation following initial evaluation of the picture by the physician. 5/32 (15.6%): Were attempted to manage via telemedicine but the condition did not improve and within the next couple of days required in person evaluation. No person had a serious adverse effect on their vision our ultimate outcome due to the delay of in person evaluation. However, from our limited experience with telemedicine, a single external photography demonstrating conjunctival injection is not likely adequate for a confident diagnosis. 0/32 (0%): We did not bill for any of the telemedicine services. We documented in the chart but elected as a practice not to attempt to get reimbursed for the telemedicine services.

PROJECT IMPACT	**<u>Fiduciary Duty:</u>** During this pandemic, one of our responsibilities was to provide an income for our employees. We were able to obtain a PPP loan. 0/52 (0%): There were no furloughs or employee layoffs. 2/52 (3.8%): Two employees due to child responsibilities elected to proceed with protections under the CARES Act. **<u>COVID-19 Exposure:</u>** At the time of starting the project, there were 0 confirmed cases in the county of the practice. Currently, there are 104 confirmed cases in the county. 0/121 (0%): There has been no known exposure of patients at our practice. 0/52 (0%): No employees have tested positive for COVID-19, 1 physician tested negative. **<u>Reopening Practice:</u>** Our state has currently stated that a partial reopening will occur on May 4th. We will continue to keep a lighter schedule in order to allow for social distancing. Extended and weekend hours will likely be required to accommodate the backlog of patients. We will start to evaluate elective surgical candidates as well as evaluating urgent/emergent cases. Truly routine exams will continue to be rescheduled for later in the summer. Elective surgery is tentatively scheduled to start back toward the end of May, but this will be dependent upon the national criteria set forth regarding ventilators, PPE of at least 2 weeks, etc.
PROJECT REFLECTION	• **Do you feel that the project was worthwhile, effective?** Yes • **How might you have performed the project differently?** I would have liked to add a reimbursement arm to the telemedicine study. It would have been interesting to determine the percentage of collected claims via telemedicine. Furthermore, looking more in depth into the time and resources required in out practice to successfully implement telemedicine protocols. • **Please offer suggestions for other ophthalmologists undertaking a similar project.** A person needs to purposefully collect patient numbers in order to provide statistical numbers for the study. In order to do so, communication to staff is required in order to obtain this data correctly. Real-time data collection vs retroactive acquisition allows for less collection bias.