

Ophthalmological Risk Stratification for COVID-19

Adapted from the Moorfields Eye Hospital-NHS Foundation Trust, 2020

General Guidelines

Updated April 14, 2020

1. These guidelines apply only during the duration of the Enhanced Community Quarantine. This will be re-assessed as the nationwide situation changes.
2. Each EyeMD is responsible for evaluating the needs for each of their scheduled patient.
3. The risk to the patient and to the staff of face-to-face contact is real, making evaluation of the urgency of the condition and the risk of face-to-face contact extremely necessary.
4. Patient visits should be deferred whenever possible, especially those considered to be high risk for contracting Covid-19 (e.g. very elderly, immunocompromised, or with multiple comorbidities), with the important exceptions of the possibility of serious threat to vision or life. For these exceptions, visits should be reduced to a minimum.
5. Virtual consultation, virtual rounds or follow-up check-ups by telephone or secure digital communication are encouraged in order to provide explanation and reassurance to the patient.



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During In-Person Consultations:

1. A breath shield should be installed on the slit-lamp.
2. Protective masks should be worn at all times by both patient and the ophthalmologist, as well as by the clinic staff.
3. Personal protective equipment (PPE) such as gloves, protective glasses or eye wear, and gowns are highly recommended.
4. Avoid speaking during the slit- lamp examination.
5. Extra precautions should be taken when examining patients with conjunctivitis.
6. Always observe proper hand washing technique in between patients.
7. Disinfect occluders, lenses, and surfaces in between patients.
8. When performing funduscopy, use of condensing lens on the slit-lamp or indirect ophthalmoscopy is preferred over direct funduscopy.
9. Proper handling of eyedrops must be observed.

*Refer to the **PAO Recommendations for Ophthalmic Practice Management during the Covid-19 Pandemic** for full details.



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This **Risk Stratification** may serve as a general guide for the clinician when making decisions on the need for in-person consultation during the period of **Enhanced Community Quarantine**, taking into account that in-person consultation carries with it the risk of exposure to Covid-19 for the patient, ophthalmologist and clinic staff.

- **HIGH RISK:** Emergent and urgent vision threatening cases that may cause blindness if not treated immediately
- **MEDIUM RISK:** Less urgent cases that will lead to worsening visual outcomes but are not immediately sight-threatening
- **LOW RISK:** Routine or elective cases that are unlikely to cause permanent visual loss if delayed for several weeks to months



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VITREORETINAL SURGERY

	HIGH RISK	MEDIUM RISK	LOW RISK
	<p>In-Person Consult (Addressed within 24 hours to < 1 month depending on the case and risk of the patient)</p>	<p>Video or phone consultation for further and regular assessment (Addressed within 1-3 months depending on the case and risk of the patient)</p>	<p>Video or phone consultation for further and regular assessment (Reschedule 3 months ahead depending on the case and risk of the patient)</p>
NEW	<p>Vitreoretinal emergency services to remain open</p> <ul style="list-style-type: none"> • Macula on retinal detachment • Macula off retinal detachment in a one-eyed (monocular) patient • Macula off retinal detachment of less than 4 weeks in a non-monocular patient • Vision threatening traction retinal detachment in a one-eyed patient • Vitreous hemorrhage with suspected retinal tear or detachment • Subfoveal hemorrhage within 2 weeks • Uncontrolled IOP needing vitrectomy (retained lens fragment, malignant glaucoma) • Acute infectious endophthalmitis • Posterior open globe injury with or without intraocular foreign body • Acute hemorrhagic or appositional choroidal detachment • Dense vitreous hemorrhage in a one-eyed patient • Infected scleral buckle or other ocular implant • Intraocular tumors requiring treatment 	<ul style="list-style-type: none"> • Retained lens fragment with medically controlled IOP • Macula off retinal detachment >4 weeks in a non-monocular patient • Macular hole <1 year duration • Dislocated IOL with vitreous traction • Diabetic vitreous hemorrhage with extramacular traction retinal detachment • Vitreous hemorrhage with retinal breaks and retinal detachment ruled out clinically • Submacular hemorrhage of more than 2 weeks duration • Vitreous hemorrhage/pre-retinal hemorrhage in a child <6 y/o • Diagnostic vitrectomy for uveitis or lymphoma • Examination under anesthesia for vision threatening issues that can't be determined clinically • Rapidly progressive epiretinal membrane or vitreomacular traction • Scleral extrusion 	<ul style="list-style-type: none"> • Chronic non-progressive epiretinal membrane • Macular hole of greater than 1 year duration • Silicone oil removal with normal intraocular pressure • Dislocated IOL without vitreous traction • Stable vitreomacular traction syndrome
FOLLOW-UP	<p>Uncontrolled IOP in post-op patients</p> <p>Follow up for complex retinal surgeries</p>	<ul style="list-style-type: none"> • Routine check-up for post-retinal surgery 	
SURGERY	<p>Surgery on patients with emergency cases</p>		

