Telemedicine in the COVID-19 era: a tricky transition

As we continue to battle the COVID-19 healthcare crisis, the role of telehealth has been brought to the forefront. Public health emergency declaration in the US in the face of the current pandemic facilitated two important initiatives to restore health care delivery amidst formal and informal lockdowns. These include the expansion of services including virtual check-ins and e-visits, and the decision by the HHS Office of Civil Rights to exercise enforcement discretion and waive penalties for the use of relatively inexpensive, non-public facing mobile and other audio-visual technology tools [1]. Expansion of telemedicine coverage by the Center for Medicare and Medicaid Services (CMS) and most commercial payers did not quite catch onto the momentum as expected. We explore potential reasons behind the lethargic initial uptake and try to propose a few strategies that may help maximize the utilization of technology.

Some of the several issues in the implementation and expansion of telehealth during the COVID-19 pandemic extend from poor adaptation due to an unprepared ecosystem, difficulty in integration with patients’ medical records systems, to an inability to create value from the data embedded in telehealth platforms. As hospitals expand their capacity to accommodate the increasing volume of COVID-19 patients, it is imperative that they also expand their infrastructure and telemedicine capabilities to meet the growing community needs. Very few organizations swiftly adopted the telehealth model to continue to provide their services but not quickly enough to escape the financial impact. Poor adaptation of technology has led to a significant loss in finances due to the decrease in the volume of patients. This caused health care layoffs as well, with many hospitals struggling to pay their employees [2]. With the anticipated closure of nearly 20% of primary care practices [3], an overly optimistic outlook to hurriedly ‘resume business as usual’ may have also hindered the transition to e-medicine.

We believe simple strategies can be effective at combating these adaptation issues like deploying simple, user-friendly tools that are easily accessed by providers, patients, and families, developing minimum medical records (MMR) standards, and ensuring that the functionalities of telehealth tools are seamlessly integrated with existing EMRs. If practices have legacy EMR systems or no EMR systems in place, the telehealth platform can assume the role of a mini-EMR. Promoting data mining and development of data-driven actionable models based on in-patient clinical data and ambulatory care continuum data can make digitalization a part of the business strategy for the next 5 years [4]. Poorly designed and redundant electronic health record systems have been one of the biggest hurdles in the adaptation of these advanced technologies. Several third-party applications, such as Doxy.me and VSee, have popularized to meet the current needs. Feedback from providers and patients has been phenomenal with regard to convenience and ease of use.

The COVID-19 public health emergency has allowed waivers under Section 1135 of the Social Security Act by Centers for Medicare and Medicaid Services. These waive penalties for the use of non- HIPAA compliant technologies like FaceTime and Skype and was expanded to include many different health professionals such as physical therapists, occupational therapists, and speech-language pathologists [1]. The status of CMS regulations and reimbursements in the future is highly uncertain. While waiver 1135 has allowed for flexibility with regards to the application of telehealth services, it is unknown if these would continue in the future. Also, CMS has allowed providers to bill telehealth visits as regular in-person visits (with a modifier). This has proven advantageous as providers have seen a significant increase in services provided. However, it is unclear how this change in regulations will financially impact these companies and larger health systems in the long run.

#x0009;The post COVID-19 challenges with the telehealth model include reduced cash influx possibly at the risk of losing several healthcare jobs, difficulty in the adaptation and long-term integration with existing electronic health records, and compliance with HIPAA regulations by secure encrypted communication. Between the patient, provider, insurance companies, and third-party platforms, the delineation of costs will ultimately influence healthcare delivery. While it is questionable whether health outcomes will be deemed inferior due to the shift in the consultation model, it is presumed that in-person services are the gold standard. The current scenario is comparable to Amazon’s monopolizing of the consumer market and devastating local businesses. Patients are tempted to switch to providers offering telehealth services if given the option. This forces clinics and hospitals to adjust quickly or else face financial consequences.
Most tele-visits are paid out of pocket or reimbursed by some private payers as a part of value based models to decrease ER visits and overall cost of care [5]. Though the concept has existed for more than a decade, payer regulations, state boundaries, and other several policy restrictions were the key hindrances in adopting telehealth.

