

COVID-19 Roundtable:

How Retina Doctors From Around the United States Are Adjusting Their Clinics



A look at how retina practices have changed their protocols during the COVID-19 outbreak.

MODERATED BY S.K. STEVEN HOUSTON III, MD; WITH YEWLIN CHEE, MD; ALLEN CHIANG, MD; JOHN B. MILLER, MD; EDWIN H. RYAN, MD; AND THANOS PAPAKOSTAS, MD

I asked some of my colleagues in the United States to share the early actions their practices have taken during the COVID-19 crisis. Doctors from a number of hot spots—from New York to Seattle—have shared their tactics. We also received a check-in from Minneapolis, a city with an experience different from that of outbreak zones but aware of the impending risk.

These interviews were conducted shortly before Retina Today went to press in early April. The physicians quoted in this piece may have altered their practices by the time you read this. Nevertheless, this roundtable serves as an important snapshot in time, and we believe you will find the tactics shared by these retina specialists helpful.

For the most up-to-date information as it pertains to retina specialists, visit the COVID-19 Member Update page on the ASRS website by visiting bit.ly/ASRSCOVID-19. For news as it pertains to ophthalmology during this crisis, visit [Eyewire.news](https://www.eyewire.news).

—S.K. Steven Houston III, MD

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What precautions are you taking in your clinic to protect your patients?

We are using screening questions to evaluate for symptoms of fever and acute respiratory infection. Patients with symptoms who need to be seen are given a surgical mask to wear and are brought directly to a private room to minimize exposure to other patients. We have limited the number of people who enter the building by restricting clinic visits to only urgent and emergent patients, per AAO guidelines. We have a new rule regarding

patient caregivers that allows each patient to bring only one other person with them to an appointment.

We have limited imaging as much as possible to obviate patient movement after an initial workup. For example, if I use a treat-and-extend protocol for a wet AMD patient, I would consider forgoing an OCT and only administering an injection. I would then schedule the follow-up at the most recent interval where stability had previously been demonstrated.

What personal precautions are you taking to protect yourself as a physician?

I have relatives in Singapore who are ophthalmologists and who practiced during the SARS and COVID-19 outbreaks. When it was evident that community spread was occurring in Seattle, I found their experience to be useful in guiding our plan.

Our practice installed large slit-lamp shields that serve as an additional barrier between patient and physician. Providers wear surgical masks for exams. Personally, I also wear eye protection and change my scrubs after clinic. I wear my hair up in a bun and shower as soon as I get home.

The AAO has advised that retina specialists offer only urgent and emergent in-office care. Where do you draw the line between urgent and nonurgent in-office care?

The patients who remain on my schedule are chiefly those receiving anti-VEGF therapy for wet AMD, recent postoperative follow-up patients, or patients with new or worsening visual symptoms.

Many nursing homes in the Seattle area are on lockdown, and I have a handful of monocular patients with wet AMD who receive anti-VEGF injections in their seeing eye. They have missed their appointments as a result of the lockdown. In these cases, I call the nursing home and discuss the patient's case with the nursing home's medical staff to emphasize the importance of treatment and the potential consequences of missing injections. In some cases, these patients have come to the office for an expedited injection-only visit.

The AAO has also advised against performing nonurgent surgical procedures. Which types of surgical cases do you consider nonurgent?

The University of Washington has a moratorium in place on nonurgent surgeries through mid-May. The cases that remain on my schedule include rhegmatogenous retinal detachments and secondary vitrectomies after open globe injuries. Macular holes (particularly if they are long standing), diabetic vitreous hemorrhage without additional macula-threatening pathology, membrane peels for epiretinal membranes or vitreomacular traction, silicone oil removal, and dislocated lens cases are non-urgent and can be rescheduled.

There are exceptions, however. Consider a scenario in which a monocular patient needs surgery that would allow him or her to perform the activities of daily living. In these situations, I think the case can be made to take the patient to the OR.

Thanos Papakostas, MD

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What precautions are you taking in your clinic to protect your patients?

Patients are screened before they come to the office for COVID-19 symptoms. Clinics are down-booked and appointments

are spaced to avoid crowding in waiting rooms. Patient workups and examinations occur in the same room to minimize patient movement in our practice. After a patient leaves a room, it is thoroughly cleaned, and patients are advised to wear masks.

