



Effective Strategies for Sustaining and Optimizing Telehealth in Primary Care

March 2023

Effective Strategies for Sustaining and Optimizing Telehealth in Primary Care

ASSOCIATION OF AMERICAN MEDICAL COLLEGES
WASHINGTON, D.C.

VIZIENT
IRVING, TEXAS

AUTHORS

Danielle Carder, MSc, and Courtney Farrow-White, MPM, RN

ABOUT US

AAMC

The AAMC (Association of American Medical Colleges) is a nonprofit association dedicated to improving the health of people everywhere through medical education, health care, medical research, and community collaborations. Its members are all 157 U.S. medical schools accredited by the Liaison Committee on Medical Education; 13 accredited Canadian medical schools; approximately 400 teaching hospitals and health systems, including Department of Veterans Affairs medical centers; and more than 70 academic societies. Through these institutions and organizations, the AAMC leads and serves America's medical schools and teaching hospitals and the millions of individuals across academic medicine, including more than 193,000 full-time faculty members, 96,000 medical students, 153,000 resident physicians, and 60,000 graduate students and postdoctoral researchers in the biomedical sciences. Following a 2022 merger, the Alliance of Academic Health Centers and the Alliance of Academic Health Centers International broadened the AAMC's U.S. membership and expanded its reach to international academic health centers. Learn more at aamc.org.

Vizient

Vizient®, the nation's largest health care performance improvement company, serves more than 60% of the nation's acute care providers, which includes 97% of the nation's academic medical centers, and more than 25% of the non-acute care market. Vizient provides expertise, analytics, and advisory services, as well as a contract portfolio that represents more than \$130 billion in annual purchasing volume. Vizient's solutions and services improve the delivery of high-value care by aligning cost, quality, and market performance. Headquartered in Irving, Texas, Vizient has offices throughout the United States. Learn more at vizientinc.com.

Clinical Practice Solutions Center

Based upon more than 20 years of collaboration between the AAMC and Vizient, the Clinical Practice Solutions Center (CPSC) creates one solution for medical practices of all sizes. With guided analytics, medical practice leaders can examine their own data related to provider productivity, coding, revenue, and charge capture as well as patient access. Together with benchmarking data, the CPSC puts the power of data into the hands of academic medical centers and community practice organizations just like yours. With the ability to examine data at the department, specialty, and provider levels, the CPSC allows for easy comparisons across key performance indicators. Using comparative data, advisory support, and peer collaboration, the CPSC is an essential component of every clinical practice leader's tool kit. Learn more at clinicalpracticesolutionscenter.org.

© 2023 Association of American Medical Colleges and Vizient, Inc. May not be reproduced or distributed without prior written permission. To request permission, please visit aamc.org/91514/reproductions.html.

Suggested citation: AAMC, Vizient. *Effective Strategies for Sustaining and Optimizing Telehealth in Primary Care*. Washington, DC: AAMC and Vizient; 2023.

CONTENTS

Acknowledgments	<i>iv</i>
Introduction	1
Foundation	5
Effective Strategies	9
Culture of Adoption	10
Patient-Centered Approach	12
Metrics and Analytics	14
Barriers to Sustained Use of Telehealth in Primary Care	16
Practices in Action: Case Studies From Two Academic Medical Centers	20
Stanford Medicine	22
University of Michigan Health	24
Conclusion	26
Notes	28

Acknowledgments

This publication would not be possible without the valuable contributions from numerous colleagues at the AAMC and Vizient who provided expertise and feedback.

The authors would like to acknowledge and thank the following organizations whose expertise and insights were essential to the completion of this report.

