

This guide serves as the early experience of Emory Telehealth team in implementing telemedicine throughout Emory Healthcare. The materials are intended solely for general educational and information purposes, and are not intended to provide professional advice. EMORY MAKES NO WARRANTIES, EXPRESS OR IMPLIED AS TO THE MATERIALS, INCLUDING, WITHOUT LIMITATION, COMPLIANCE WITH QUALITY, REGULATORY, ACCREDITATION OR STANDARDS OF CARE. EMORY EXPRESSLY DISCLAIMS ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE RELATED TO THE MATERIAL.

I. Training and certification

In order to ensure that everyone who would provide telemedicine services has the base knowledge to provide telemedicine services, we created a certification program for everyone who has privileges and credentials in our health system. This certification program (attached as HLC Provider Training_HLC Telehealth_Final_External.pdf) is a three-part module developed in Healthstream Learning Center (HLC), created BEFORE the changes in federal and state policy that occurred due to the public health emergency of COVID19. HLC allows us to maintain a database of who has taken the module so that they can be certified to perform telehealth actions and be granted access to the resources necessary to do that. **Module 1** promotes basic understanding of telehealth and telemedicine based on Georgia definitions, benefits of telehealth, basic applications, definitions, types of telehealth and telemedicine, licensing, and expected Emory standards. **Module 2** defined legislation and regulations at the state and federal levels, regarding licensure, billing, coding, and allowable practice. **We removed this module from the materials we are sending because much of the material in module 2 is now obsolete secondary to the lifting of restrictions due to emergency waivers.** You may wish to consider development of a similar module for your institutions in conjunction with your own compliance and legal advisors. **Module 3** includes basics about the telehealth visit process. The modules are not expected to be exhaustive or to encompass all use cases; they are designed to ensure that practitioners use telemedicine for the right use cases, safely, complying with laws, and with understanding of the elements of telehealth visits from start to finish. Over 1200 providers have been completed the module within a 2-week period.

II. Assessment and Attestation

Upon completion of the module, a 10-question assessment (attached as Emory Post-Training Telehealth Provider Assessment.v2.pdf) is administered that must be passed at a rate of 80% or higher, and physician/APP attestation is requested so that they are aware that in-person training will be required when we gain access to our new vendor's platform. Due to the nature of the rapid ramp-up, we have adopted a "train the trainer" model, with extensive Zoom-based training sessions, or in-person training sessions for those requesting it. Sessions have included as many as 65 clinicians at one time.

III. Hub and spoke model

In order to scale the effect of our small central team, we adopted a hub & spoke model to rely on the creative power of our people. Emory Telehealth team is the hub, and each section, division, or practice is the spoke. Examples of spokes would be our Brain Health Center (BHC) team, inclusive of neurology, neurosurgery, physical medicine and rehabilitation, psychiatry, and sleep medicine; Heart and Vascular team, inclusive of CT Surgery, Cardiology, and Vascular surgery; Primary care, including the faculty practice and the employed non-faculty providers; etc. Chairpersons and service line chiefs are highly supportive. We request that each spoke have a **dyad** of at least one administrative facilitator and one physician or APP champion; often there are a few of each, especially in larger groups. We leverage the power and ingenuity of our people to improve our materials and workflows. For instance, BHC team created outstanding standard work documents, which are step by step processes for schedulers and providers listing the step, the description, the key point/image/reason for the step, who is responsible, and why. Each area modified this for their own practitioners depending on need. Videos were created as well as educational resources. All resources are catalogued on a SharePoint site with federated access for Emory-affiliated employees, and read access is open to all Emory requestors. Write access is limited for appropriate site maintenance.

