

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

Title: Patient and Staff Safety During COVID19 Epidemic

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Project Description	This project serves to decrease risk of exposure to and infection by COVID19 in practice staff, physicians and patients during the height of the COVID19 epidemic in New York.
Background Information	COVID19 has proven to be a highly virulent pathogen with concerning rates of morbidity and mortality in adults; while these rates are worse with age, even younger adults may need hospitalization or may succumb to the disease. Without a current treatment paradigm other than supportive care, it has become imperative to decrease potential exposure and, if exposed, potential infection using extreme measures in clinical care.
Project Setting	Hospital
Study Population	This project incorporates multiple different process changes: employee training in patient screening and employee use of protective gear, physician training in patient screening and use of protective gear, incorporation of higher levels of room disinfection, novel incorporation of telemedicine and strict patterns of patient visit deferral. Additionally, novel incorporation of virtual teaching is being incorporated into resident education.

<p>Quality Measures</p>	<p>Prior to COVID19, there was no training in patient screening and minimal use of protective gear (typically gloves); there was no physician training in COVID patient screening and minimal use (limited to facemask or gloves) in protective gear; rooms were disinfected daily with cleaning of the slit lamp and equipment between patients; telemedicine was not used and patients were not purposefully deferred for infection control; virtual education was not used for trainee education. Using recommendations put out by hospital leadership, the AAO and articles being published in the literature, these proposed changes were enacted. Performance measures will be: percentage of staff trained in COVID19 screening and PPE use; percentage of physician training in COVID19 patient screening and PPE use; percentage of conversion to high level room disinfection between each patient; percentage of personal patients converted to telemedicine or deferred; and percentage of resident lectures converted to virtual lecture and additional virtual educational opportunities, over the time period of March 15th to April 15th, 2020.</p>
<p>Project Interventions and Improvement Period</p>	<ol style="list-style-type: none"> 1. Training of employees and physicians in patient screening for COVID19 2. Training of employees and physicians in use of appropriate PPE for COVID19 3. Training in complete room disinfection between each patient during the COVID19 epidemic 4. Conversion of every Oculoplastics visit safely possible to telemedicine or deferred for 2 months 5. Conversion of all trainee lectures to virtual lectures + incorporation of novel methods of resident education during redeployment to other services in the hospital
<p>Project Team</p>	<p>I am a leader in this project team; other leaders include Departmental leaders (Chairman, Vice-Chairman, Residency Program Director) as well as the head of the technicians.</p>

COVID-19 Infection and Prevention in Ophthalmology Offices
Section 2. Project Evaluation

<p>PROJECT SUMMARY</p>	<p>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.</p>
<p>BASELINE DATA</p>	<ol style="list-style-type: none"> 1. Training of employees and physicians in patient screening for COVID19: 0/120 (0%) in that the screening originally implemented was not adequate by the end of the evaluation period. 2. Training of employees and physicians in use of appropriate PPE for COVID19 0/120 (0%) in that the initial recommendations regarding PPE were not adequate by the end of the evaluation period. 3. Training in complete room disinfection between each patient during the COVID19 epidemic 120/120 (100%) in that all personnel had been advised to disinfect room prior to each patient on March 13th. 4. Conversion of every Oculoplastics visit safely possible to telemedicine or deferred for 2 months 0/201 (0%) 5. Conversion of all trainee lectures to virtual lectures + incorporation of novel methods of resident education during redeployment to other services in the hospital 3/19 (16%)
<p>FOLLOW-UP DATA</p>	<p>There are 120 staff (employees and physicians).</p> <ol style="list-style-type: none"> 1. Training of employees and physicians in patient screening for COVID19: 120/120 (100%) in that training for more robust screening has been implemented. 2. Training of employees and physicians in use of appropriate PPE for COVID19 120/120 (100%) in that all are trained in the most up-to-date recommendations at this time. 3. Training in complete room disinfection between each patient during the COVID19 epidemic 120/120 (100%) in that all personnel continue to disinfect room prior to each patient on March 13th. 4. Conversion of every Oculoplastics visit safely possible to telemedicine or deferred for 2 months 14/201 in person (7%) 116/201 postponed (58%) 71/201 telemed (35%) 5. Conversion of all trainee lectures to virtual lectures + incorporation

	<p>of novel methods of resident education during redeployment to other services in the hospital</p> <p>16/19 (84%); however, new access to online lectures across the region greatly supplemented the curriculum.</p>
<p>PROJECT IMPACT</p>	<p>There was a massive effort expended in the training of employees and physicians in patient screening for COVID19 and appropriate use of PPE for the same. Not only were all rooms and permanent room equipment disinfected between each patient visit, but all portable items such as lenses were as well. A minority of patients were seen in person; the vast majority were either incorporated into a telemedicine format or postponed for safer care. All trainee lectures were converted to virtual, and new teaching methods were put into place.</p>
<p>PROJECT REFLECTION</p>	<ul style="list-style-type: none"> • Do you feel that the project was worthwhile, effective? Yes • How might you have performed the project differently? It would have been helpful to have concrete definition of what training and screening mean -- this idea and definition changed over the course of the project and therefore scores at baseline were constantly changing. But in general, it was a timely project. • Please offer suggestions for other ophthalmologists undertaking a similar project. It is easier to collect information routinely throughout the project than it is to gather it in larger clumps later. Define what 'training' means very exactly.