Denver Health Physicians Organization

Johns Hopkins University School of Medicine

Loma Linda University Faculty Medical Group

Oregon Health & Science University (OHSU) Medical Group

Penn State Hershey Medical Group

Stanford University School of Medicine

University of Arizona University Physicians Inc. - Banner Health

University of California, San Francisco Medical Group

University of Miami Medical Group

University of Michigan Health

University of Texas Medical Branch at Galveston

University of Wisconsin Medical Foundation

Yale School of Medicine Yale Medical Group

PROJECT STEERING COMMITTEE

- Rika Bajra, MD, Telehealth Co-director, Primary Care and Population Health, Clinical Assistant Professor of Medicine, Stanford University School of Medicine
- Julia Chen, MD, Clinical Assistant Professor in Internal Medicine, Ambulatory Care Clinical Chief, Virtual Care Lead, General Medicine, University of Michigan Medical School
- Rebecca Rogers, MD, Physician Champion for Telehealth Initiative, Chair, Department of Obstetrics and Gynecology, Albany Medical Center
- Tamara Scott, DBA, Practice Administrator, Stanford Medicine Children's Health
- Eric Wallace, MD, Professor of Medicine, Medical Director of Telehealth, University of Alabama at Birmingham Marnix E. Heersink School of Medicine



Introduction

The start of the COVID-19 pandemic caused telehealth levels to surge across ambulatory care as both providers and patients pivoted to find safe access to health care and reduce spreading COVID-19. Prior to the pandemic, providers conducted telehealth services at extremely low levels — less than 1% of ambulatory visits across AAMC-Vizient Clinical Practice Solutions Center (CPSC) organizations. At the height of COVID-19, telehealth visits in primary care surged to 67% across CPSC organizations (refer to Figure 1). This dramatic shift in care delivery was made possible by significant regulatory changes, as well as significant changes in provider and patient openness to telehealth. Telehealth use varies significantly by specialty, with certain conditions and levels of acuity more appropriate for telehealth. Vizient and the AAMC partnered to study telehealth sustainability in primary care, including general internal medicine, family medicine, and geriatrics. Primary care serves a diverse and complex patient population, and telehealth has proven to be a fundamental tool for health systems and providers to meet the access challenges of delivering care to their patients.