HIGH RISK: Urgent and vision threatening cases that may cause blindness if not treated
MEDIUM RISK: Less urgent cases that will lead to worsening visual outcomes but are not immediately sight-threatening
LOW RISK: Routine or elective cases that are unlikely to cause permanent visual loss if delayed for several weeks to months
Stratification and management of cases listed above may change depending on the circumstances of the patient and final assessment of the attending retina specialist
During face to face encounter with the patient:

- Ophthalmologist/Retina specialist should wear protective gear as based on each hospital's infection control policy
- Patient should be wearing at least a surgical mask



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MEDICAL RETINA

	HIGH RISK	MEDIUM RISK	LOW RISK
	<p>In-Person Consult (Addressed within 24 hours to < 1 month depending on the case and risk of the patient)</p>	<p>Video or phone consultation for further and regular assessment (Addressed within 1-3 months depending on the case and risk of the patient)</p>	<p>Video or phone consultation for further and regular assessment (Reschedule 3 months ahead depending on the case and risk of the patient)</p>
NEW	<p>Any patient with new onset of:</p> <ul style="list-style-type: none"> Severe blurring of vision Floater Flashes of light <p>Vitreoretinal emergency services to remain open</p> <ul style="list-style-type: none"> Laser for retinal tears Laser treatment for high-risk proliferative diabetic retinopathy Retinal vascular occlusions Eye examination under anesthesia for intraocular tumors Retinopathy of prematurity screening and treatment Neovascular glaucoma 	<ul style="list-style-type: none"> Laser treatment for early proliferative diabetic retinopathy Examination under anesthesia for vision threatening issues that can't be determined clinically Central serous chorioretinopathy 	<ul style="list-style-type: none"> Genetic retinal disease Non-proliferative diabetic retinopathy
FOLLOW-UP	<p>Any patient with new onset of:</p> <ul style="list-style-type: none"> Severe blurring of vision Floater Flashes of light <p>Intravitreal injections of certain cases</p> <p>Additional laser treatment for neovascular glaucoma in a patient with previous laser treatment</p>	<ul style="list-style-type: none"> New onset of floaters in a patient previously treated for diabetic retinopathy or ischemic retinal vascular disease Intravitreal injections of certain cases 	<ul style="list-style-type: none"> Genetic retinal disease Non-proliferative diabetic retinopathy Proliferative diabetic retinopathy or ischemic retinal vascular disease with complete laser treatment

HIGH RISK: Urgent and vision threatening cases that may cause blindness if not treated

MEDIUM RISK: Less urgent cases that will lead to worsening visual outcomes but are not immediately sight-threatening

LOW RISK: Routine or elective cases that are unlikely to cause permanent visual loss if delayed for several weeks to months

Stratification and management of cases listed above may change depending on the circumstances of the patient and final assessment of the attending retina specialist

During face to face encounter with the patient:

- Ophthalmologists/Retina specialists should wear protective gear based on each hospital's infection control policy
- Patient should be wearing at least a surgical mask



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GLAUCOMA

	HIGH RISK	MEDIUM RISK	LOW RISK
	In-person Consult	Video or phone consultation with in-person follow-up rescheduled for first part of recovery phase	Rescheduled 6 months ahead
NEW	<ul style="list-style-type: none"> Urgent internal or external referrals with IOP >38mmHg Urgent internal referrals with uveitis, neovascular glaucoma Phacolytic/Phacomorphic Glaucoma Symptomatic Angle Closure cases may be considered for laser iridotomy or emergency surgery if deemed necessary after in-person consult. 	<ul style="list-style-type: none"> Angle closure glaucoma consults without raised IOP who are asymptomatic may be delayed Raised IOP may be treated empirically while awaiting in-person consult 	<ul style="list-style-type: none"> Patient by patient triage of new referrals needed History by telephone or video consult with referring doctor and patient May start empirical treatment (e.g PGA) via e-prescription. Reassess course of treatment via phone or video consult and schedule in-person follow-up after several months.
FOLLOW-UP	<ul style="list-style-type: none"> Triage patients to identify those requiring essential follow-up: Post-op patients, significantly raised IOP at last visit, acute angle closure glaucoma, uveitic glaucoma, neovascular glaucoma, pediatric glaucoma High risk avoidable vision loss within 2 months Post-op patients with surgery (within 6/52 of trabeculectomy; 3/12 tube) Patients where follow-up interval was 4 weeks or less (suggesting high risk) 	<ul style="list-style-type: none"> Post-op cataracts (no previous glaucoma surgery) done by glaucoma 	<ul style="list-style-type: none"> Stable monitoring/Virtual clinic/OPD clinic patients postponed 6 months ahead without review Patients stratified by planned follow-up interval at last appointment: <ul style="list-style-type: none"> If interval 6 months or over = postpone by 6 months if interval 3-6 months = postpone by 4 months if interval <3 months, needs case by case review to identify those possible high risk needing in-person consult
SURGERY	<ul style="list-style-type: none"> Identify patients in need of immediate surgery based on factors including: Level of vision and extent of visual field loss, status of contralateral eye, level of IOP, rate of visual deterioration, access to temporizing medications Choose surgical procedure that minimizes post-op follow-up visits where safe. Avoid procedures requiring intensive post-op follow-up, anti-metabolite injections, or suture manipulation if possible Perform all cases using local anesthesia and as out-patient cases when possible 	<ul style="list-style-type: none"> Postpone operating on patients who may be symptomatic for COVID-19, febrile, or in quarantine due to exposure, unless High Risk. 	<ul style="list-style-type: none"> Delaying surgery in this group may lead to loss of vision in some, therefore needs consultant review of cases and work on retriaging and stratifying whole population before recovery phase Defer cataract surgery by 6 months

APPENDIX

Allowable surgeries that may be necessary for high risk glaucoma patients ideally under local anesthesia and as outpatient basis.

- High pressure uncontrolled medically with risk of rapid loss of vision for both primary or secondary causes
- Cataract surgery for lens induced glaucoma which is uncontrolled medically
- High risk vision loss in only eyes
- Flat anterior chamber in post trabeculectomy
- Blebitis or endophthalmitis in post trabeculectomy
- Removal of drainage shunt in endophthalmitis
- Repair of Bleb leaks, wound leaks, underfiltration, overfiltration, bleb scarring, sight threatening hypotony, revision of drainage implant for tube exposure, malpositioned tube that might worsen vision

Tonometry Guidelines

- A 10% diluted sodium hypochlorite (bleach) solution or 70% ethyl alcohol may be used to sterilize applanation IOP monitoring devices such as the Goldmann tonometer. Tear film disturbances have also been associated with non-contact air-puff tonometry, suggesting that this could be a micro-aerosol formation procedure, thus alternative IOP monitoring instruments must be used if possible.