What personal precautions are you taking to protect yourself as a physician?

I wear an N95 mask, goggles for eye protection, and gloves. If a patient has COVID-19 symptoms, I wear a gown, too. We installed protective shields at the slit lamps. Other measures include the usual ones, such as social distancing and frequent handwashing.

The AAO has advised that retina specialists offer only urgent and emergent in-office care. Where do you draw the line between urgent and nonurgent in-office care?

The cases that need to be seen are anything involving acute vision loss and acute eye pain. Regarding injections, I extend the interval in as many patients as I can; I continue to administer injections to patients on monthly therapy. Unfortunately, patients with AMD are vulnerable patients who, should they get COVID-19, have the highest chance for admission to ICU and mortality.

Before an appointment, I have a phone call with the patient in which I discuss the pros and cons of a visit, and a decision to proceed is made on a case-by-case basis. Postoperative patients are also seen in the clinic. There is a telemedicine initiative in our facility that works nicely for other ophthalmic subspecialties and medical specialties. For our field, given the nature of the exam and practice, telemedicine consultations are limited in general.

The AAO has advised against performing nonurgent surgical procedures. Which types of surgical cases do you consider nonurgent?

Retinal detachment (macula-on and recent macula-off), endophthalmitis, intraocular foreign bodies, and open globe injuries must be addressed. Cases of epiretinal membranes, macular holes, diabetic tractional retinal detachments, vitreous hemorrhages without tears or detachment, IOL fixation, and floater removal are examples of nonurgent cases.

As we speak, our ORs are converted into ICU rooms to deal with the astronomic surge of critical COVID-19 patients in New York City.

A Final Note

The first rule in medicine is, "Do no harm." The risk of an elderly, immunocompromised, or diabetic patient (which are the majority of the patients in every retina practice in the United States) contracting a catastrophic COVID-19 infection by coming to an eye care facility (especially in a hospital setting) is much higher than the risk of vision loss by delaying eye care for most of our patients. Please try to keep these vulnerable patients out of offices.

S.K. Steven Houston III, MD

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What precautions are you taking in your clinic to protect your patients?

As a first step, we talked to all of our employees, explaining the risks of COVID-19 to our patients, staff, and physicians. We then established company-wide policies regarding basic procedures for hand

hygiene, office and equipment cleaning, and cleaning of high-touch points.

We reviewed common signs and symptoms of COVID-19 and reviewed when to discuss a situation with a supervisor. Employees with signs or symptoms of a cold, flu, or COVID-19 are asked to stay home from work and contact a supervisor for testing steps and information on when to return.

Second, we adjusted our schedules to prioritize patients that need intravitreal injections to maintain disease stability. We prioritize other urgent patients with potentially sight-threatening issues. We have rescheduled all other patients for a later time. Our staff calls all patients who were kept on the schedule to confirm their appointments. At the time of confirmation, we ask about signs, symptoms, and risks of COVID-19, and reschedule the patient if necessary.

After prioritizing patients that need to be seen, our clinical staff works with each individual physician on in-office precautions. By design, our practice does not have more than one physician in an office at the same time. As a result of having 19 offices, the same staff travels with each physician to each clinic. There is some cross-coverage during OR days, but we are attempting to limit potential spread among physician teams. Any staff member who develops fever, cough, nasal congestion, or shortness of breath will be asked to stay home and self-quarantine until the fever has subsided for 48 to 72 hours without medication and symptoms have improved.

As patients come into our offices, we are again asking about signs, symptoms, and travel history, including recent cruises. We use infrared thermometers to measure temperatures. Patients with concerning signs and symptoms, or who recently traveled to an endemic area or were on a recent cruise, are rescheduled. We ask all nonpatient visitors to wait outside unless they are required to be in the office, and we restrict children from accompanying parents or grandparents to appointments.

Patients are given the option to wait in their car, and

then we send them an SMS text message when the physician is ready. Personally, I have converted most of my rooms (approximately four to six rooms depending on the office) to procedure rooms to ensure faster throughput of patients.