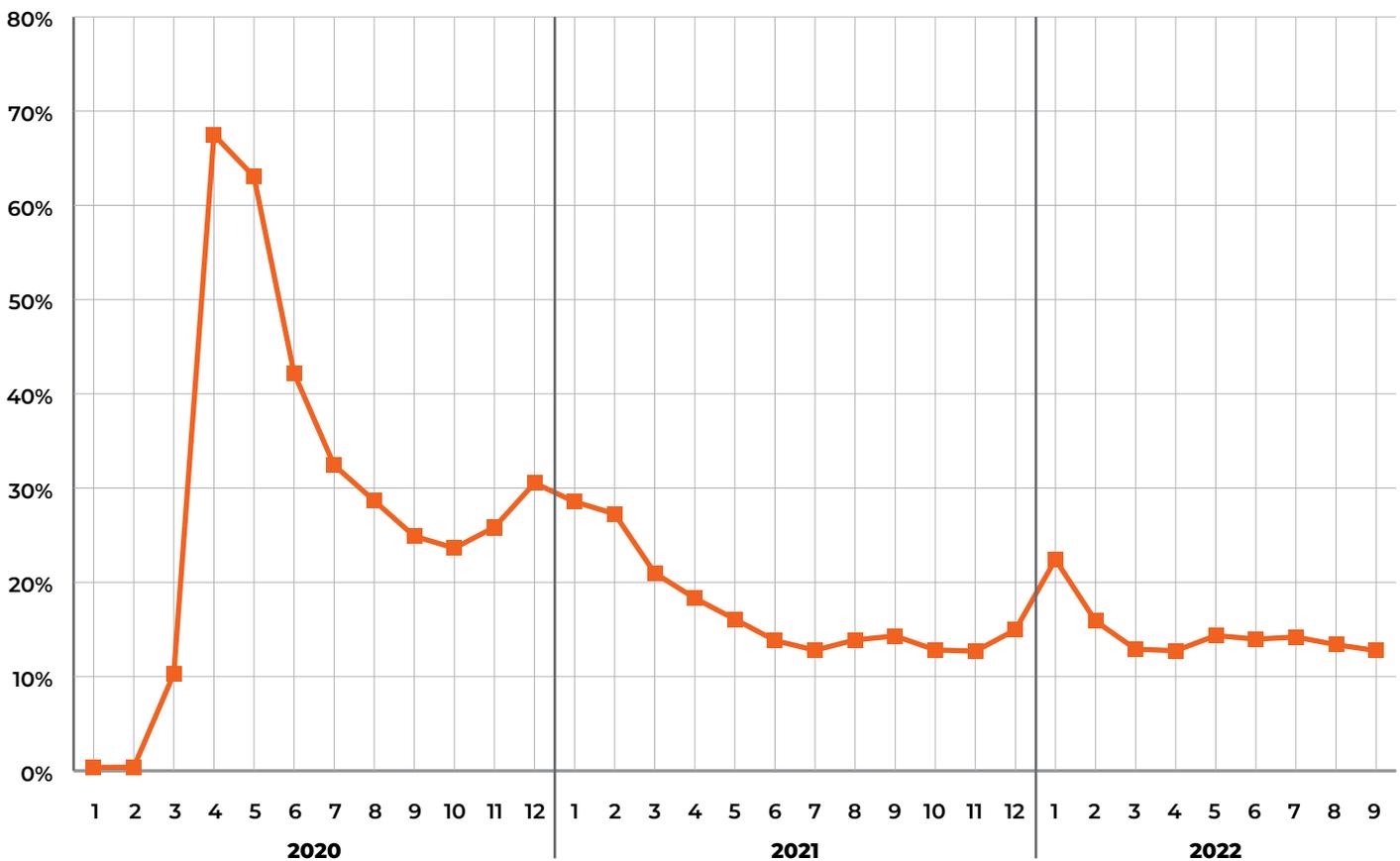


Figure 1. Overall percentage of telehealth use in primary care, by month, 2020-2022.¹

In 2022, the rates of telehealth use within primary care vary significantly across health systems. Across the 80 CPSC members (each represented by a single bar in Figure 2 below) who met the criteria for the analysis, the mean percentage of telehealth visits in primary care in the first through third quarter of 2022 was 15%, with a range from 1% to 51% (refer to Figure 2 below).