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ORBITS and EYELIDS

	HIGH RISK	MEDIUM RISK	LOW RISK
	In-Person Consult	Ideally seen in clinic within 1-3 months. Acceptable to consult via telemedicine while on quarantine.	Okay to be seen in clinic > 4 months after the concern was posted.
NEW or FOLLOW-UP	<p>New and follow-up patients presenting with signs of the following conditions:</p> <p>SEVERE ORBITAL PAIN & PROPTOSIS from orbital hemorrhage / retro-bulbar hemorrhage secondary to:</p> <ul style="list-style-type: none"> • Vascular malformation (lymphatic, arterial, venous) • Trauma <p>SIGNIFICANT VISION LOSS (optic neuropathy) from orbital apex syndrome secondary to</p> <ul style="list-style-type: none"> • inflammatory conditions (TED, NSOI) • tumor (primary or secondary, intraconal or large extraconal) • Trauma <p>SEVERE ORBITAL PAIN & PROPTOSIS from malignant tumors:</p> <ul style="list-style-type: none"> • Malignant lacrimal gland tumor • Other orbital tumors <p>CONGESTED ORBIT from cavernous sinus syndrome secondary to</p> <ul style="list-style-type: none"> • orbital infection / cellulitis • inflammation • tumor (primary or secondary) <p>TRAUMA:</p> <ul style="list-style-type: none"> • Orbital floor fracture with oculocardiac reflex • severe hypoglobos and/or enophthalmos • large orbital fracture (>1/2 of the orbital floor) • orbital floor fracture with entrapped inferior rectus on imaging • orbital floor fracture with diplopia on vertical and/or horizontal gaze on clinical testing • Lid laceration from trauma <ul style="list-style-type: none"> • with or without involvement of the lid margin • with or without involvement of the canaliculus • with or without orbital fat prolapse <p>RAPIDLY-GROWING ORBITAL MASS or ORBITO-SINONASAL INFECTION from fungal infection</p> <p>RAPIDLY-GROWING ORBITAL MASS IN A PEDIATRIC PATIENT probably secondary to retinoblastoma, rhabdomyosarcoma</p> <p>PERIORBITAL TISSUE NECROSIS from Necrotizing fasciitis</p> <p>EYELID SWELLING that does NOT improve with oral antibiotics (to rule out the following):</p> <ul style="list-style-type: none"> • orbital cellulitis that requires IV antibiotics • carotid-cavernous sinus fistula <ul style="list-style-type: none"> • need to check IOP and optic nerve to rule out and manage glaucomatous optic neuropathy • NSOI <p>Complicated orbital and/or eyelid surgery which requires close monitoring in the first few days to weeks for early management of possible complication(s).</p> <ul style="list-style-type: none"> • Intraconal excision / incision surgery • Orbital or eyelid surgery with significant intra-operative bleeding 	<p>New and follow-up patients presenting with the following conditions:</p> <ul style="list-style-type: none"> • Proptosis (from any orbital condition) that do not fall under high risk • Stable or inactive TED • Post-operative eyelid surgery (If non-absorbable suture was used, the suture could be removed by the patient and/or relative in the comfort of their own home without the need for exposure to COVID-19) <p><i>*** If the consultant who performed the surgery prefers to remove his/her own suture, then this scenario may be placed under the high risk group.</i></p>	<p>Non-amblyogenic and even potentially amblyogenic congenital eyelid tumors</p> <p>All other orbital and eyelid concerns that do not fall under the high-risk and medium-risk stratification.</p>



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FOLLOW-UP	<ul style="list-style-type: none">Please refer to the conditions mentioned under "New"	<ul style="list-style-type: none">Please refer to the conditions mentioned under "New"	
SURGERY	<ul style="list-style-type: none">Orbital hemorrhageOrbital tumor with significant vision loss that is not attributable to other eye pathologies.Rapidly growing orbital mass and/or proptosisOrbital fracture with the following scenarios: oculocardiac reflex, entrapped inferior rectus muscle on imaging, severe hypoglobus, severe enophthalmosLid laceration from trauma with or without involvement of the following: lid margin, canaliculus, or orbital fatNecrotizing fasciitis		



