

ARTICLE

The Transition from Reimagining to Recreating Health Care Is Now

Judd E. Hollander, MD, Frank D. Sites, MHA, BSN, RN

Vol. No. | April 8, 2020

DOI: 10.1056/CAT.20.0093

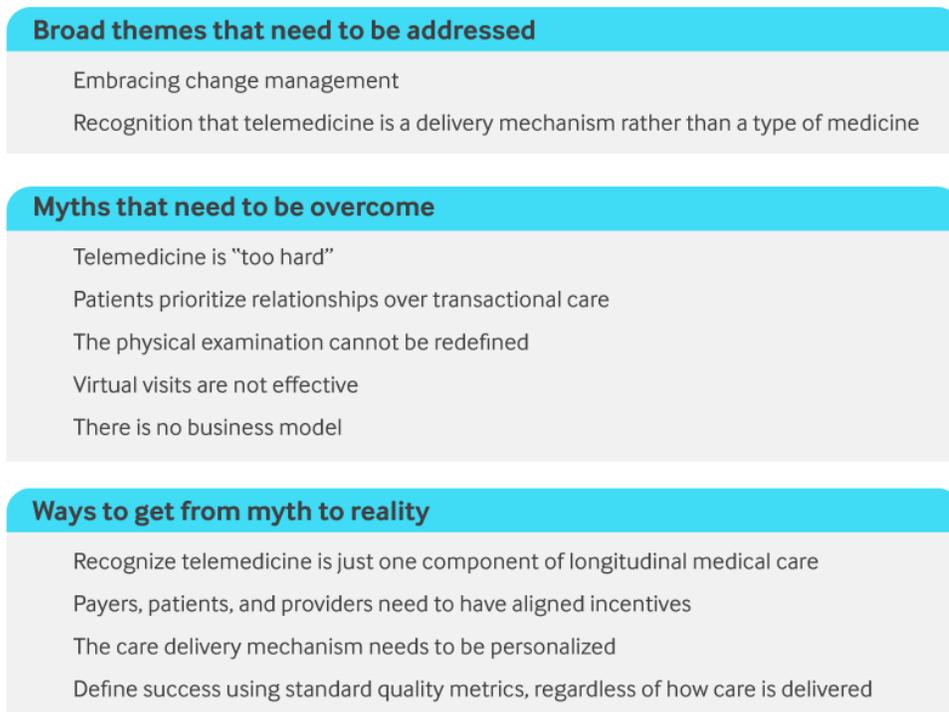
Prior to the Covid-19 pandemic, policy makers and leaders from both the health care delivery side and the payer side were busy “reimagining” health care; but change was slow to occur because the economic incentives were not aligned with the vision. Covid-19 changed everything. Suddenly it is time to move past *reimagining* and begin *recreating*. In this article, we provide insights into the perceived impediments that led to slow adoption of telemedicine, the changes that came with the Covid-19 pandemic, and advice on how to most easily implement a telemedicine program rapidly if you do not have one. We also caution that established telemedicine programs should not embrace the short-term easing of federal restrictions and divert from best clinical practices unless absolutely necessary.

Before the Covid-19 pandemic, the health care system wrestled with trying to align incentives between payers and providers to accommodate patients who were beginning to view health care as a consumer commodity. Policy makers and leaders from both the care delivery side and payer side were busy *reimagining* health care. Suddenly that ended. Instantly we had to begin *recreating*.

Until recently, there were several barriers preventing widespread adoption of telemedicine (Figure 1). The two broad themes were: (1) providers, health systems, and payers were slow to embrace change; and (2) a failure to appreciate that telemedicine is not a new type of medicine, but rather simply a care delivery mechanism that can be utilized with some patients, some of the time, to provide high-quality care.

FIGURE 1

Improving Adoption of Telehealth



Source: The authors

NEJM Catalyst (catalyst.nejm.org) © Massachusetts Medical Society

Why is this important today? Because we must learn from our past errors. We will rally together to defeat Covid-19, but we need to be smart enough to use our learnings to make sure we are better prepared for Covid-20 or whatever disaster comes our way next.

Addressing the Telemedicine Myths

Myth 1: Telemedicine is “too hard.”

