

## Applying the Lessons of COVID-19 to Telehealth

Leveraging Collaboration Tools to Improve Efficiency and Meet Quadruple Aim Goals

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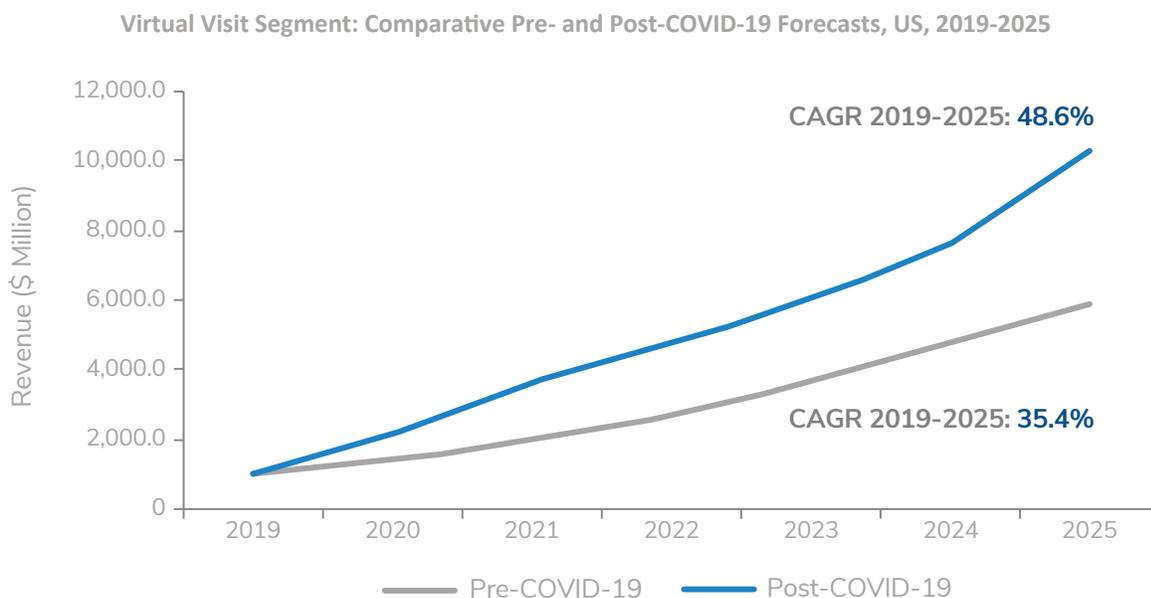
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## COVID-19 ACCELERATION OF TELEHEALTH USAGE AND WIDER PROVIDER ADOPTION

The COVID-19 pandemic has disrupted the practice of medicine and the delivery of healthcare worldwide. Ironically, the urgency to deploy social distancing has opened the door to and created an unanticipated demand for telehealth as a critically important technology that may be used to evaluate, manage, and track certain COVID-19 patients without the need for an in-person exam. Beyond virtual visits, healthcare providers have deployed telehealth solutions and video collaboration tools in a wide variety of use cases, gaining experience with these tools and incorporating them into their daily routine. This paper will provide insights on the broader range of use cases that providers should consider and the case for continued acceleration of the adoption of telehealth and collaboration technology.

Frost & Sullivan's reforecast of the US telehealth market indicates a huge spike in usage in 2020: the market is now forecast to achieve a 64.3% growth in 2020 (across all applications). The pre-COVID-19 forecast was 32.3%. This indicator points to a 100% increase in growth based on dramatically higher demand as a result of the COVID-19 pandemic. During the period when most locations were under shelter-in-place orders, teleconsultations were the only way to maintain continuity of care and some revenue flow for many healthcare providers. While there will be some return to face-to-face visits in the second half of 2020, Frost & Sullivan believes the overall telehealth market has been pushed ahead by up to two years in adoption. During the full year 2020, remote patient monitoring (RPM) is forecast to grow by 150.3%, while virtual visits are forecast to grow by 124.2%, as shown in Figure 1.

**Figure 1: COVID Driven Surge in Telehealth**



Source: Frost & Sullivan

Other telehealth applications also expanded during the COVID-19 pandemic. Many provider organizations utilized virtual rounding to reduce face-to-face encounters with hospital inpatients to decrease exposure risk for clinicians and patients and to preserve valuable personal protective equipment. Telehealth solutions also are still being used in screening and triage applications in both inpatient and at-home settings.