The only humanistic element of virtual consultation is eye contact, which is compromised if providers are preoccupied with attempting to key in the exchanged communication. Hopefully, there will soon be a transition to a widely accepted platform that uses natural language processing software to automatically transcribe the encounter so that providers can focus exclusively on patient care. Especially since high-level billings are primarily accounted for by the risk and complexity of medical decision making by the physician, transcribed e-visit notes would ensure that priority be given to accurately assess and formulate a suitable treatment plan rather than focus on documentation.

More than 50% of the care health care and approximately 60% of primary care visits can be carried out virtually without compromising on quality and patient satisfaction [6]. Particularly with regards to primary care and chronic illness management, the telehealth model will definitely prove beneficial in improving health outcomes. From a patient’s standpoint, there is a lot of time and money saved by avoiding the hassle of taking time off from work, commuting to the doctor’s office, and waiting to be seen. The luxury of attending a tele-visit from the comfort of one’s couch, as a patient or provider, is incomparable [7]. While it may take some time to adapt to the new system, there are remarkable tools that can simulate examinations almost to the extent as with human touch.

With the current infrastructure that thrives on annual balance sheets and profit margins rather than focusing on the overall health of the population, telemedicine might help shift the focus from short term returns to long term results. By incentivizing telehealth systems in such a way that is designed to prevent advancement and complications of chronic illnesses, we may be able to instigate a much-needed paradigm shift in healthcare delivery. Of course, it is a change that may require over five to ten years to set into action; and given the number of governing bodies involved in bringing about such a drastic transformation, there is no doubt that it will be a challenging- but indispensable feat.

**Disclosure statement**

No conflict of interest, personal financial or employment interest, or funding disclosures.

**ORCID**

Kavya Bharathidasan  http://orcid.org/0000-0001-5753-0967

**References**

[1] HHS. Notification of enforcement discretion for telehealth. 2020 [cited 2020 Sept 13]. Available from: https://www.hhs.gov/hipaa/for-professionals/special-topics/emergency-preparedness/notification-enforcement-discretion-telehealth/index.html

[2] Gabler E, Montague Z, Ashford G During a pandemic, an unanticipated problem: out-of-work health workers. New York Times. 2020 Apr 3 [cited 2020 Sept 13]. Available from: https://www.nytimes.com/2020/04/03/us/politics/coronavirus-health-care-workers-layoffs.html

[3] Primary Care Collaborative. Primary care practices endangered from steep declines in revenue and staff, new survey shows. 2020 Apr 17 [cited 2020 Sept 13]. Available from: https://www.pcpcc.org/2020/04/17/primary-care-practices-endangered-steep-declines-revenue-and-staff-new-survey-shows?language=en9

[4] Baig A, Hall B, Jenkins P, et al. The COVID-19 recovery will be digital: a plan for the first 90 days. McKinsey Digital. 2020 May 14 [cited 2020 Sept 13]. Available from: https://www.mckinsey.com/business-functions/mckinsey-digital/our-insights/the-covid-19-recovery-will-be-digital-a-plan-for-the-first-90-days

[5] Basen R Doctors struggle to get paid for telehealth visits. MedPage Today. 2020 Apr 16 [cited 2020 Sept 13]. Available from: https://www.medpagetoday.com/infectiousdisease/covid19/85990

[6] Henry TA After COVID-19, $250 billion in care could shift to telehealth. AMA Digital. 2020 Jun 18 [cited 2020 Sept 13]. Available from: https://www.ama-assn.org/practice-management/digital/after-covid-19-250-billion-care-could-shift-telehealth

[7] Bestsennyy O, Gilbert G, Harris A, et al. Telehealth: a quarter-trillion-dollar post-COVID-19 reality? McKinsey & Company. 2020 May 29 [cited 2020 Sept 13]. Available from: https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/telehealth-a-quarter-trillion-dollar-post-covid-19-reality

Venkataraman Palabindala

*Department of Medicine, University of Mississippi Medical Center, Jackson, MS, USA*  
palabindala@gmail.com  http://orcid.org/0000-0001-5753-0967  http://orcid.org/0000-0001-5753-0967

Kavya Bharathidasan

*Department of Medicine, Vyddehi Institute of Medical Sciences and Research Center, Bangalore, India*  
http://orcid.org/0000-0001-5753-0967