IV. Outpatient telemedicine

As the realities of the need for social distancing occurred and resulted in clinic patient cancellations, each site was expected to develop a plan for outpatient telemedicine to be deployed as soon as possible to maintain continuity of care with existing patients and to provide opportunities for new patients to be seen. Workflows were developed based on our scheduling system (Cerner, GE Centricity Business) that allow new and established video visits, portal visits, and telephonic visits. Providers are expected to review existing schedules and determine if the patients are urgent enough to be seen in person (rare) or switched to video / portal / or phone visits. Patients are given choice as well. Facilitators act to promote robust interaction between providers, administrative staff, and clinical staff to ensure seamless continuity for the patients. Models have developed in which clinical staff can assist the physician in the rooming process via video (vital signs report, med history, allergy, pharmacy check, social history, review of systems). Each section performs rapid tests of change with continuous quality improvement methodology to achieve best outcomes. Nightly Zoom telemedicine “office hours” are led by telehealth administrator Rob Sweeney and Medical Director Gregory J. Esper, MD, MBA to demonstrate workflows and to answer questions. Questions are funneled by the Chat function, and dialogue abounds. Screen share has been an important tool for learning. Each meeting is recorded for later distribution. We now do report-outs in a tiered fashion, which is beginning to mimic our Lean tiered huddle structure in which we report out safety, methods, equipment, staffing, or supply concerns for each spoke. 3000 telemedicine visits are scheduled this week across all sites, up from <100 the prior week. Additional attached information includes various provider, patient, and scheduler guides, Zoom tips and tricks, and webcam recommendations for providers not using camera-enabled computer devices.

V. Emergency Department low-risk respiratory pathway

In order to preserve PPE, the Emory Emergency Medicine group is actively iterating with a nurse presenter model for low acuity respiratory patients. Flow was developed beginning with a greeter who triages the low acuity patient based on questions to either a respiratory or non-respiratory pathway. The low acuity respiratory patient is then escorted to a room in which a nurse presenter who has donned personal protective equipment (PPE) performs vital signs and then begins an audio/video assessment with the remote (or distant site) provider. Medical screening examination is performed using pen light and Bluetooth stethoscope. Initial stages of the pilot require in person examination to confirm that findings via telemedicine examination would not change based on standard examination. Initial results suggest that telemedicine examination is equal to that done via telemedicine. PPE is spared as the provider is able to see patients via a control room, saving up to 4 pieces of equipment (glasses, gown, gloves, and mask) for each patient seen.

VI. Palliative care video visits in ICU

Visitor restrictions for COVID positive patients have created a challenge with decision making regarding potential end-of-life interventions. Our palliative care team is actively iterating on an early model that allows the patient to be brought together with family members via telemedicine for support during the critical decisions that occur at end-of-life. While hospital visitor restrictions may be lifted towards end-of-life for COVID+ patients, decisions may be required more urgently. Additionally, telemedicine is especially helpful if family members or caregivers cannot be at bedside for various reasons. As with the ED use case, it is important for the clinician to be at bedside during the first consults to ensure seamlessness. The model progresses, if necessary for PPE preservation, to have the provider on video but close by the ICU in case of difficulty; the model can be broadened depending on workforce availability to have one palliative care team member staffing multiple ICUs in multiple locations.

VII. Inpatient consultative telemedicine

For purposes of PPE preservation and in preparation for possible workforce reduction, various specialties are iterating over telemedicine deployment protocols. Specialties including neurology, urology, nephrology, rheumatology and others, who work directly with hospital medicine to define patients that require in person consultation, those that require telemedicine visits, and those that require decision making through chart and imaging review. It is imperative that collegial decision-making is facilitated during pilot development by the medical director of telehealth. It is also important to follow standard quality improvement strategies to facilitate continued engagement towards the right outcomes for patients and clinicians. We use A3 methodology which is derived from Lean.

VIII. Trainees and telemedicine

Service lines that teach large numbers of residents and fellows began asking for pathways for training and deploying learners for telemedicine visits. A policy needed to be developed that outlines scope, background, and requirements to enact the standards set forward by the health system. This is attached as Emory Policy on GME Telehealth. Trainees are provided with access to the HLC learning module to track who is eligible to deliver telemedicine services under the supervision of an attending. The supervising attending physician must also be certified to deliver telemedicine services. The program director and the attendings who engage in training of residents and fellows in each service line are responsible for the deployment of telemedicine, and they are working to ensure the appropriate level of quality for the patient interactions within their specialty. All billing guidelines follow telehealth compliance regulations and those that govern trainee interactions. The program also must ensure compliance with all ACGME guidelines for ACGME residents, which includes supervision and feedback. The variation in service lines has required the EHC Telehealth team to delegate the care model formation to the specialty. The EHC Telehealth team serves as advisors solely in the deployment of telemedicine technological workflows and does not assume responsibility for the care model created by the specialty service line.