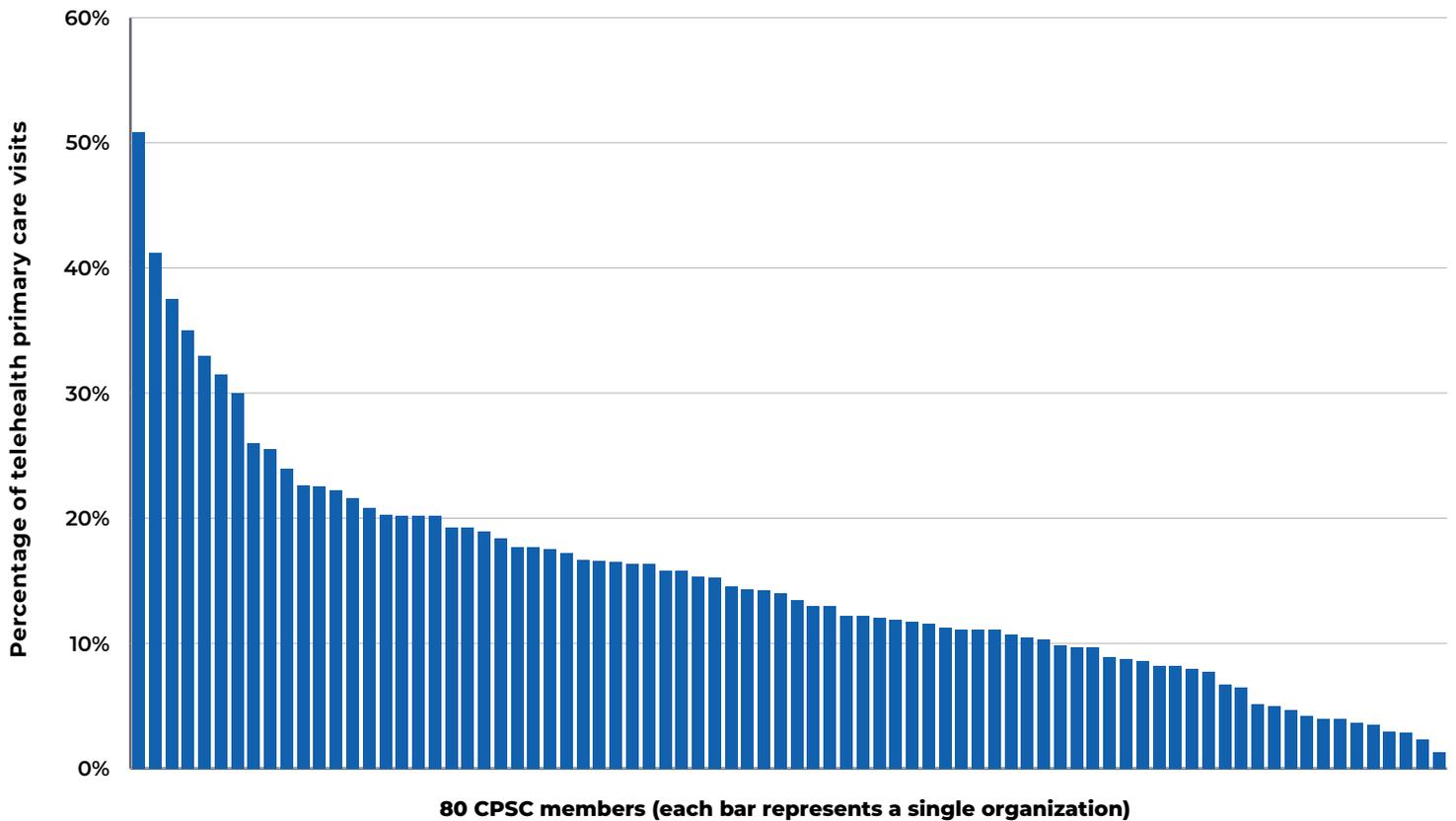


Figure 2. Variability of percentage of telehealth use in primary care, quarters 1-3 (January-September 2022).¹