This was not true before Covid-19 and we have further demonstrated that it is not true now. Almost every provider and the great majority of patients in the U.S. already [possess the technology](#) needed to conduct a telemedicine visit — a smartphone, tablet, or computer. In an informal poll of greater than 1,000 providers attending a lecture, pre-Covid-19, almost everyone acknowledged caring for a friend or family member via phone, text message, or video call. Providers were already doing telemedicine — just not with their patients. During the Covid-19 pandemic, the growth in telemedicine at Jefferson Health (a Philadelphia-area system that treated 39,122 inpatients and 1.3 million outpatients in Fiscal Year 2019) has gone from 40–60 scheduled visits per day to more than 2,000 per day system-wide. It turns out that when fear of catching a potentially fatal disease strikes, telemedicine is no longer too hard. Problem solved, likely forever.

“ It turns out that when fear of catching a potentially fatal disease strikes, telemedicine is no longer too hard.”

The largest challenge with caring for your own patients via telemedicine is communication and change management. We recommend that your office staff learn to coordinate telemedicine visits in a manner analogous to in-person visits. The visit should be scheduled, and the patient should receive appointment reminders and be welcomed to the visit by virtual front-desk staff. Especially important when just beginning the program is having office staff perform a “test visit” with the patient the day before. If using a traditional telemedicine platform, patients may need to register in advance, entering their up-to-date history, medications, allergies, and pharmacy information. We have learned that the test visit can walk them through this process and allows your staff to make sure they know to be on Wi-Fi in a quiet location at the time of the visit. Any necessary troubleshooting of technology should occur in advance.

We find that if the staff does this for each first-time caller, the call completion rate approaches a 100% and physician and provider experience are outstanding. Our experience after implementation of a “test visit” process showed that we were able to increase the visit completion rate from 60% to more than 96% when the test visit occurs with the patient. We have a net promoter score of 50–70 with our scheduled visit program.

Myth 2: Patients prioritize existing relationships with their provider over transactional episodic care.

Data argues otherwise: The majority of times, patients just want care. Falling primary care visits rates, coupled with growing emergency department and urgent care visit rates, suggests convenience as more important than an established relationship. Right now, since Covid-19, our on-demand platform for video visits, [JeffConnect](#), has experienced a 20-fold growth in volume (from 10–15 to more than 200 per day). There are likely some patients and many providers who enjoy the in-person patient provider relationship, but getting care is the priority. Of course, if an established provider offers care that is just as convenient as on-demand telemedicine solutions, patients can have both.

One challenge to telemedicine can come from health system consolidation. Jefferson Health has grown through the merger of several hospital systems using several different electronic medical records and, thus, we have had to deliver a consistent message and develop reproducible workflow to try to reduce the number of pathways to conduct a telemedicine visit. The telemedicine experience will be more consistent if all providers in a health system are using the same telemedicine platform. For our patient-to-provider visits, we have consolidated into one on-demand platform (JeffConnect, which is a white labelled Teladoc Health product), which can be done via any smartphone, tablet, or webcam-enabled computer. We also have two scheduled-visit platforms (JeffConnect and Epic) and are currently working on an integration between the on-demand and scheduled-visit platforms to make the patient experience seamless. Recommendations for practices that need to get started rapidly to deal with Covid-19 — but do not have preexisting infrastructure — are described later in this article.

Myth 3. You cannot do a physical examination.

It turns out you can. A new 21st-century physical exam utilizing telemedicine emphasizes the importance of general appearance (sick or not sick, weight, distress), respiratory effort, and environmental factors including a visual assessment of the home that is not something that can be accomplished at an office visit. But, even in the era of Covid-19, patients have “normal” acute medical conditions that should not be ignored. We engage and empower patients by teaching them to self-assess musculoskeletal injuries using the [Ottawa ankle and knee rules](#), by having patients (or family members) feel and count the pulse out loud, and we risk-stratify patients with abdominal symptoms at high and low risk for needing surgical interventions by observing a directed caregiver examination and assessing for peritonitis by watching the patient when they jump up and down. We have identified surgical emergencies (appendicitis, cholecystitis, ruptured ectopic pregnancy, and cauda equina syndrome) this way. This is especially important when we try to limit the number of people going to the emergency department or urgent care center so that they won't either transmit or be exposed to Covid-19.



The majority of times, patients just want care."