What personal precautions are you taking to protect yourself as a physician?

All of our clinical staff wear surgical masks and gloves and maintain strict hand hygiene measures, equipment cleaning, and high-touch point cleaning.

We have installed plastic shield barriers on slit lamps. However, I minimize my use of the slit lamp in favor of indirect ophthalmoscopy. Our practice approaches all patients as if they are asymptomatic COVID-19 positive. Per guidelines, I am wearing a surgical mask (preferably a N95 mask), eye protection (goggles/safety glasses), and gloves. These personal protective equipment (PPE) recommendations enhance the safety of the clinic for patients, staff, and physicians.

If a patient who visited our clinic reports symptoms and tests positive for COVID-19, the department of public health contacts the patient and finds out where he or she was during the past week. If a physician or staff member wasn't wearing appropriate PPE, then that physician or staff member will be sent home for self-quarantine for 2 weeks or until a negative test is confirmed, which can take 5 to 10 days to turn around.

The AAO has advised that retina specialists offer only urgent and emergent in-office care. Where do you draw the line between urgent and nonurgent in-office care?

After discussions with my partners and several retina specialists around the country, our practice has decided to prioritize patients who need intravitreal injections for wet AMD, central retinal vein occlusion, proliferative diabetic retinopathy, and (in some cases) diabetic macular edema. Without injections, many of these patients risk worsening complications that may have permanent effects on vision.

Regarding specific patient visits, we are still prioritizing all injection patients, as well as emergent patients with acute posterior vitreous detachments and potential retinal tears, retinal detachments, and acute diabetic complications (eg, vitreous hemorrhage, new or progressing tractional retinal detachment). Additionally, individual patient characteristics need to be assessed on a case-by-case basis, notably in monocular patients with acute changes in their remaining functional eye.

The AAO has advised against performing nonurgent surgical procedures. Which types of surgical cases do you consider nonurgent?

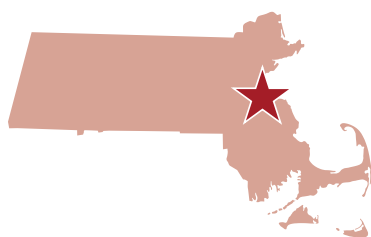
Not only has the AAO advised against performing nonurgent surgeries, but increasingly the hospitals and ASCs where we operate are limiting nonurgent surgeries to preserve anesthesia staff and equipment for potential surges

in COVID-19 cases in hospitals. As a result, we are focusing on urgent cases with sight-threatening complications that will have consequences if not treated in a timely manner. This includes all rhegmatogenous retinal detachments, endophthalmitis, retained lens fragments, and progressing tractional retinal detachments.

As discussed above, cases with extenuating circumstances, notably monocular patients, should be approached on a case-by-case basis. For full thickness macular holes that are acute, I recommend initial observation for 4 to 6 weeks and surgery if the condition is unresolved. Elective cases such as macular puckers, vitreous opacities, and dislocated IOLs are rescheduled.

John B. Miller, MD

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What precautions are you taking in your clinic to protect your patients?

We have significantly reduced appointments in all clinics since March 16. Visits have been limited to

postoperative evaluations, anti-VEGF injections, and urgent evaluations for events such as retinal detachment, PDR, and ruptured globes. All staff are required to wear surgical masks, and patients wear masks for injections (which was common practice for some physicians prior to the COVID-19 outbreak). We are also spreading out schedules to minimize the number of patients in the waiting room.

What personal precautions are you taking to protect yourself as a physician?

I have tried to limit my trips into the hospital by consolidating multiple clinic days into one or two half-day sessions. I wear a mask, gloves, and eye protection for all patient encounters. At this point, we have to assume that asymptomatic carriers are bypassing any screening that is occurring at the front door.

The AAO has advised that retina specialists offer only urgent and emergent in-office care. Where do you draw the line between urgent and nonurgent in-office care?

It's a tough call because we don't know how long it will be until we can return to clinical operations. I think it is reasonable to postpone some injection patients for a few weeks or a month, and we have done that when possible. Retinal detachments and retinal tears still have to be seen right away, as do endophthalmitis, acute retinal necrosis, and posttraumatic injuries. Fortunately, such cases normally arise

on call, and we have consolidated those urgent visits to a single physician on call.

