



AMERICAN ACADEMY  
OF OPHTHALMOLOGY®

# **Teleophthalmology Toolkit:** **A resource for state societies and their members**

***Compiled by***  
**The Secretariat for State Affairs**

***Acknowledgement:***  
***We greatly appreciate the quality material produced by American Academy of Ophthalmic Executives (AAOE) used in the Toolkit***

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## INTRODUCTION

The Teleophthalmology Toolkit will serve as a resource for our state societies and their members to better serve their communities and reduce potential exposure in facilities where patients are being treated. This is not a comprehensive guide to telemedicine but hopes to highlight important topics for ophthalmologists and their staff. Since the information is constantly evolving, we recommend monitoring the AAO's telehealth webpage (<https://www.aao.org/practice-management/telehealth>) for new updates.

## SETTING UP THE VIRTUAL ENVIRONMENT

To ensure a successful virtual/telehealth visit for you and the patient, take some time to walk through and test these considerations before starting:

- ❖ **Identify an appropriate clinician visit location:** Locate an area that allows for clinicians to interact with patients securely through the video platform. This location should provide:
  - **Appropriate Lighting:** Ensure that the location identified allows the clinician to be seen clearly by the patient without overhead or side glare from lighting or windows. The clinician should also be able to easily view the screen without excessive glare or reflection.
  - **Clear Audio:** Clinician should be able to be clearly heard by the patient and clearly hear the patient, whether through use of tablet speakers, telephone, or personal earbuds/headphones.
  - **Privacy:** The location should be free of foot traffic and allow the clinician to still maintain patient information in a confidential fashion.
  - **Ability to consult with other onsite clinicians.**
  
- ❖ **Patient location considerations:** Locate a space for patient that will allow the device to remain plugged at all times but will be outside of the path of traffic within the patient's home or facility. Consider the following:
  - **Appropriate lighting:** As with clinicians, the patient should be free of visible glare from overhead lighting or open windows and should be clearly visible to clinicians.
  - **Clear audio:** Patient should be able to hear and speak clearly to be able to interact with clinician through device speakers.
  - **Steady placement:** It is important that to the extent possible, the device be placed on a sturdy surface that impedes movement but allows for the patient to be positioned in a way the clinician can appropriately assess them.

## **Synchronous Audio and Video Visits**

Visits are covered under CPT codes 99201-99215 and for Medicare Part B, the Eye visit codes 92002-92014 also.

Smartphone or web interface (not electronic health record portal). Common platforms include FaceTime, Facebook Messenger video chat, Google Hangouts video, Zoom, Go-To-Meeting and Skype.

- Connect with the patient using one of these audio-video connections.
- Document patient consent.
- Start your timer if billing based on time vs. medical decision making
- Complete medical history and history of present illness (HPI) updates, update medical record.
- You can watch or perform visual acuity testing, and the patient (or other person) can position the camera to view the external structures, as well as attempt to visualize a red reflex.

## **Testing Visual Acuity Using a Chart or Web-based System**

The Academy has printable instructions on how patients can test their vision at home (<https://www.aaopt.org/eye-health/tips-prevention/home-eye-test-children-adults>).

Printable version can be found in Appendix A.

- Perform the external exam, pupils, eye movements and alignment and pen light anterior segment with a camera. The patient can share additional selfie images separately for documentation but they are not separately billable.
- Conduct medical discussion, including questions from the patient and family.
- Document the time of the visit.

**For EHR built-in systems that support videoconferencing:** Practices with sophisticated EHRs can use the patient portal.

There are specific rules for each EHR system, including scheduling and access for the patient including consent, patient location (currently waived restriction) and then logging in to the EHR portal. This can be challenging for patients.

## **Testing Visual Acuity Using a Local Chart or Other Available Platform**

- Perform the external exam, pupils, eye movements and alignment and pen light anterior segment with a camera. The patient can share additional selfie images separately for documentation but they are not separately billable.
- Medical discussion including questions from patient and family.
- Document time of visit.

