

## Supplementary Material

### Telemedicine Survey of Ophthalmology Residency Program Residents at Massachusetts Eye and Ear (MEE)

I agree to participate in this research:	Yes No
<b>A. Background Information:</b>	
This section strives to better understand the survey respondent characteristics.	
Please indicate your year in training:	PGY2 PGY3 PGY4
Please indicate your planned area of practice/subspecialty:	Comprehensive Cornea Retina Glaucoma Pediatrics Oculoplastics Neuro-ophthalmology Uveitis Industry/Nonclinical Undecided
Please indicate your age:	< 25 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 > 39
Please indicate your sex:	Female Male Prefer not to say
Please indicate your racial or ethnic identity:	White Black or African American Asian or Asian Indian Hispanic, Latino, or Spanish American Indian or Alaska Native Middle Eastern or Northern African Native Hawaiian or Other Pacific Islander Prefer not to say
<b>B. Telemedicine:</b>	
This section aims to understand your current exposure and future plans related to telemedicine.	
For the purposes of this survey, 'telemedicine' or 'telemedicine visit' is defined as 'a formal structured clinical encounter conducted remotely from the patient to provide diagnostic or treatment information to a patient or a consulting physician'. This can take place either via telephone, video, or remote review of images/video with a generated report. For the purposes of this survey, this does NOT include patient telephone	I understand

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calls to answer questions about medications or non-structured phone calls to answer quick clinical questions	
Have you participated in a formal telemedicine curriculum during your MEE Ophthalmology Residency?	Yes No
If yes, please rate your satisfaction with the current telemedicine curricular component	Satisfied Somewhat Satisfied Neutral Somewhat Unsatisfied Unsatisfied
Please rate your confidence in your knowledge and skill in conducting the following components of a telemedicine eye exam	
Setup - Logistics of a proper encounter (e.g., audio/video, lighting, background, how to use software...)	Confident Somewhat Confident Neutral Somewhat Unconfident Not at all Confident
History - Patient interaction (e.g., best practices for telephone/video calls)	Confident Somewhat Confident Neutral Somewhat Unconfident Not at all Confident
Exam - Collecting clinical data via telemedicine visits (e.g., VA, pupils, external exam, anterior segment exam, limitations)	Confident Somewhat Confident Neutral Somewhat Unconfident Not at all Confident
Documentation (e.g., telehealth note-writing, billing/coding, interprofessional interactions)	Confident Somewhat Confident Neutral Somewhat Unconfident Not at all Confident
Education (e.g., ensuring proper attending oversight and feedback; learning how to triage ophthalmic complaints via telemedicine)	Confident Somewhat Confident Neutral Somewhat Unconfident Not at all Confident
Please rank your current level of comfort in being able to apply real-world technological solutions to address issues of ethics and professionalism in telemedicine	Complete knowledge base Good knowledge base Moderate knowledge base Somewhat poor knowledge base Poor knowledge base
Please rank your current level of comfort in being able to apply real-world technological solutions to address health disparities in telemedicine	Complete knowledge base Good knowledge base Moderate knowledge base Somewhat poor knowledge base Poor knowledge base
Have you personally been involved in the clinical care of a patient via an ophthalmic telemedicine visit?	Yes No
If yes, please provide an approximate number of telemedicine visits where you were involved in the provision of clinical care to patients in the last academic year.	1-3 4-6 7-9 10 or more
If yes, has your telemedicine experience been in providing direct patient care, shadowing another physician offering telemedicine visits, or both?	Direct patient care Shadowing Both
If yes, has your telemedicine experience been in providing synchronous (real-time video or telephone visit with a patient), asynchronous (store-and-forward review of an image or video without a real-time in-person or	Synchronous Asynchronous Hybrid Remote Monitoring

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video/telephone call), hybrid (patient obtains testing such as HVF or OCT + telemedicine visit), or remote monitoring (remote evaluation of patient-provided 'wearable' data such as IOP) telemedicine? Select all that apply.	
Do you believe that you will use telemedicine in your future day to day practice?	Yes No Unsure
How important will telemedicine be for ophthalmologists in the future	Important Rather important Moderately important Minimally important Unimportant
How important is it that telemedicine be taught during ophthalmology residency?	Important Rather important Moderately important Minimally important Unimportant
How comfortable are you in triaging a patient via a telemedicine visit at present?	Comfortable Rather comfortable Moderately comfortable Minimally comfortable Uncomfortable
Which of the following conditions do you think can be appropriately TRIAGED (i.e., determine necessity of an in-person visit) via telemedicine instead of in-person? Select all that apply	Acute conjunctivitis Diabetic retinopathy Age related macular degeneration Primary open angle glaucoma Acute angle closure glaucoma Uveitis Retinal detachment Cataract Retinopathy of prematurity Strabismus Optic neuritis Corneal abrasions Ruptured globe
How comfortable are you in making diagnoses via a telemedicine visit at present?	Comfortable Rather comfortable Moderately comfortable Minimally comfortable Uncomfortable
Which of the following conditions do you think can be appropriately DIAGNOSED (i.e., detect presence or absence of disease) via telemedicine instead of in-person? Select all that apply	Acute conjunctivitis Diabetic retinopathy Age related macular degeneration Primary open angle glaucoma Acute angle closure glaucoma Uveitis Retinal detachment Cataract Retinopathy of prematurity Strabismus Optic neuritis Corneal abrasions Ruptured globe
How comfortable are you managing patient with known diagnoses via a telemedicine visit at present?	Comfortable Rather comfortable Moderately comfortable Minimally comfortable Uncomfortable
Which of the following conditions do you think can be successfully MANAGED via telemedicine encounters for	Acute conjunctivitis Diabetic retinopathy Age related macular degeneration

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<p>patients with a known and established diagnosis? Select all that apply</p>	<p>Primary open angle glaucoma                  Acute angle closure glaucoma                  Uveitis                  Retinal detachment                  Cataract                  Retinopathy of prematurity                  Strabismus                  Optic neuritis                  Corneal abrasions                  Ruptured globe</p>
<p>To further improve your telemedical knowledge and skills, which educational modalities would best assist you in developing your capacity to provide care via telemedicine? Select all that apply</p>	<p>Lecture based / Didactics                  Online modules                  Simulated telemedicine encounters with directed feedback                  Real-patient telemedicine encounters with directed feedback</p>
<p>Please provide any ideas or feedback regarding current or future ophthalmology telemedicine curriculum at Massachusetts Eye and Ear</p>	