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Contact Lens

	MODERATE RISK	LOW RISK
	Video or Phone Consultation with in-person follow-up rebooked for first part of recovery phase	Reschedule follow-up 6 months ahead
NEW		<ul style="list-style-type: none">• Can be delayed
FOLLOW- UP	<ul style="list-style-type: none">• Therapeutic contact lens patients• Contact lens-related infections• Contact lens overwear syndrome• Boston K-Pro patients if triaged by telephone	<ul style="list-style-type: none">• Delays acceptable in other patients

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GENETICS

	HIGH RISK	MEDIUM RISK	LOW RISK
	In-Person Consult	Video or Phone Consultation with F2F follow-up rescheduled for first part of recovery phase	Rescheduled 6 months ahead
NEW	<ul style="list-style-type: none">None		All patients
FOLLOW-UP	<ul style="list-style-type: none">None	<ul style="list-style-type: none">All patients	



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GENERAL OPHTHALMOLOGY

	HIGH RISK	MEDIUM RISK	LOW RISK
	In-Person Consult	Video or Phone Consultation with F2F followup rescheduled for first part of recovery phase	Rescheduled 6 months ahead
NEW	<ul style="list-style-type: none">None	<ul style="list-style-type: none">Triage consultation for routine referrals via phone/video.	
FOLLOW-UP	<ul style="list-style-type: none">None	<ul style="list-style-type: none">All patients triaged via phone/video consultation	<ul style="list-style-type: none">Postponement or discharge from phone/video triage



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Neuro-Ophthalmology

	HIGH RISK	MEDIUM RISK	LOW RISK
	In-person Consult	Video or Phone Consultation with in-person follow-up rebooked for first part of recovery phase	Reschedule follow-up 6 months ahead
NEW	<ul style="list-style-type: none"> • Patient by patient triage needed • Stat neuro-imaging as warranted 	<ul style="list-style-type: none"> • Neuromuscular disorders • Optic neuropathies • Cranial nerve palsies • Supranuclear and internuclear ocular motor disorders • Neuro-muscular disorders (Ocular myasthenia) • Efferent disorders • Order neuroimaging and other appropriate ancillary diagnostics as warranted by the case • If STAT neuroimaging is necessary, refer to high risk classification 	<ul style="list-style-type: none"> • None
FOLLOW-UP	<ul style="list-style-type: none"> • Patient by patient triage needed • Immunosuppressed patients losing vision due to neuro-ophthalmologic condition <ul style="list-style-type: none"> • Reassess in an area dedicated for non-CoViD-19 patients (see Uveitis section) 	<ul style="list-style-type: none"> • Neuromuscular disorders • Follow up once ancillary procedures are done <ul style="list-style-type: none"> • Depending on the results, should the patient require hospital treatment refer to high risk classification • For non-face-to-face: <ul style="list-style-type: none"> • Optic Neuropathies (inflammatory or infectious) needing steroid treatment <ul style="list-style-type: none"> • Weekly follow up • Cranial nerve palsies (inflammatory or infectious) needing steroid treatment <ul style="list-style-type: none"> • Weekly follow up • Cranial nerve 3 palsy <ul style="list-style-type: none"> • Follow up 1 week from onset of symptoms to check if there is involvement of pupils in patients initially with normal pupils • Mass lesions causing NO symptoms • Ocular myasthenia <ul style="list-style-type: none"> • If monitoring response to treatment 1-2 weeks follow-up • Refer to neurologists if there is systemic involvement • Refer to corresponding specialist depending on nature of etiology (ie. IM – Infectious / Neurology / Rheumatology, etc) 	<ul style="list-style-type: none"> • Ischemic optic neuropathies • Hereditary optic neuropathies • Traumatic optic neuropathies of more than 3 days • Toxic optic neuropathies • Ischemic cranial nerve palsies • Refer to corresponding specialist depending on nature of etiology



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OCULAR ONCOLOGY

HIGH RISK

Face-to-Face Consult (Addressed within 1-4 weeks)

NEW

All new referrals with enhanced triage (direct referral to an Ocular Oncologist or to a subspecialist with special expertise in the particular oncologic concern)

All known ocular oncology cases with new onset of signs and symptoms relatable to possible tumor recurrence.