The AAO has also advised against performing nonurgent surgical procedures. Which types of surgical cases do you consider nonurgent?

We consider any case involving an epiretinal membrane, macular hole, dislocated IOL, or chronic retinal detachment to be nonurgent. We consider some diabetic cases nonurgent, and those are determined on a case-by-case basis.

Allen Chiang, MD

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Philadelphia*



What precautions are you taking in your clinic to protect your patients?

The majority of retina patients are elderly, and many have significant medical comorbidities,

making them the most vulnerable to COVID-19. One of our highest priorities is to reduce their risk of exposure in the office by trimming schedules down to those with active or urgent and emergent issues and implementing some changes to the office environment. We are actively reviewing charts and rescheduling patients who can be reasonably postponed to a later date. Before patients arrive, they are asked screening questions to identify those who are either symptomatic or at increased risk (eg, if the patient or someone who lives with them has traveled internationally, on a cruise, or to the New York metro area in the past 2 weeks). Those who are symptomatic or have had exposure are instructed not to come to the office but instead to contact their PCP or self-quarantine, respectively. If they screen positive on our questionnaire and are experiencing acute vision loss, they are directed to our Wills Eye Hospital location for further evaluation as either a presumed or confirmed COVID-positive individual.

In the office, we use noncontact thermometers to screen every individual before entering the office, including physicians and staff. Chairs in the waiting area and break room are spaced 6 feet apart. We have also instituted a virtual waiting room, which allows patients to wait in their cars until notified that it's their turn to be seen. Family or friends are asked not to accompany the patient into the clinic unless it's out of a medical necessity. Staff who are in and around exam lanes have been reduced.

We have sought to increase awareness by utilizing various platforms, including our website, social media, and call center patient liaisons. In addition to understanding the CDC, AAO, and state public health guidelines, we want patients to

be apprised of the steps we are taking to ensure each visit is as safe as possible. Coordinating with our referring doctors to focus on patients with problems of an urgent nature is important, too.

What personal precautions are you taking to protect yourself as a physician?

We have installed large breath shields on the slit lamps. Rooms are disinfected after each patient is examined, with special attention paid to high-touch surfaces. Mobile phones are wiped down periodically throughout the day and social distancing is observed throughout the office. Doctors and staff who work within 6 feet of patients don PPE consisting of protective glasses, masks (surgical, or N95 if available), and gloves. These steps are taken even with asymptomatic patients because there is evidence that asymptomatic or presymptomatic infections are fueling the pandemic.

When I get home, I change my clothes in the garage; sanitize anything that I touched including the interior surfaces of my car, bags, and belongings; throw my lab coat and scrubs into the washer; and wash my hands and face before greeting my family. I have been extra focused on eating balanced meals, getting sufficient sleep, and exercising regularly in order to maintain my immune system.

The AAO has advised that retina specialists offer only urgent and emergent in-office care. Where do you draw the line between urgent and nonurgent in-office care?

Trauma and acute-onset eye pain or vision loss certainly still need to be evaluated emergently. Examples include intraocular foreign body, retinal detachment, and infection. We have prioritized patients for whom the potential risk and severity of irreversible vision loss increase as evaluation and treatment are delayed. Examples include acute posterior vitreous detachment, wet AMD patients who historically require a frequent injection interval, postoperative follow-up after recent surgery, and acutely worsening complications of PDR. There will, however, be exceptions to any line that we draw, such as in the case of a monocular patient.

We must recognize that the circumstances of the pandemic change week to week, if not day to day, particularly in certain parts of the country. Ongoing communication is critical so that practice patterns can be modified in real time as the situation evolves.

The AAO has advised against performing nonurgent surgical procedures. Which types of surgical cases do you consider nonurgent?