## VIRTUAL VISIT/TELEHEALTH PRO TIPS

- ❖ **Set Up Your Camera at Eye-Level**
  - Whether you're using an integrated or external camera, set it up so that the camera is approximately eye-level. That way, it'll be easier to maintain eye contact with the patient and stay engaged during the visit.
- ❖ **Interpersonal Courtesy**
  - Don't multitask (side conversations, cell phone calls, or checking emails) while the patient is connected with you. Set your devices to "do not disturb" and treat the visit as you would an in-person consultation.
  - Make every effort to look at the webcam often (not the person on the screen) to give the impression that you are looking them in the eye.
- ❖ **Read your patient's complaint and have their chart ready beforehand.**
  - Being prepared makes the appointment more professional, productive, and efficient, saving time and hassle for you and your patient.
- ❖ **Communicate when you have to look away from the screen.**
  - If you need to glance away to take notes, let your patient know you're still listening but simply documenting the appointment as needed.
- ❖ **Keep lag time in mind**
  - You may experience some lag time while on a virtual connection. A good rule of thumb is to wait about two seconds before speaking to allow your patient's last words to come through on your end.
- ❖ **Be clear with any post-appointment instructions**
  - Be clear and direct with any post-visit appointment instructions, such as calling in prescriptions or scheduling a follow-up appointment. Patients may not always know what to do next after a video appointment versus an office appointment.
- ❖ **How will you re-direct a patient through video visit**
  - Be thinking of how you would redirect a patient - what words would you use to tell a patient that you can't see them clearly. This is likely the patient's first video visit and they will be nervous.

## CODING FOR PHONE CALLS, INTERNET AND TELEHEALTH CONSULTATIONS

An AAO downloadable resource: Coding for Telemedicine Toolkit

(<https://www.aao.org/Assets/6f71c38f-37b9-4399-871f-7687947ade2c/637281003623170000/coding-for-telemedicine-toolkit-final-06-18-20-pdf?inline=1>)

*What You Need to Know:*

- **CMS changed place of Service (POS) from 2 to 11.** (See "Resubmit Your Telemedicine POS 2 Denied Claims" information below.)
- **Important: Effective April 30, CMS added the Eye visit codes to the list of covered exams during the COVID-19 PHE.** Documentation requirements remain the same:
  - 92002 and 92012 are achievable via virtual face-to-face interaction.
  - Place of service is 11 and append modifier -95.
  - This expansion of coverage may be unique to CMS.
- **Time involving staff who are not licensed** to practice medicine cannot be billed for or factored into time-based coding options.
- **Important: Effective April 30, CMS included the technician code 99211 as a telemedicine code option.** Documentation requirements include:
  - Applies to new and established patients.
  - There must be a documented order from the physician indicating what should be addressed during the staff/patient encounter by phone.
  - Supervision may be virtual.
  - 99211 continues to be bundled with all testing services performed the same day.
  - A physician visit performed on the same day of 99211 would not be separately billable.
- **Commercial and Medicaid programs** have their own rules regarding coverage of codes, modifiers and place of service (POS). Check every commercial and Medicaid website for specific information.
- **All information applies to new and established patients.**
- **Patients must be notified that a claim will be submitted to the payer.**
- **Phone call codes G2012 or 99441-99443** should not be reported when originating from a related E/M service provided within the past seven days nor leading to an E/M service or procedure within the next 24 hours or soonest available appointment. Should not be reported for postop visits. (See note below option 2 chart.)
- **E-visit codes 99421-99423** include up to seven days cumulative time. These codes are not to be used for scheduling appointments or conveying test results.
- **Evaluation of Video or Images code G2010** should be used for remote evaluation of recorded video and/or images submitted by a new or established patient (e.g., store and forward), including interpretation with follow-up with the patient within 24 business hours, not originating from a related E/M service should be provided within the previous seven days nor leading to an E/M services or procedure within the next 24 hours or soonest available appointment. G2010 and G2012 may be submitted the same day.