INTRAOCULAR NEOPLASM

Suspected intraocular tumors with signs and symptoms relatable to an intraocular malignancy such as, but not limited to, the following:

Pediatric

- From birth until age 7: Leukocoria / squint / significant conjunctival hyperemia / buphthalmos
 - Retinoblastoma
- Proptosis, strabismus, periocular edema, ptosis, blurred vision
 - Retinoblastoma
 - Rhabdomyosarcoma
 - Neuroblastoma
- Nystagmus
 - Neuroblastoma
- History of systemic malignancy with new onset visual disturbance (blurred vision, floaters, flashes of light, curtains closing)
 - Leukemia
 - Lymphoma
 - Neuroblastoma

Adult

- Any referral for suspicious intraocular tumor including asymptomatic cases
- Blurred vision, flashes of light (photopsia), wavy vision (metamorphopsia), floaters secondary to vitreoretinal involvement from intraocular tumor (vitreoretinal or uveal)
 - Choroidal melanoma
 - Choroidal nevus with subretinal fluid
 - Choroidal metastatic tumor
 - Intraocular lymphoma
 - Vasoproliferative tumor
- Ocular pain, redness, with or without increase in IOP from an enlarging iridociliary tumor
 - Iridociliary melanoma
 - Iridociliary metastatic tumor
 - Iridociliary tumor with an unknown etiology that may require biopsy
- History of systemic malignancy with new-onset visual disturbance (blurred vision, floaters, flashes of light, curtains closing)
 - Choroidal metastatic tumor
 - Intraocular lymphoma

OCULAR SURFACE NEOPLASM

- Suspected ocular surface malignancy with evidence of growth, with or without vascularity, including, but not limited to the following:
 - Pigmented: Conjunctival melanoma
 - Non Pigmented: Squamous Cell Carcinoma
 - Lymphoma

EYELID NEOPLASM

- Progressively enlarging eyelid mass with or without signs and symptoms of malignant nature such as erosion, madarosis and anatomic disruption.

ORBITAL NEOPLASM

- Worsening proptosis, with or without evidence of imaging, which may be secondary to any of the following conditions:
 - **Primary orbital tumor secondary to a:**
 - **malignant etiology** (orbital lymphoma, malignant lacrimal gland tumors)
 - **benign etiology** (space-occupying lesions which may also present with visual disturbances)
 - **Secondary orbital tumor**
 - Metastatic tumor from a known or unknown systemic primary tumor
 - Local metastatic tumor from the sinonasal region

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OCULAR ONCOLOGY

	HIGH RISK	MEDIUM RISK	LOW RISK
	Face-to-Face Consult (Addressed within 1-4 weeks)	Ideally Face to Face consult within 3-6 months	Ideally Face to Face consult within 6-12 months
FOLLOW-UP	<p>All ocular oncology cases deemed uncontrolled, and requires continual care with chemotherapy, radiotherapy, and other adjuvant modalities. These conditions include, but are not limited to, the following:</p> <ul style="list-style-type: none">• Retinoblastoma undergoing globe-sparing procedures (chemoreduction, laser therapy, and cryotherapy)• Extraocular or high-risk retinoblastoma requiring adjuvant chemotherapy• Ocular surface tumors (such as conjunctival melanoma, squamous cell carcinoma) which have undergone surgery, but require monitoring and/or adjuvant therapy (topical medications, cryotherapy or surgery)• Orbital and/or eyelid surgery which requires close monitoring in the first few days to weeks for early management of possible complication(s).<ul style="list-style-type: none">• Intraconal excision / incision surgery• Orbital or eyelid surgery with significant intra-operative bleeding• Eyelid surgery which may lead to eyelid malpositions and/or exposure keratopathy	<p>All ocular oncology patients who were deemed controlled for 12 months, with the patient being seen in clinic for follow-up with an interval of every 3-months or longer.</p>	<p>All ocular oncology patients who were deemed controlled or stable for 24 months without any concerns or issues.</p> <p>Patients who have biopsy-diagnosed benign neoplastic lesions and without current visual or ocular concerns.</p>
SURGERY	All ocular oncology surgery and management are expected to continue		