## Collaboration Tools Added Value to Internal Communications During the COVID-19 Crisis

Video collaboration tools were utilized in other ways during the pandemic to help provider organizations maintain operations. Providers used these solutions to broadcast communications to staff and to roll out new protocols and safety programs, leveraging video to clearly demonstrate needed processes in a way that standard written and oral communication could not match. Care teams were able to interact to discuss and exchange messages regarding needed follow-up with at-risk patients. Tumor boards utilized these tools to connect for meetings and share files.

As with any enterprise, healthcare providers also utilized video collaboration platforms to enable employees to work outside their offices, connect with their team members, hold meetings, and train staff remotely. Business continuity for financial and operational staff who were not permitted to be on site was crucial to maintaining functional organizations during the crisis.



## OVERCOMING HURDLES TO TELEHEALTH ADOPTION

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There are many reasons why healthcare providers have been slow to adopt telehealth solutions; some were addressed during the COVID-19 crisis, and others have seen movement over the last couple of years. A combination of factors directly addressing these challenges contributed to the opening of the spigot to scale up telehealth rapidly at the beginning of 2020. While the issues outlined below are not the only barriers to telehealth adoption, the needle has clearly moved on several of them.

## Government Reimbursement and Other Stimulus Efforts

National public sector payers have addressed the major barrier of lack of reimbursement for telehealth services. This contributed greatly to the spike in telehealth usage. Some regional governments required all health insurers, health benefit plans, and others offering coverage for healthcare services operating within their borders to reimburse providers for telehealth visits during the coronavirus pandemic. Countries around the world have encouraged telehealth use, allowed for reimbursements for an expanded array of encounters, and lowered requirements for secure platforms to allow for rapid ramp up of telehealth.

**“ Some regional governments required all health insurers, health benefit plans, and others offering coverage for healthcare services operating within their borders to reimburse providers for telehealth visits during the coronavirus pandemic.**

Both Canada and India actively encouraged telehealth consultations during the COVID-19 crisis and allowed for full reimbursements. In Germany, the Central Federal Association of Health Insurance Funds and the National Association of Statutory Health Insurance Physicians temporarily removed limitations on the number of video visits that can be utilized for medical and psychiatric patients, and removed the requirement that telehealth visits could only be utilized after an initial in-person visit. France removed a similar requirement for an initial in-person consultation prior to the use of telehealth. The National Health Insurance Fund in France, which had been hesitant to open the door to telehealth, announced during the COVID-19 crisis that teleconsultations would be 100% reimbursable by physicians. The Dutch Healthcare Authority also relaxed restrictions on teleconsultations for initial encounters and expanded the types of clinician-patient interactions that would be reimbursed.

Actions by the US government opened up Centers for Medicare & Medicaid Services (CMS) to reimburse telehealth encounters, expanded Medicare telehealth coverage, and made reimbursement available to qualified providers. The removal of reimbursement barriers was executed to ensure prompt COVID-19 response to contain the spread, but also supported continuity of care for at-risk patients covered under government health insurance programs. CMS temporarily lifted originating site and geographic restrictions to allow all Medicare beneficiaries to benefit from telehealth services, allowing encounters from their home and regardless of location. Following the US government's declaration of a state of emergency on March 17 in response to the COVID-19 pandemic, CMS started approving Medicaid Section 1135 waivers, easing certain restrictions to allow states to respond more effectively. In just over a week, 34 states had requests for waivers approved, shifting the landscape for telehealth reimbursement.

While these measures were announced as temporary during the pandemic, Frost & Sullivan expects at least some of the reimbursement structures to remain, especially those under Medicare in the United States, as the elderly population remains at high risk and is well suited to benefit from ongoing telehealth services.

## Waiver of Privacy and Security Regulations and Penalties

The US Department of Health and Human Services (HHS) relaxed Health Insurance Portability and Accountability Act (HIPAA) requirements early in the pandemic so healthcare providers could quickly implement new telehealth and video interactions. During the national emergency, providers will not be penalized for using technology solutions and vendor platforms that are not HIPAA-compliant. Some states also specifically relaxed privacy and security standards. France removed similar requirements limiting the types of platforms that could be used for telehealth consultations.