PROJECT STRUCTURE

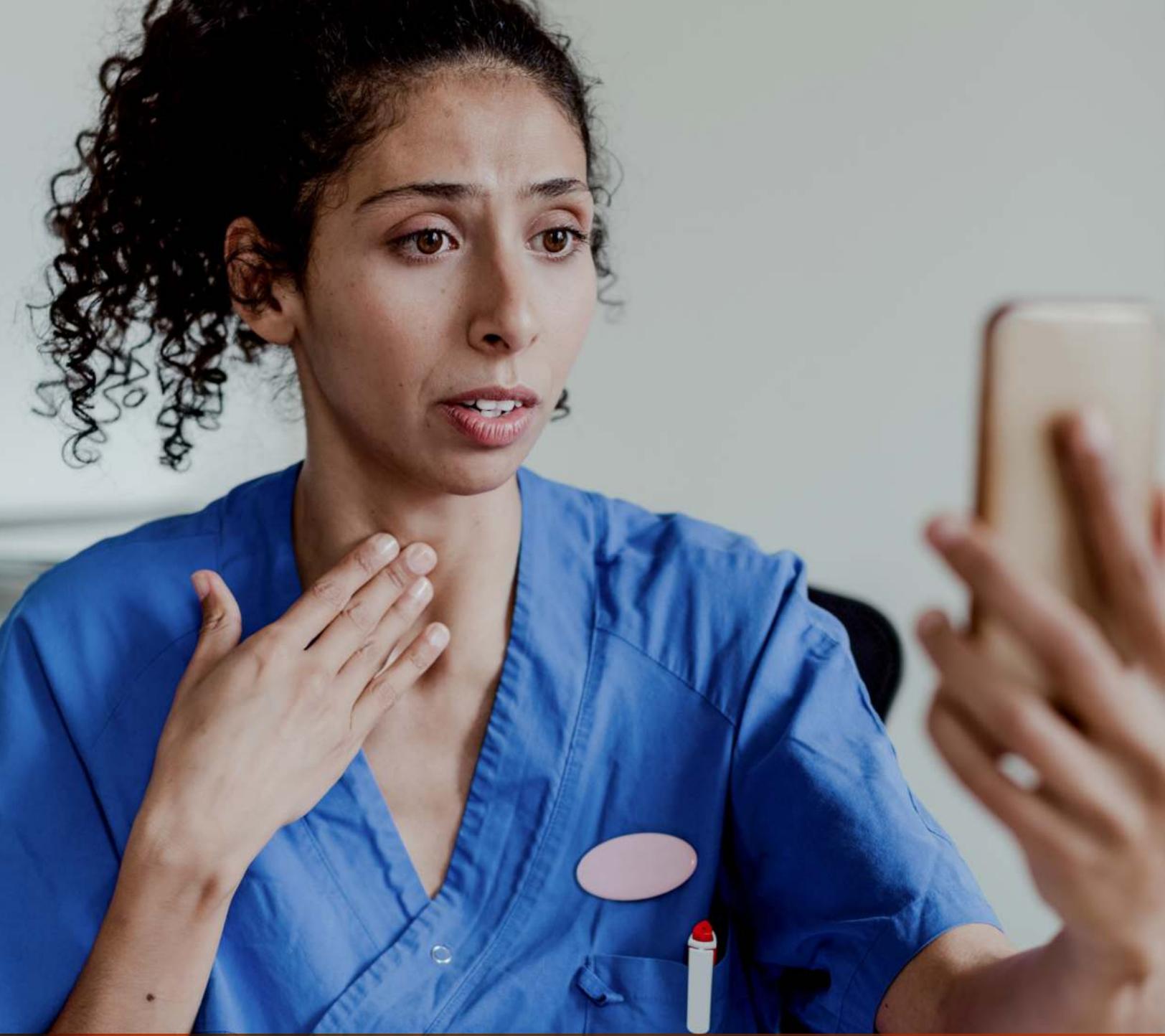
The goal of this project was to understand variations across academic medical centers (AMCs) in use of telehealth to deliver adult primary care beyond the pandemic, explore AMCs’ motivations for sustained telehealth use, understand how sustained use was achieved, and study associated implications on clinical performance.

A survey was conducted across all CPSC organizations to understand how primary care departments are using telehealth. While telehealth includes a wide variety of methods to deliver care, such as video visits, telephone/audio visits, and asynchronous care (e.g., eConsults, patient portal, mHealth), the primary focus of this survey and project was video and audio visits. Based upon the survey responses and data from the CPSC database, we then conducted structured video interviews with organizations that had varied rates of telehealth within primary care.

The structured interview questions were:

- **Is a high level of telehealth use in primary care a strategic priority for your organization? If so, why?**
- **How have you approached provider engagement around the use of telehealth?**
- **How have you approached patient engagement around the use of telehealth?**
- **Beyond patient and provider engagement, what other efforts have you focused on to encourage appropriate use of telehealth?**
- **How do you assess your performance in telehealth usage in primary care?**

A foundation for telehealth implementation and key effective strategies for optimizing telehealth usage in primary care were identified following these interviews. It is imperative that organizations plan and build a solid foundational infrastructure to support long-term stability and growth. These effective strategies can be utilized by health systems and primary care leaders working to expand and further leverage telehealth within their primary care services.