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Pediatric Ophthalmology

	HIGH RISK	MEDIUM RISK	LOW RISK
	In-person Consult	Video or Phone Consultation with in-person follow-up rebooked for first part of recovery phase	Reschedule follow-up 6 months ahead
NEW	<ul style="list-style-type: none"> Sight threatening conditions such as but not limited to the following: <ul style="list-style-type: none"> Eye infections (microbial keratitis) Ocular inflammatory conditions (pediatric uveitis) Secondary to trauma and post operative eye complications Premature babies at risk of developing ROP Any leukocoria under the age of 5 years old (rule out retinoblastoma) Other conditions with rapid amblyogenic potential Orbital inflammation and infection Suspected glaucoma Sudden complaints of change or loss of vision, diplopia Reduced vision in one eye under age 7 	<ul style="list-style-type: none"> Upgrade risk status if differentials include sight threatening or life-threatening conditions that will warrant face to face consult 	<ul style="list-style-type: none"> May be delayed on a case by case basis
FOLLOW-UP	<ul style="list-style-type: none"> Follow up for the conditions listed above Post ops within last 2 months Children on medication (drops or systemic) for glaucoma, uveitis, corneal disease 	<ul style="list-style-type: none"> Patients having amblyopia treatment Pediatric oculoplastic/adnexal cases 	<ul style="list-style-type: none"> May be delayed on a case by case basis
SURGERY, LASER OR INTRAVITREAL TREATMENT	<ul style="list-style-type: none"> High pressure uncontrolled medically with risk of rapid loss of vision Acute eye emergencies or amblyogenic conditions High risk vision loss for one eyed patient Sight and Life threatening intraocular tumor High risk premature infants with progressing ROP 	<ul style="list-style-type: none"> Congenital cataract in the amblyopic period <ul style="list-style-type: none"> Timing of surgery will depend on the severity and laterality of the cataract (whether surgery needs to be done immediately or not). 	<ul style="list-style-type: none"> May be delayed on a case by case basis

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Strabismus

	HIGH RISK	MEDIUM RISK	LOW RISK
	In-person Consult	Video or Phone Consultation with in-person follow-up rebooked for first part of recovery phase	Reschedule follow-up 6 months ahead
NEW	<ul style="list-style-type: none"> • Triage of referrals on case by case basis • Sudden diplopia • Trauma with extraocular muscle involvement • Post surgery 	<ul style="list-style-type: none"> • May be possible to get an idea of severity on video that will aid triage to delay consultation 	<ul style="list-style-type: none"> • Maybe delayed
FOLLOW-UP	<ul style="list-style-type: none"> • Post op within the last 2 months 		
SURGERY	<ul style="list-style-type: none"> • Torn or loss extraocular muscle 		