*Resubmit Your Telemedicine POS 2 Denied Claims (Updated 8/4/2020)*

In the early days of telemedicine, CMS required telemedicine codes to be submitted with place of service (POS) 2 for telehealth. Then, CMS changed it to POS 11 for office. Since then, Medicare Administrative Contractors (MAC) have been receiving hundreds

of redetermination requests to change the POS on claims from 02 to 11. For physicians who may not be aware, this type of change to their claims should and can be expedited through the reopening process. Check the unique instructors on your particular MAC website. Self-service re-openings can initiate both claim and line level adjustments within a single transaction. Examples of these adjustments are:

- Billed Amount
- Deny Services Billed in Error
- Diagnosis
- Modifiers-see exceptions below
- Month/Day of Service Changes
- MSP Type
- Place of Service
- Procedure Code and Billed Amount
- Procedure Code, Modifier and Billed Amount
- Rendering NPI and PTAN
- Referring NPI
- Reprocess Claim (without changes)
- Units and Billed Amount
- Units, Modifier and Billed Amount

#### Overview of Four Covered Options for Medicare Part B Patients

There are four options for telehealth and other communications-based technology services. This information is based on guidelines from the Centers for Medicare & Medicaid Services.

#### **Option 1: Telehealth Virtual Two-Way Communication Between Physician and Patient**

Level of exam is based on either physician total time on the date of the encounter (listed below) or medical decision making (MDM) during the PHE.

<b>CPT Code New Patients</b>	<b>Level of MDM</b>	<b>Time</b>	<b>Modifiers</b>	<b>Place of Service</b>
99201	Straightforward	10 min	95	11
99202	Straightforward	20 min	95	11
99203	Low	30 min	95	11
99204	Moderate	45 min	95	11
99205	High	60 min	95	11

## Eye Visit Codes

<b>CPT Code New Patient</b>	<b>Description</b>	<b>Modifiers</b>	<b>Place of Service</b>	
92002	New patient Intermediate exam	95	11	
92004	New patient Comprehensive exam	95	11	
<b>CPT Code Established Patient</b>	<b>Level of MDM</b>	<b>Time</b>	<b>Modifiers</b>	<b>Place of Service</b>
99211	Doesn't qualify	5 min	95	11
99212	Straightforward	10 min	95	11
99213	Low	15 min	95	11
99214	Moderate	25 min	95	11
99215	High	40 min	95	11

## Eye Visit Codes

<b>CPT Code Established Patient</b>	<b>Description</b>	<b>Modifiers</b>	<b>Place of Service</b>
92012	Established patient Intermediate exam	95	11
92014	Established patient Comprehensive exam	95	11



## Option 2: Physician/Patient Phone Calls

CPT Code	Time	Modifiers	Place of Service
G2012	5-10 min	N/A	11
99441	5-10 min	N/A	11
99442	11-20 min	N/A	11
99443	21-30 min	N/A	11

**Important:** Effective April 30, CMS increased the allowable of 99441 to 99212, 99442 to 99213 and 99443 to 99214. The increase will be automatically made to March 1 dates of service. These codes are reported for medical discussion with the physician and should not be used for administrative or other non-medical discussion with the patient.

## Option 3: E-Visits for Online Digital Services

CPT Code	Time	Modifier	Place of Service
99421	5-10 min	N/A	11
99422	11-20 min	N/A	11
99423	21 or more min	N/A	11

## Option 4: Evaluation of Video and Images

CPT Code	Definition	Modifier	Place of Service
G2010	Remote evaluation of recorded video and/or images submitted by a new or established patient (e.g., store and forward), including interpretation with follow-up with the patient within 24 business hours	N/A	11

### *Interprofessional Telephone/Internet/Electronic Health Record Consultations (Updated 7/13/2020)*

An interprofessional telephone/Internet/electronic health record consultation is an assessment and management service in which a patient's treating physician (eg, attending or primary physician) requests the opinion and/or treatment advice of a physician with specific specialty expertise (the consultant) to assist the treating

physician in the diagnosis and/or management of the patient's problem without patient face-to-face contact with the consultant.