We care for more than 100 potential Covid-19 ambulatory patients a day via telemedicine. A previously described but largely unheard of technique to evaluate shortness of breath and hypoxia, the Roth Score, simply requires having a patient take a deep breath and count out loud to 30 as rapidly as possible while timing the time before the next breath.¹ Being unable to count to 7 or count for 5 seconds has a sensitivity of 100% and 91%, respectively, for oxygenation saturation less than 95%. If you are like our whole telemedicine team, you will have probably just tried this and found you made it to 30. We have found that patients with Covid-19 requesting transfer to the hospital often can only count to around 7.

Like every other new challenge, you have to try telemedicine to get comfortable with it. Covid-19 has forced patients and providers to try it. You should, too. We have found it takes 12–15 visits to feel comfortable and once you do 20–30, you will join the group of the telemedicine converted.

We have learned that the providers most likely to adopt telemedicine are not necessarily the youngest physicians. In our health system it has been those 40–45 and 60–65 years old. Perhaps you need enough clinical judgment to try it or just a new incentive (near retirement). Covid-19 is another such new incentive.

Myth 4: Virtual visits are less effective than in-person visits.

Focusing on the comparison in diagnostic accuracy between virtual and in-person visits sets up a false dichotomy. Focusing on *actionable information* is more important than diagnostic accuracy.² Actionable information recognizes providers might not always make a diagnosis within a single visit, whether in-person or telemedicine. After a traditional outpatient visit, patients often need laboratory testing, imaging, or specialist input. The same is true in telemedicine. The focus should be on whether the provider has sufficient information to determine the correct next step,

and whether the visit meets the needs of the patient given their realistic alternatives.² For some patients, the alternative would be no care at all as a result of limited access to specialists in rural areas, lack of appointments in urban areas, or avoidance of care for financial reasons or fear of exposure to sick patients during Covid-19.^{3,4} The effectiveness of care should be defined by the medical issue, the provider, and the care delivered — not by whether it was done in person.

“ *Like every other new challenge, you have to try telemedicine to get comfortable with it.* ”

During the Covid-19 pandemic we have identified more patients who are positive for Covid-19 through telemedicine linkages with testing centers than we have in our 14 hospitals. We have Covid-19-positive patients being managed at home who can do telemedicine calls with their primary physician or with our on-demand physicians, should they get worse. Some are monitoring their own vital signs and oxygen saturation at home. Our internal data shows that, depending upon the complaint, 83% to more than 90% of patients perceive that their problem was addressed as they would have hoped via telemedicine.

Myth 5. There is not a payment model supporting telemedicine.

While it is true that the Centers for Medicare & Medicaid Services (pre-Covid-19) had limited reimbursement based upon site of service and geography, since the Covid-19 outbreak, to the credit of the federal government and commercial payers, telemedicine is now covered. The major barrier to continued growth of telemedicine post-Covid-19 is that these changes are either time-limited or limited to Covid-19-related conditions. Thus, many payers may be too focused on short-term patches, rather than long-term solutions. We pray that commercial payers will be more focused on the patients rather than shareholder value.

Without knowledge of whether these new payer policies will still exist post-Covid-19, it places providers and health systems in a difficult position. Redesign of on-demand platforms that were typically all cash (or credit card) to include real-time eligibility checks that accurately, in an automated platform, determine coverage and co-pays is an expensive endeavour and will not be accomplished in a couple of weeks. It also requires payers to provide detailed accurate information to the eligibility platforms that can be accessed 24-7/365 or the convenience of telemedicine will be lost. The current cash/credit card/employer-based eligibility file-based platforms have reduced administrative expenses. Back-end billing will drive up the cost of providing care via telemedicine.

Beginning the Transition

“I have never done telemedicine. How do I get started tomorrow?”

The first step is understanding that telemedicine is not a type of medicine — it is just one way to deliver the care you already deliver. Telemedicine, like other forms of care delivery, needs to be personalized based upon the patients and their individual needs. Telemedicine does not treat

disease any more than a stethoscope treats disease. It is just one tool available to use to improve health.



Telemedicine program growth is less about technology and more about developing efficient workflows."

The recommendations below are for providers that have never done telemedicine in the ambulatory setting. These are not appropriate long-term solutions to develop telemedicine programs for a variety of reasons. Programs that have existing telemedicine platforms should *not* adopt these recommendations as they will create challenges with business continuity, patient and provider experience, and legal, regulatory, and compliance considerations.