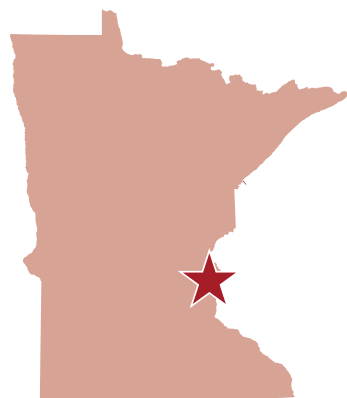
The ASCs where we operate are closed. At Wills Eye Hospital, surgery is limited to urgent cases in order to conserve and redirect resources to handling COVID-19 cases. Nonurgent refers for conditions that are not immediately sight-threatening and can be postponed for at least a few

weeks or longer without significant adverse visual or prognostic consequence. Vitreous opacities and hemorrhage, chronic nonprogressing diabetic tractional detachment, dislocated IOLs, and macular pucker are some examples. Most macular holes can be postponed for several weeks. However, as was the case with in-office care, there will be some exceptions (eg, a monocular patient who is worsening) that will require our best judgment as surgeons.

We should approach patients with empathy when communicating with them about postponing surgery. Although many will be relieved to do so, some may express that the visual problems they are enduring, while not urgent, are being trivialized or marginalized. Acknowledging their sentiments while focusing on our shared societal responsibility to flatten the curve can be both reassuring and compelling.

Edwin H. Ryan, MD

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What precautions are you taking in your clinic to protect your patients?

Our practice is screening for risk. When we contact patients by phone to remind them of their appointments, we ask them about their travel and exposure history and if they're demonstrating symptoms such as fever or cough.

We also ask them at the time they arrive for an appointment. We have diligently wiped down surfaces after every patient visit, and we have spaced out seats in our waiting room to reduce the likelihood of transmissions (Figure).

The mostly elderly patients who visit a retina clinic are at high risk of death if they contract COVID-19, and we are taking our preparation seriously. As of the week of March 23, physicians and staff have started wearing masks; we are wearing whatever masks are available. Still, our staff and physicians operate as if we are not wearing masks—that is, we remain 6 feet away from each other. It is unclear what benefit (if any) these masks provide, but they at least provide some psychologic comfort.

What personal precautions are you taking to protect yourself as a physician?

Our practice has made a few temporary changes to protect physicians, many of which overlap with our mission to protect patients.



Figure. Seats in the waiting room at VitreoRetinal Surgery PA in Woodbury, Minnesota, have been moved further apart.

We have minimized talking in our practice. The social aspects of patient encounters have been all but eliminated for the sake of safety. We have a policy in place that only patients may visit the examination rooms.

Avoiding slit-lamp examination is impossible, but we have reduced our use significantly. When a slit-lamp examination is required, we use protective breath shields. We have been diligent about sanitizing our hands upon entry and exit of any exam room. I cannot stress enough how important it is to sanitize your hands and work stations. From the research so far, it appears to be the best way to mitigate risk of transmission.

The AAO has advised that retina specialists offer only urgent and emergent in-office care. Where do you draw the line between urgent and nonurgent in-office care?

Our office considers routine exams, referrals for nevi, epiretinal membranes, and asymptomatic background diabetic retinopathy evaluations to be nonurgent. Those patients will hopefully be seen in the summer. Patients with acute vision loss or symptoms that suggest a retinal detachment are considered emergent cases and are seen.

Patients who receive anti-VEGF therapy for wet AMD are still being seen in our practice. We use a treat-and-extend regimen for many of these patients. Rather than extending them to some unknown treatment date, we decided to treat these patients. There is a certainty that they will lose vision if we do not treat them; there is a low risk that coronavirus will be transmitted if they visit the office. That's the calculus we've operated with so far, but of course it may change as the situation evolves.

The AAO has also advised against performing nonurgent surgical procedures. Which types of surgical cases do you consider nonurgent?

We have determined that surgery for epiretinal membranes, chronic vitreous hemorrhage, and chronic macular

hole are all nonurgent. Surgeries that have been scheduled for macular holes and dislocated IOLs can be delayed by 1 to 2 months.

Still, much of what we see in the OR is emergent. Cases involving rhegmatogenous retinal detachment, endophthalmitis, dropped nucleus, and a number of other conditions must be seen immediately, and we will not delay those surgeries.

Again, I must stress that this is an evolving situation. Delaying surgery for a macular hole by 1 or 2 months should be fine; delaying by 5 or 6 months could have negative consequences. ■

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