<b>CPT Code</b>	<b>Definition</b>	<b>Amount</b>
99446	Interprofessional telephone/Internet/electronic health record assessment and management service provided by a consultative physician, including a verbal and written report to the patient's treating/requesting physician or other qualified health care professional; 5-10 minutes of medical consultative discussion and review	\$18.41
99447	11-20 minutes of medical consultative discussion and review	\$37.31
99448	21-30 minutes of medical consultative discussion and review	\$55.58
99449	31 minutes or more of medical consultative discussion and review	\$73.98

- Place of service is 11 or 22
- Modifier -95 is not required for CMS
- Verify coverage with non-Medicare payers
- Telephone/Internet/EHR consultations of less than 5 minutes should not be reported.
- When the sole purpose of consultation is to arrange a transfer of care or other face-to-face service, these codes are not reported.
- The patient may be either a new patient to the consultant, or an established patient with a new problem or an exacerbation of an existing problem.
  - However, the consultant should not have seen the patient in a face-to-face encounter within the last 14 days.
- When the telephone/Internet/EHR consultation leads to a transfer or care or other face-to-face service (e.g., a surgery, a hospital visit, or a scheduled office evaluation of the patient) within the next 14 days or next available appointment date of the consultant – these codes are not reported.
- If more than one telephone/Internet/EHR contact is required to complete the consultation requires (e.g., discussion of test results), the entirety of the service and the cumulative discussion and information review time should be reported with a single code.
- 99446-99449 conclude with a verbal opinion report and written report from the consultant to the attending or primary physician.



## INFORMATION STATEMENT - ETHICS IN TELEMEDICINE

**The COVID-19 pandemic continues to spread across the United States and the world. Consequently, ophthalmologists are increasingly turning to telemedicine to more safely deliver much-needed care to their patients. We must, however, remember our ethical responsibility to our patients and to our profession.**

### Introduction

Although the fidelity and ethics of the relationship between physician and patient have changed little since the days of Hippocrates, the manner in which we interact with our patients has changed dramatically. The pace of technological innovation has rapidly altered the way that we are able to communicate with our patients as well as with each other and has allowed us to deliver care to patients even thousands of miles away through the use of telemedicine. Although telemedicine may take one of several forms, it is important for us, as physicians, to remember that our fiduciary and ethical obligations to our patients remain unchanged.

Telemedicine and telehealth are similar but different terms referring to the way in which physicians use communication technology to assist patients. Telehealth is a broader term that encompasses telemedicine and also refers to more indirect physician-patient interactions, for example, through answering questions on a health-related website. Telemedicine refers to the part of telehealth that involves more-direct patient interaction. According to the Academy's Telemedicine for Ophthalmology Information Statement, telemedicine is "real-time, bidirectional communication between a patient and provider using audiovisual telecommunications and data collection technology".

Although telemedicine allows us to consult with and treat patients in distant locations, it is clearly not a perfect substitute for a normal face-to-face patient interaction. Nonetheless, ophthalmologists who provide clinical services using telemedicine must still uphold the same standards of professionalism that are expected with in-person consultation as well as follow the Academy's Code of Ethics and adhere to applicable laws governing the practice of telemedicine. It is important for members of the American Academy of Ophthalmology who use telemedicine to keep the following ethical issues in mind.

### Competence

The first of the Academy's Rules of Ethics deals with physician competence and states, in part, "an ophthalmologist should perform only those procedures in which the ophthalmologist is competent by virtue of specific training or experience or is assisted by one who is. An ophthalmologist must not misrepresent credentials, training, experience, ability or results."

With respect to telemedicine, there is a learning curve to use this technology to competently evaluate ophthalmic conditions and render care. Providers will have varying levels of experience and ability using telemedicine technologies. Thus, it is incumbent upon the ophthalmologist to ensure that he/she understands the limitations and shortcomings of the technology used and is sufficiently proficient in the use of telemedicine platforms to be able to comfortably interact with patients electronically.

Providers must ensure that they have the information they need to make well-informed clinical recommendations when they cannot personally conduct a physical examination and must obtain vital information through remote technologies.

The limitations of the use of telemedicine should be communicated with the patient. For example, many aspects of a slit lamp exam may not be possible with current telemedicine platforms and may severely limit the quality of the exam if an intraocular problem is suspected. The ophthalmologist performing a telemedicine consult should recognize and plan for these limitations.