The implementation of a telemedicine program requires an understanding of the specific unmet need being addressed. Developing a scalable, durable program requires constitution of a governing body that should include representatives from the clinical leadership, information technology, legal, compliance, payer contracting, revenue cycle, marketing, finance, and operations. Telemedicine program growth is less about technology and more about developing efficient workflows. Let the experts in each of these areas be the expert in telemedicine in the same area. That approach is much more likely to be successful than having a few core telemedicine team members try to develop expertise across all these content areas. Recognizing that during the Covid-19 pandemic, practices may prioritize rapid deployment of technology over a slower, more deliberate approach, the following basic recommendations will make this easier.

- Use your normal electronic medical record to document. This allows you to maintain normal care processes and utilize the tools you already prioritized and have built into your electronic medical record, whether it be sharing notes with referring physicians, electronic order entry for medications, or real-time eligibility checks and back-end billing processes.
- Schedule visits as you would normally schedule visits so that patients can access your staff, you, and their test results the way they normally would. Maintain current workflows and change as little as possible. Telehealth is just a tool to help facilitate care of your patient.
- Utilize a platform that allows you to schedule visits and that will prevent others from inadvertently joining a private telemedicine session. The federal government has lifted restrictions, and now allows the use of nontraditional telemedicine platforms, such as FaceTime. This sounds great until you realize this only works on iPhones, which are only around 50% of the smartphone market in the United States. If you don't have an iPhone, FaceTime is a nonstarter. If you do, there is still a 50% chance your patient will not. Web conferencing software, like Zoom or GoToMeeting, can allow your staff to set up the visit with a link for only the patient. These may be good short-term solutions but are not good long-term solutions.
- Have staff in your practice conduct outreach to your patients to ensure they know how to utilize the technology you implement. This is a new process for the patients just as much as it is for you as the provider. Prepare a tip sheet with screenshots that can be distributed to the patient

before the visit. Reviewing the app download and registration, ensuring that the microphone and camera are working, and doing a test visit before the actual appointment will increase the likelihood of a successful visit.

Looking to the Long Term

It is critical to note that this approach will not be a long-term telemedicine solution for your practices. During normal times, either the federal government, the states, or your institution will require certain things that do not exist on nontraditional platforms, such as the ability to obtain informed consent, terms and conditions of use, verification of patient identity, verification of patient location (because the provider must be licensed in the state where the patient is located), a secure HIPAA-compliant platform, and maintaining an audit trail for compliance purposes (to prove you did a video visit to justify the bill).

If you will want to have a viable long-term telemedicine program, we recommend you reach out to one of the traditional telemedicine vendors offering start-up packages that can be rapidly deployed for use. This approach may also allow you the flexibility to have both an on-demand offering and one for scheduled visits, better preparing you to continue your program post-Covid-19.

We need to be flexible and focused to get through Covid-19, but we also need to prepare for what will happen afterward. In this period of uncertainty, one thing is certain: Health care will be different.⁵ Let's be prepared.

Judd E. Hollander, MD

Senior Vice President, Healthcare Delivery Innovation, Sidney Kimmel Medical College Associate Dean, Strategic Health Initiatives, Sidney Kimmel Medical College Professor, Department of Emergency Medicine, Sidney Kimmel Medical College, Thomas Jefferson University

Frank D. Sites, MHA, BSN, RN

Vice President, Connected Care Operations, Jefferson Health

Disclosures: Judd Hollander and Frank Sites have nothing to disclose.

References

1. Chorin E, Padehimas A, Havakuk O. Assessment of respiratory distress by the Roth Score. *Clin Cardiol.* 2016;39(6):636-9
2. National Quality Forum. Creating a Framework to Support Measure Development for Telehealth. August 2017. Accessed March 26, 2020. https://www.qualityforum.org/Publications/2017/08/Creating_a_Framework_to_Support_Measure_Development_for_Telehealth.aspx.
3. Huilgol YS, Joshi A, Carr BG, Hollander JE. Giving urban health care access issues the attention they deserve in telemedicine reimbursement policies. *Health Affairs Blog.* October 12, 2017. Accessed March 26, 2020. <https://www.healthaffairs.org/doi/10.1377/hblog20171022.713615/full/>.

4. Handley N, Hollander JE. Opportunity cost: the hidden toll of seeking health care. Health Affairs Blog. May 1, 2019. Accessed March 26, 2020. <https://www.healthaffairs.org/doi/10.1377/hblog20190429.592190/full/>.
5. Lee TH. Creating the New Normal: The Clinician Response to Covid-19. NEJM Catalyst.