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Uveitis

	HIGH RISK	MEDIUM RISK	LOW RISK
	In-person Consult	Video or Phone Consultation with in-person follow-up rebooked for first part of recovery phase	Reschedule follow-up 6 months ahead
NEW	<ul style="list-style-type: none"> • Panuveitis • Posterior uveitis • Retinal vasculitis • Intermediate uveitis with vision loss • Acute anterior uveitis with visual loss 	<ul style="list-style-type: none"> • Anterior uveitis to be given standard 6-8 week tapering drop course then telephone consult at 7-9 wks • Clinic review in 3 months if indicated by telephone consult 	
FOLLOW- UP	<ul style="list-style-type: none"> • Condition reviewed via teleconsultation and patient advised on medications. • May have to do in-person consult if with worsening vision. • Patients on immunosuppressive treatment (e.g. corticosteroids, immunomodulatory medications) are high risk medically. <ul style="list-style-type: none"> • Case to be reviewed via teleconsultation. • When in-person consult is necessary, efforts must be made to isolate the patient (e.g. separate clinic area or specified consultation time). 	<ul style="list-style-type: none"> • Anterior uveitis patients (will require proof of compliance to medications) 	
SURGERY	<ul style="list-style-type: none"> • Urgent surgery to allow visualisation for diagnosis 		<ul style="list-style-type: none"> • Cataract surgery for uveitis patients could be delayed

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CORNEA AND EXTERNAL DISEASE

	HIGH RISK	MEDIUM RISK	LOW RISK
	Remain Face to Face	Video or Phone Consultation with F2F follow-up Reschedule for first part of recovery phase	Reschedule after 6 months
NEW	<ul style="list-style-type: none"> Corneal pathology from trauma, chemical burns, erosions Hyperacute purulent conjunctivitis, i.e. gonococcal Infectious endophthalmitis Central corneal infection/aggressive peripheral infection 	<ul style="list-style-type: none"> Persistent corneal epithelial defects (with bandage SCL) Non-hyperacute conjunctivitis Ocular Stevens Johnson Syndrome Central corneal infection, following arrest of progression Conjunctivitis in COVID 19 suspects with other red flag symptoms/travel or exposure history (only for confirmation before referral to ER triage) 	<ul style="list-style-type: none"> Referrals from external sources triaged to allow longer delays
FOLLOW-UP	<ul style="list-style-type: none"> Post-op patients Other unstable patients on short follow-ups e.g. under 6 weeks Immunosuppressed patients losing vision due to external disease - review in dedicated area (see uveitis section) 	<ul style="list-style-type: none"> Corneal graft rejection, following initial treatment 	<ul style="list-style-type: none"> Patient by Patient triage needed Cross-linking could be delayed with minimal risk but must be reviewed on a case by case basis
SURGERY	<ul style="list-style-type: none"> Urgent cases, perforations, tectonic for infectious, etc. Trauma support 		<ul style="list-style-type: none"> Graft surgery Keratoconus Surgery

Ophthalmological Risk Stratification for COVID-19

Adapted from the Moorfields Eye Hospital-NHS Foundation Trust, 2020

CATARACT

	HIGH RISK	MEDIUM RISK	LOW RISK
	Remain Face to Face	Video or Phone Consultation with F2F follow-up Reschedule for first part of recovery phase	Reschedule after 6 months
NEW	<ul style="list-style-type: none"> None 		<ul style="list-style-type: none"> Deferred for 6 months
FOLLOW-UP	<ul style="list-style-type: none"> Complex post-op or complications 	<ul style="list-style-type: none"> Routine post-op managed by telephone 	<ul style="list-style-type: none"> Routine follow-up delayed
SURGERY	<ul style="list-style-type: none"> Unlikely unless support for other services e.g. uveitis 		



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REFRACTIVE

	HIGH RISK	MEDIUM RISK	LOW RISK
	Remain Face to Face	Video or Phone Consultation with F2F follow-up Reschedule for first part of recovery phase	Reschedule after 6 months
NEW	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> Post-op within 1 month of surgery 	<ul style="list-style-type: none"> All other patients
FOLLOW-UP	<ul style="list-style-type: none"> Post-op within 1 week of surgery Post-op complicated surgery 	<ul style="list-style-type: none"> Post-op within 1 month of surgery 	<ul style="list-style-type: none"> All other patients
SURGERY	<ul style="list-style-type: none"> Possible infection Uncontrolled/aggressive DLK, flap infection 		