### **Informed Consent**

Informed consent is the process by which the ophthalmologist educates a patient concerning the risks, benefits and alternatives of an intervention. In telemedicine, this process allows the patient to understand the unique limitations of the technology and to make autonomous decisions about its use.

By helping the patient to understand the reasons for using telemedicine as well as the technology's shortcomings and possible alternatives, providers fulfill their obligations of autonomy, beneficence and justice and greatly limit medical liability exposure.

In addition to providing information about clinical issues and treatment options, the ophthalmologist's informed consent process should also provide information that the patient needs concerning the distinctive features of telemedicine. Patients should have some understanding of how telemedicine technologies will be used in their care, what the limitations of these technologies are and what will be expected of patients when using these technologies.

### **Conflict of Interest**

All ophthalmologists who participate in telemedicine have an ethical responsibility to uphold fundamental fiduciary obligations by disclosing any financial or other interests in the telemedicine application or service. Ophthalmologists should take steps to manage or eliminate conflicts of interest and disclose any conflicts of interest to the patient prior to a consultation.

### **Confidentiality**

Perhaps the greatest challenge concerning the use of telemedicine is the potential for loss of privacy and risk to patient confidentiality. Ophthalmologists who provide telemedicine services have an obligation to protect the confidentiality, privacy, security and integrity of the clinical information gathered during a telemedicine consult. Because of international privacy laws as well as HIPAA in the United States, this obligation is not only an ethical requirement, it is a legal requirement as well.

The physician must ensure that the platform used during the consult has appropriate protocols to prevent unauthorized access and to secure and protect data security. Video and images should be transmitted with proper security protocols, including encryption. The physician should inform the patient of the inherent risks that are unique to telemedicine and discuss steps that can be taken by the patient to protect confidential information.

### **Continuity of Care**

Ophthalmologists who participate in telemedicine services have an obligation to promote continuity of care and advise the patient on follow-up care and next steps after the consult ends. When possible, and with the patient's permission, the provider may wish to provide the results of the telemedicine consultation to the patient's local primary care provider and/or local eye care provider. Care must be taken that this is done in a HIPPA-compliant fashion.

### **Preservation of Data**

At the onset of a telemedicine consult, the ophthalmologist establishes a physician-patient relationship and just as in a face-to-face in-office interaction, takes on an obligation to record and preserve any clinical data that is gathered in order to facilitate continuity of care.

In the context of telemedicine, special consideration should be given on how the provider will preserve information both for future episodes of care and/or referral to more local providers.

Because the telemedicine provider may not have an ongoing relationship with the patient and because of the unique risks of storing information on the internet, the ophthalmologist should give thoughtful consideration on how the data will be stored at the end of the encounter as well as data recovery in case of system failure.

### **Legal Considerations**

In addition to the ethical concerns of telemedicine, there are legal concerns as well. Legal considerations should include not only malpractice concerns but also the statutory issues of informed consent, patient privacy and conflict of interest. These same issues govern face-to-face visits. In addition, the consulting ophthalmologist must consider the laws and regulations pertaining to the practice of telemedicine across state borders (see the Center for Connected Health Policy for information).

### **Conclusion**

Whether in a local nursing home or in a rural area a continent away, telemedicine gives the promise of delivery of general ophthalmic and subspecialty eye care to areas where ophthalmic care may be difficult or otherwise impossible to obtain. However, no matter where the patient is found, our ethical responsibilities to the patient are not diminished.

Just as in a face-to-face setting, it is imperative that the telemedicine provider place patient welfare above all other interests, provide competent patient care, provide all the information that a patient needs to make well-informed decisions, respect patient

privacy and confidentiality and take steps to ensure continuity of care. Our goal should be to deliver excellent care over distance to enhance health care access, quality and patient satisfaction.

American Academy of Ophthalmology Ethics Committee  
April 28, 2020

For more information or to submit a question, contact the Academy's Ethics Committee at [ethics@aao.org](mailto:ethics@aao.org).