While this allowed many more healthcare providers to quickly transition to offer virtual encounters, Frost & Sullivan expect that current waivers of privacy and security regulations and penalties won't remain in place beyond the immediate crisis. In some cases already, data breaches and the accompanying negative public reaction will have long-term impacts even if no fines were levied. Recent articles regarding exposure of telehealth encounters to other users of a platform have hurt the vendor's reputation. Vendors that do not support expected privacy and security standards will not survive in the market.

**Figure 2: Factors Limiting Telehealth Adoption**



Source: Frost & Sullivan

## Cost, Quality, and Scalability Issues

A combination of factors involving hardware and software costs, usability, and scalability also has been a barrier to telehealth adoption. Hardware costs have been too high to scale up some solutions and allow provider organizations to deploy across their facility or organization. Some solutions have been complex to implement, making it difficult for both the clinician and the patient to quickly become comfortable with starting up and managing an encounter. Some solutions are not integrated with standard clinical workflows, such as when the solution and the resulting encounter are not connected into the provider's electronic health record (EHR). Finally, the quality of video interaction must be similar to a face-to-face encounter or the clinician and patient may consider the encounter to be less valuable, and uptake is impacted.

Over the past few years, most of these shortcomings have been addressed by telehealth vendors and their hardware partners. Low-cost, high-quality cameras can deliver video similar to an in-person encounter and meet price-performance requirements to allow for scalability by provider organizations. Hardware and software have become plug-and-play, enabling clinicians to quickly get the system up and running and feel comfortable with it. This cost-quality-simplicity alignment meets user expectations and overcomes organizational concerns regarding scalability.

## IT'S NOT JUST ABOUT COVID-19: MEETING QUADRUPLE AIM GOALS

While healthcare providers gained experience and insight from employing telehealth more widely in the beginning of 2020, telehealth tools should not just meet needs during the COVID-19 pandemic. Frost & Sullivan's view is that healthcare providers should review strategic applications of telehealth and video collaboration tools to determine how to increase performance and efficiency in their ongoing operations.

Telehealth applications have shown promise in helping organizations meet Quadruple Aim goals, shown in figure 3. The Quadruple Aim stems from the Triple Aim developed by the Institute for Healthcare Improvement (IHI) to guide the optimization of health system performance; it has been the foundation for much of healthcare reform implemented by CMS and through value-based care initiatives from payers and providers. The focus of the Triple Aim was to "improve the patient care experience, improve the health of a population, and reduce per capita health care costs." Many healthcare organizations noted the need to include an improvement in the clinician experience to address optimal sustainable functioning of their organizations and have incorporated the Quadruple Aim into their framework for organizational improvement and metrics.

**Figure 3: The Quadruple Aim**



Source: [ahrq.gov](http://ahrq.gov)

Research by healthcare providers shows that telehealth solutions contribute to meeting Quadruple Aim goals, specifically with regard to the improved experience of both clinicians and patients from the application of these tools in patient-provider interactions. Research conducted by healthcare providers before the COVID-19 crisis demonstrated the value of virtual visits and virtual rounding, with high levels of patient and clinician satisfaction, and perceptions of effectiveness from clinic users of the technology. Given these findings, and the wider exposure to these solutions during the COVID-19 crisis, Frost & Sullivan believes provider organizations should take a more strategic approach to implementing telehealth as part of their standard care portfolio.

**A Sentara Health survey of nurses after they initiated virtual rounding by nurses in their ward found the following:**

- Nurses felt that they were 56% more effective in resolving issues and 55% more satisfied with the rounding process
- Hospital administrators reported HCAHPS scores rose in these wards

**A Massachusetts General Hospital survey of 254 patients and 61 clinicians found that:**

- “62 percent of responding patients reported the quality of virtual video visits was no different from that of office visits, and 21% thought virtual visits’ overall quality was better.”
- “59 percent of health professionals providing virtual video visits agreed that, for the patients selected for these visits, virtual visit quality was similar to that of office visits; one third thought office visit quality was better.”
- “68 percent of patients rated virtual video visits at 9 or 10 on a 10-point scale, and patients who rated the visits lower were generally concerned about technical issues they experienced during their first use of the system.”



