

# Transitioning a Surgery Practice to Telehealth During COVID-19

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The spread of COVID-19 has challenged practices across the United States to dramatically change inpatient and outpatient practices to focus on containing spread of the virus and accommodate the anticipated increase in volume of acute illness. Despite this transition, practices will need to continue to accommodate evaluation of newly diagnosed malignancies, routine postoperative visits, and acute postoperative issues. Building on an existing telemedicine framework, we aim to describe rapid transition in our outpatient care to a telehealth model in a general thoracic surgery practice during COVID-19.

**Keywords:** COVID-19, surgical practice, telehealth

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Telehealth services have gained popularity and routine utilization among surgical practices in roles such as accessing distant patient populations and routine postoperative care.<sup>1</sup> Although the roles of telehealth for surgical providers continue to mature and experience with this technology is growing, an acute need for use of this technology has been defined by the current pandemic. The advent of COVID-19 has forced medical practices across all disciplines in the United States to dramatically transform inpatient and outpatient practices to focus on containing spread of the virus and accommodate the anticipated inpatient needs of health systems to care for a likely influx of acutely ill patients. Despite the COVID-19 pandemic, there will continue to be new diagnoses of malignancies, acute surgical issues requiring with routine postoperative care, and need to triage outpatient concerns. As a result, our practices will need to continue to accommodate outpatient evaluation while adapting to a continually evolving pandemic, and appropriately limiting elective case volume.

The Centers for Disease Control and Prevention has informed providers to identify alternatives to “face-to-face visits,” suggesting telehealth as a potential modality.<sup>2</sup> As a response to the current situation, institutions have attempted to shift outpatient care to telehealth encounters. Although some patients require a face-to-face visit, such as for chest tube removal, our surgical practice has asked that all other patients be transitioned to a telehealth encounter to comply with current recommendations.

We aim to describe our institution’s experience with transitioning to an almost exclusive telehealth outpatient experience in a general thoracic surgical practice across the domains of new patient evaluation and postoperative care. We have built on the existing framework at our institution, which has performed greater than 7900 telehealth visits during this fiscal year thus far, with the division of thoracic surgery performing greater than 130 visits during the same time period.

## IMPLEMENTATION

We define a telehealth encounter as using telecommunication technology to engage in live synchronous audio and video-conferencing using an internet-based connection from any location as part of our institution’s JeffConnect program.<sup>3,4</sup> Patients are contacted by a clinical coordinator and explained the reasoning for transitioning to telehealth. They are then screened for the ability to access an internet-equipped smart device (eg, computer, smart phone) that is equipped with a microphone and webcam. They are then provided instructions on downloading an app and performing a brief set-up. The patient is then provided an appointment time in which they would sign-on to the telehealth program.

The provider can conduct the encounter using our Heal-compliant platform from any location that is private (ie, to protect patient privacy) with an internet connection using a microphone- and video-equipped smart device (eg, smart phone, tablet). Healthcare providers must comply with state laws governing telehealth consent requirements. Once the patient signs in to the telehealth encounter, an alert is generated on the provider’s device. The provider can then begin the video-encounter using mobile device access through our electronic health record platform. Providers can perform a comprehensive visual examination that can be documented including inspection of incision sites. Our institution provides learning modules detailing comprehensive visual physical examination skills for telehealth. In addition, vital signs such as heart rate and respiratory rate can be determined. A note is then entered in the medical record as a telehealth encounter for documentation. Patient satisfaction with telehealth encounters at our institution is tracked using survey-based methods.<sup>4</sup>

Recent changes by the Centers for Medicare and Medicaid Services (CMS), due to COVID-19, allow for broader access for beneficiaries to telehealth services. Specifically, telehealth visits will be paid at the same rate as in-person encounters, beneficiaries may be located in their home during the visit, and audits will not be conducted to ensure a prior doctor-patient relationship existed (ie, not limited to established patient visits).<sup>5</sup> In addition, recent documentation and billing changes for telehealth by CMS allows providers to select the visit “level” based on 2 options: medical decision making or total time of visit.