Foundation

By increasing access to physicians and specialists, telehealth helps ensure that patients receive the right care at the right place and at the right time. Technology, workforce, and access strategy serve as the foundation for establishing a telehealth program within primary care at an organization. They are essential elements for continued enhancement of a telehealth program. Organizations should ensure this strong foundation is in place to drive optimization and sustainability.

FOUNDATION COMPONENT: TECHNOLOGY

Technology and a video platform are essential to enable successful telehealth visits. Health systems must invest significant resources in the technology and infrastructure required for a platform that has the key components to successfully complete telehealth visits. Digital health platforms need to integrate with existing clinical workflows and systems so they can be easily shared and used by patients and staff.

Key technology components for successful video visits:

- HIPAA-compliant video platform.
- Integration into the electronic health record.
- Backup option for when video visit fails (e.g., another video platform or audio visit workflow).
- User-friendly platform for both providers and patients.
- Ability to include additional care delivery members on the visit (e.g., translator services, trainees, integrated care team members).
- Sufficient bandwidth for both providers and patients to ensure a smooth connection.
- Appropriate devices for providers and staff to conduct video visits at various locations (e.g., in clinics, offices).

FOUNDATION COMPONENT: WORKFORCE

A key piece to the success, sustainability, and optimization of telehealth is a well-prepared staff who have both the needed knowledge and comfort level with using the technology and other aspects of telehealth. A coordinated effort is required to train and engage with staff to successfully integrate telehealth into practice. Key team members include, but are not limited to, PCPs, care team members, front desk staff, scheduling teams, IT staff, regulatory experts, billing staff, and leadership.

Key steps include:

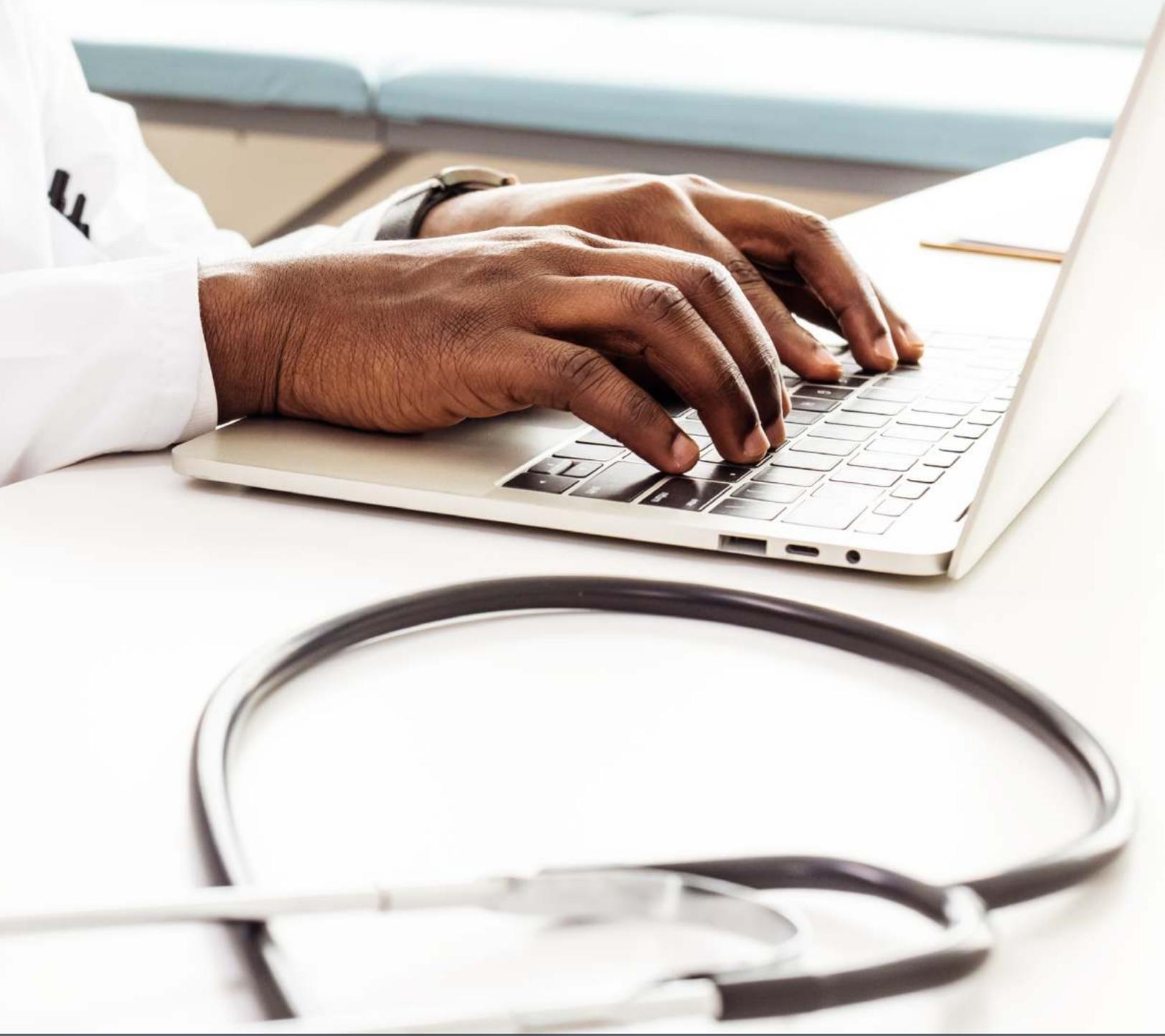
- Establish roles and responsibilities among staff to manage the day-to-day operations of telehealth practice.
- Create a flexible telehealth workflow that allows for quick changes and improvements.
- Evaluate if workflow modifications require changes in staff roles and responsibilities.
- Determine if a dedicated telehealth delivery care team is needed.
- Assign a telehealth practice lead to manage administrative issues and resolve problems that may occur.
- Create a formalized staff and provider training program. Schedule training to increase comfort and familiarity with telehealth technology and changes in workflow.
- Seek feedback on a regular basis to find out what is working well and what can be improved.
- Create a dedicated telehealth support team that provides at-the-elbow and technical support for providers, staff, and patients.

FOUNDATION COMPONENT: ACCESS STRATEGY

Telehealth was originally developed with a primary focus on extending access to rural patients. Since the COVID-19 pandemic, telehealth has been adopted by many organizations as part of their access strategies to ensure timely, necessary, and appropriate health care services across their entire patient populations. Now more than ever, patients demand efficiency and ease of use for scheduling. Specifically within primary care, there is more diversity and breadth of conditions seen compared with other specialties. This can make it more challenging to determine appropriateness of telehealth visits within primary care.

Key strategies include:

- As much as possible, primary care departments should identify appropriate clinical use cases for telehealth to use in scheduling algorithms and guidance for schedulers.
- Providers should understand how to best fit telehealth visits into their schedules. Approaches include:
 - Hybrid care models (clinical sessions that are a mix of in-person and telehealth visits).
 - Designated telehealth visit sessions and designated in-person sessions.
- Create a clear process for patients to self-schedule and identify telehealth visit options.
- Design a workflow to clinically assess visit type appropriateness prior to the visit to ensure a visit reason or condition is appropriate for telehealth. Processes and procedures need to be developed for identifying and contacting patients who may need to be rescheduled to a correct visit type.



Effective Strategies

Prior to the pandemic, most telehealth programs were within individual specialties or pilot programs. As telehealth adoption has become widespread, health systems have adopted the foundational elements detailed above but are now working to effectively sustain and optimize the use of telehealth in primary care and across the ambulatory space. Overall, telehealth visit rates have declined as patients have returned to in-person care. Following interviews with 13 health systems, the following effective strategies were identified across organizations that have sustained their use of telehealth in primary care and effectively integrated telehealth into their care delivery and operations.