## STRATEGICALLY LEVERAGING COLLABORATION TOOLS POST COVID-19

What applications of telehealth and video collaboration tools should healthcare organizations consider? While the short-term focus during the COVID-19 pandemic was on business continuity, organizations should also consider growth opportunities as they plan for post-COVID investments. There is a wide range of use cases that have been shown to be effective. Once the infrastructure is in place, creating the most value means scaling utilization to align with organizational benefits that can be achieved. Organizations should examine how the following use cases align with their needs or would contribute to the strategic goals of the organization. Many of these use cases contribute to improving an organization's competitiveness in the market for both employees and patients (as customers).

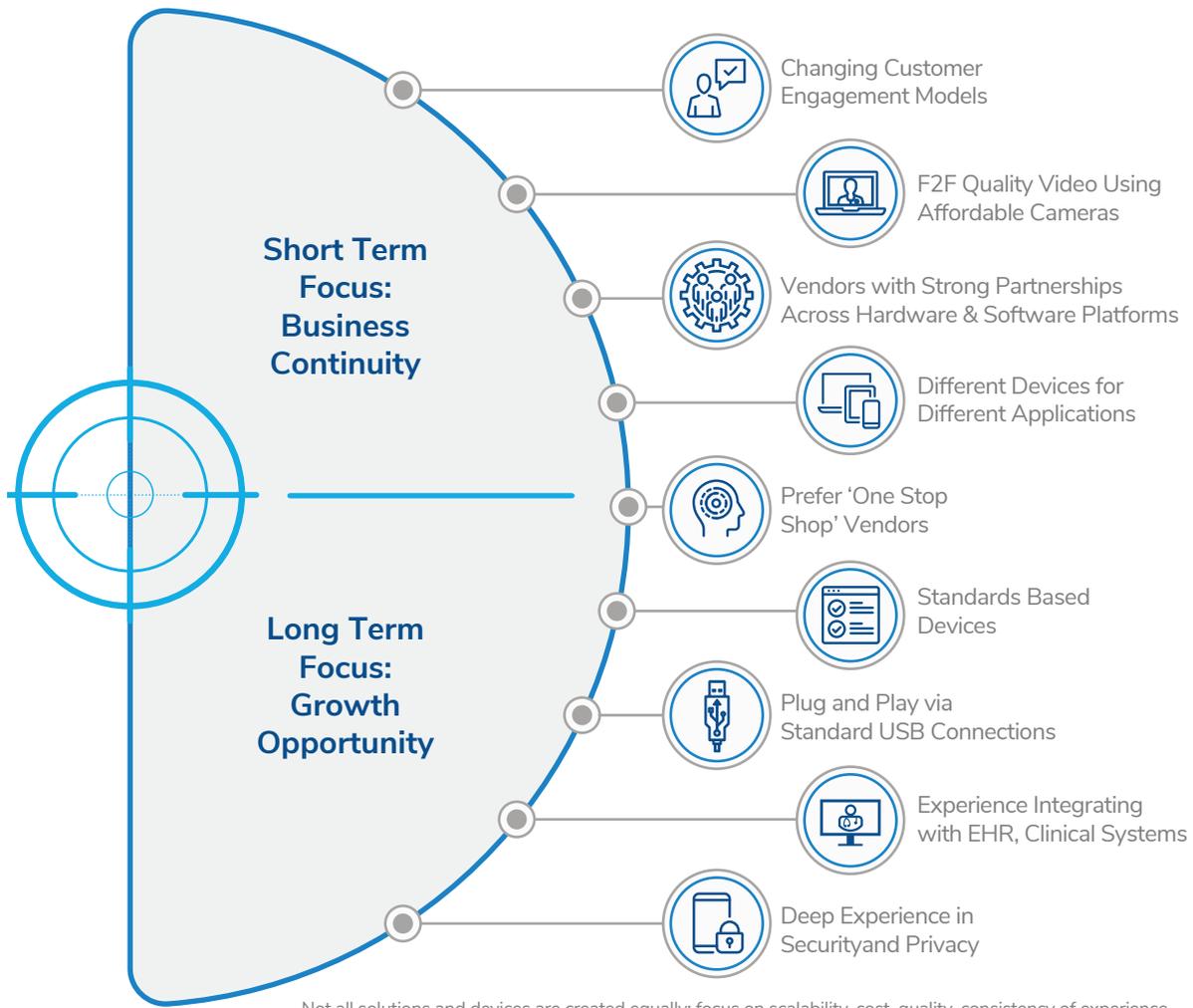
Frost & Sullivan believes that these applications of telehealth and video collaboration technologies should be examined:

- Connect with patients to increase access to care, improve chronic condition management, support regular contact with individuals seeking behavioral health interactions, and improve member retention through higher levels of customer satisfaction
- Offer remote specialist consultations, improving care and lowering costs by expanding your organization's geographic reach without physically traveling to remote locations
- Screen the backlog of elective surgeries to prioritize patients most in need; deliver pre-surgery instructions and content, and confirm preparation protocols have been followed; and deliver post-surgery instructions and follow up consultations
- Promote clinical team interaction (care teams, clinician to clinician consultations, tumor boards) to improve coordination and care outcomes
- Enable rapid response and new program rollout through video broadcasts, getting the details to all employees
- Increase the scope of continuing medical education opportunities for staff and enable advanced clinical training
- Upgrade computers on wheels with better video interaction tools to improve workflow, enabling clinical staff to conduct more encounters and meetings across the facility
- Expand recruitment and retention of employees by enabling remote work, widening the reach of the organization to employ needed team members regardless of location

## INFRASTRUCTURE NEEDED TO SUPPORT THE STRATEGIC SHIFT

To gain value from these applications, organizations need to put the right infrastructure in place. Not all solutions and devices are created equally, and as noted previously, quality impacts end user satisfaction. Delivering quality does not require breaking the bank, however; telehealth should be designed to scale and provide access, which means getting the right hardware that can deliver both good price and high performance. In reviewing solutions, focus on scalability, cost, quality, and consistency of experience. Exhibit 4 presents organizational and vendor considerations.

**Figure 4: Infrastructure Needed to Support the Strategic Shift**



Not all solutions and devices are created equally: focus on scalability, cost, quality, consistency of experience.

Source: Frost & Sullivan

As part of your strategic review of organizational needs, consider the changing engagement models for both internal and external customers, and the growing uses for telehealth and video collaboration solutions. This will help to define more than a short-term strategy and help the organization invest in the growth opportunities that these tools can enable.

On the hardware side, look for vendors that can deliver affordable cameras that produce video quality nearly identical to in-person interactions. These should be standards-based, plug-and-play devices that guarantee ease of use to maximize application utility. Remember that different applications require different types of devices, so look for vendors that can meet all your device needs through one source.

To enable plug-and-play usability, work with vendors that have a strong range of partnerships across hardware and software components. These vendors also need to have experience delivering solutions to healthcare providers and the ability to integrate telehealth components with the EHR or other clinical systems. Fitting into clinician workflows is the only way to ensure maximum returns from these investments. Finally, seek vendors that have experience with the privacy and security requirements of the healthcare provider reality.



## CALL TO ACTION

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The COVID-19 pandemic greatly increased the exposure of healthcare providers and their organizations to a wider range of use cases for telehealth and video collaboration solutions, connecting clinicians to patients, and clinicians (and other staff) to each other. As we plan for the post-pandemic scenario, healthcare providers should learn from these experiences and consider how to better leverage these tools to increase efficiency, improve outcomes, and deliver better patient and clinician experiences. There are many applications to consider, and each organization needs to review the use cases and determine alignment with their strategic goals, and where they can make the greatest gains in results and competitiveness.

With these plans in place, evaluate the vendor partners that can best deliver the range of solutions that match these needs, and put in place the infrastructure that will meet short-term requirements and longer-term growth opportunities. Cost-effective solutions are available, and internal and external barriers have fallen: now is the time to embrace the next step to gain from the increased application of telehealth and video collaboration technology.

## NEXT STEPS

- ① [Schedule a meeting with our global team](#) to experience our thought leadership and to integrate your ideas, opportunities and challenges into the discussion.
- ② Interested in learning more about the topics covered in this white paper? Call us at 877.GoFrost and reference the paper you're interested in. We'll have an analyst get in touch with you.
- ③ Visit our [Digital Transformation](#) web page.
- ④ Attend one of our [Growth Innovation & Leadership \(GIL\)](#) events to unearth hidden growth opportunities.

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