## References

<https://www.aao.org/ethics-detail/code-of-ethics>

<https://www.aao.org/clinical-statement/telemedicine-ophthalmology-information-statement>

<https://www.ama-assn.org/delivering-care/ethics/ethical-practice-telemedicine>

<https://www.aao.org/practice-management/article/teleophthalmology-how-to-get-started>

<https://www.aao.org/practice-management/cybersecurity>

<https://www.omic.com/telemedicine-consent-form/>

<https://www.hhs.gov/sites/default/files/telehealth-faqs-508.pdf>

## IT AND CYBERSECURITY CONSIDERATIONS

The information found in this section can be found at <https://www.aao.org/practice-management/cybersecurity>

### Cybersecurity Overview

Viruses, malware and hackers pose a threat to patients and physician practices. The Academy has curated resources and has tips for physicians and health care staff to protect patient health records and other data from cyberattacks. The HIPAA Security Rule requires practices to conduct a security risk analysis and mediate any identified risks.

### Prepare for Cyberthreats

- [Securing Your Wireless Network](#). Federal Trade Commission
- [Security Risk Analysis](#), American Academy of Ophthalmology
- [Health Industry Cybersecurity Practices](#) (PDF). Overview of threats and 10 cybersecurity recommendations. Department of Health & Human Services.
- [Health Industry Cybersecurity Practices, Technical Volume 1: Cybersecurity Recommendations for Small Health Care Organizations](#) (PDF). How to implement cybersecurity recommendations. HHS.
- [Cybersecurity Tips](#), Jeffrey Daigrepoint, senior vice president of the [Coker Group](#).

### Respond to Cyberattacks

- [My entity just experienced a cyber-attack! What do we do now?](#) (PDF) HHS Office of Civil Rights
- [Cyber-Attack Quick Response Infographic](#), HHS Office of Civil Rights

### Anti-Virus Software

Anti-virus protection is important to protecting your practice's data. The Academy has curated a list of trusted products below.

**Important:** Do NOT install multiple anti-viruses. Most products (like Windows Defender) will stop running when another product is installed. Others may still run but will slow down the system and reduce the effectiveness of each anti-virus product.

#### Mac:

- [Kaspersky Security Cloud Free](#)
- [Bitdefender Antivirus Free Edition](#)

#### PC:

- [Kaspersky Security Cloud Free](#)
- [Bitdefender Antivirus Free Edition](#)
- Windows Defender (built-in with Windows 10)

- [PCMag: The Best Free Antivirus Protection for 2020 \(free versions\)](#)
- [PCMag: The Best Antivirus Protection for 2020 \(paid versions\)](#)

### **Train Yourself and Your Staff**

The Academy has identified a few free cybersecurity training options below.

- HIPAA TV, [Healthcare Cybersecurity Training](#)
- HHS [Cybersecurity Awareness Training](#)  
Description: Cybersecurity awareness training leveraged by HHS employees, contractors, interns, and others.
- HHS, [Your Mobile Device and Health Information Privacy and Security](#)

### **Videos From the Academy**

- [Cybersecurity and Ways to Protect Your Practice](#), Jeffery Daigrepoint and Marissa Maldonado discuss risks and ways to protect the practice.
- [Protect Patients, Practice, and Profits from Ransomware](#), By Renee C Bovelle MD, Lee A Snyder MD
  - [Ransomware 101—Hackers Are Trying to Take Your Practice Data Hostage](#), Written counterpart. Leslie Burling-Phillips, Contributing Writer, interviewing Janet A. Betchkal MD, Jeffery Daigrepoint, EFMP, CMPE, and Ravi D. Goel, MD
- [Cybersecurity 101: Protecting Your Medical Records](#), video of Ravi D. Goel, MD

### **Cyber Liability**

Ophthalmology Mutual Insurance Co.

- [Cyber Liability Resources](#) (some resources require an OMIC password)



# APPENDIX A: VISUAL ACUITY CHART FOR HOME USE

## Snellen chart for adults

**K H O R**  
20/100

**O Z N H V C**  
20/70

**R K S C Z H V D**  
20/50

**H O C Z R K D S V N**  
20/30

**S D K H O R C V**  
20/20