## NEW PATIENT EVALUATION

New diagnoses, such as lung and esophageal malignancies, will continue to occur and will require evaluation to prevent delays in treatment, as the current COVID situation unfolds. Given the unclear duration of the current situation, new cancer diagnoses will need to be evaluated and a treatment plan established to ensure that patients are appropriately managed and a backlog of patients does not incur. Our practice, which includes 4 providers (3 physicians, 1 CRNP), have shifted all new outpatient evaluations to telehealth encounters. This allows practitioners to evaluate, discuss treatment options, and establish management plans whereas observing recommended Centers for Disease Control and Prevention guidelines.<sup>2</sup>

Beyond the thoracic surgery clinic, our Multidisciplinary Lung Cancer Clinic has also transitioned to a telehealth model to accommodate the currently evolving situation. Patients requiring a

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multidisciplinary approach (eg, new advanced lung cancer diagnosis) are evaluated by thoracic surgery, medical oncology, and radiation oncology in a single telehealth visit. Patients can be evaluated by all necessary providers (eg, thoracic surgeon, medical oncologist) in a single visit. Each provider logs into the single encounter to perform their portion of the “appointment” and then signs out of the visit, allowing the next physician to begin. In our current model, providers predetermine the order in which they will evaluate each patient. This model preserves the multidisciplinary approach outside the confines of the cancer center and ensures a similar patient experience while undergoing evaluation.

### POSTOPERATIVE CARE

Telehealth visits have been utilized in the postoperative setting to triage acute issues and serve as routine postoperative appointments. Currently, our providers utilize telehealth in the postoperative setting in 3 distinct ways: routine post-discharge assessment at 48 hours, evaluation of acute postoperative issues, and routine postoperative appointments.

Patients experiencing acute issues requiring urgent attention (eg, wound problems) are first evaluated by one of our providers via a telehealth visit. This allows patients to be evaluated including a focused exam that can be documented in the medical record. By engaging patients in this manner, issues can be managed without presentation to outpatient clinics or emergency departments. If further in-person care is required, patients can be directed to clinic or appropriate emergency services. The goal of this strategy is to limit the use of any urgent care/emergency services and limit incoming patient phone calls, as clinical staff is limited due to “stay-at-home” orders that exist in many cities at this time.

Although elective surgical case volume will significantly decrease, as per published guidelines, providers will continue to encounter patients with outpatient postoperative issues related to elective cancer operations or emergent procedures (eg, esophageal perforation).<sup>6</sup> As data surrounding efficacy of post-discharge telemedicine assessment in surgical populations is well-described, we have elected to perform post-discharge telehealth visits at 48 hours following discharge from the hospital.<sup>7</sup> Through this approach, we attempt to identify early postsurgical issues and answer any questions in an elective manner. Finally, routine postoperative visits are being performed through telehealth.

### CHALLENGES

There will be challenges associated with a rapid transition to an outpatient telehealth model across multiple different barriers. First, building rapport and trust during new patient evaluations will be an inevitable problem. Although many patients will understand the unique circumstances, the sacred patient-physician relationship has traditionally been developed during face-to-face interactions which will be a shift from our current culture.

Second, the infrastructure and provider experience to support the shift to almost exclusively telehealth encounters may be a significant challenge for many practices. Although many health

systems may have technical ability and infrastructure to support this, there is investment of resources to ensure patients can properly connect to telehealth encounters. In addition, some providers may not have adequate experience in this modality and there may be a learning curve associated with engaging patients through the telehealth platform. Furthermore, some patients may not have access to required technology for telehealth services, which may exacerbate disparities in obtaining care during the current pandemic.

Third, there are challenges regarding reimbursement and existing laws limiting access that may prevent certain patient populations from engaging in telehealth. COVID-19 has led to recent changes, such as those by CMS, to allow broader reimbursement and access to telehealth services for patients during the current crisis.<sup>5</sup> In addition, practitioners must observe state laws regarding telehealth services. Recent changes in state-level policies due to the pandemic, such as those in Pennsylvania, are now improving access for patients to telemedicine services by allowing out-of-state licensed practitioners to provide services to in-state residents.<sup>8</sup>

### CONCLUSIONS

The current practice has dramatically changed for providers practicing in the inpatient and outpatient settings. Given the uncertainty regarding duration of the impact of COVID-19 on clinical practice, we must adapt, even if temporarily, to ensure that patient care continues. Telehealth provides a modality to continue outpatient care, while ensuring the safety of patients, providers, and the public by limiting personal interactions in a situation that is evolving on a daily basis. Although there will be challenges on multiple fronts and the special circumstances of COVID-19 are hopefully temporary, telehealth allows surgical providers to engage patients until the routine patient-physician encounter can resume.

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