EFFECTIVE STRATEGY 1: CULTURE OF ADOPTION

Leaders and providers must demonstrate a commitment to the value of telehealth. Telehealth should be incorporated into a system access strategy that involves engaging providers and staff in this shared mission.

Leadership Engagement

Designated oversight and delineation of leadership responsibilities for telehealth within a health system are needed. Organizational leadership must create and drive the telehealth strategy to align with the organization's core philosophy and mission. Primary care leadership must commit to and adopt said strategy within primary care, including a focused commitment to telehealth as a key component of primary care access and care delivery.

Telehealth strategy should include longitudinal thinking and clear communication of goals, along with prioritization of improvement and enhancements in this ever-changing environment. Importantly, leaders should solicit feedback from providers and staff regularly on ways telehealth workflows, scheduling, and other components can be continually improved. In turn, leaders need to communicate what action they've taken. Leaders should be able to tell a narrative and demonstrate why having telehealth in primary care is vital to the organization's success. Leadership plays an instrumental role in helping to shift the organizational culture and mindsets to embrace telehealth and technology.

Provider Engagement

Organizations that have sustained and optimized their use of telehealth in primary care all have physician champions who help drive the culture, commitment, and strategy of their telehealth programs. Beyond being “superusers,” these providers understand the value of telehealth and are motivated to participate and encourage their fellow providers to embrace virtual visits. One of the key tenets of primary care is continuity, defined as a temporal relationship between patient and provider that results in strong mutual trust.² This relationship and trust between patient and provider is key to patient adoption of telehealth; if providers suggest and encourage telehealth visits to patients, then patients typically will embrace telehealth. Telehealth leadership should engage with providers to design workflows that are provider-friendly with reduced impact on clinical practice styles. In addition to reducing workflow disruptions for providers, leadership should consider how telehealth can be implemented to benefit clinicians, including the ability to conduct clinical sessions from home when appropriate and reduce the impact of possible in-person clinic disruptions. Addressing concerns from clinicians and regularly involving them in the performance improvement process is essential to providers embracing telehealth as part of their regular practice.

Staff Engagement

A successful telehealth practice includes providers and staff who prioritize patients’ needs and know how to meet them. Staff need to have a good understanding of the strategy and priorities for primary care, which include telehealth as a key strategic priority. Staff need to understand the value telehealth can bring to expanding access and flexibility in care delivery. Staff are a vital resource and instrumental in carrying out activities needed to have smooth telehealth visits. Ensure staff feel supported and have sufficient training and onboarding to use the telehealth platform. Involving staff in discussions on optimization and planning of improvement activities and soliciting their feedback enhances staff engagement and buy-in. Telehealth also makes it possible for staff to work from home. Organizations should contemplate the pros and cons when considering work-from-home opportunities to ensure an equitable work environment for staff.

EFFECTIVE STRATEGY 2: PATIENT-CENTERED APPROACH

Prioritize creating a seamless patient encounter, from the initial scheduling to the visit to the follow-up. Breaking down silos in care provision and proactive consumer engagement are not only vital to sustaining and growing consumer use of virtual health care but they enable patients to more easily get care when they need it, through the most convenient channels, and at a lower cost of care.

The health care field has come a long way to thinking of the patient as a whole person and increasing partnership between providers and patients, including putting patients at the heart of deciding which goals and treatments are most valuable to them instead of clinicians deciding what is best. We also need to understand that patients are now consumers of health care services, with numerous options available. Primary care must be agile to adapt to the continually evolving consumer demands, market competitors, and inevitable technology innovations.

Telehealth has become another channel for patients to access care, especially those looking for alternative types of care that are convenient, efficient, cost-effective, and designed around their needs. Only 76% of patients have a PCP who plays a key role in maintaining health, managing chronic conditions, and helping to coordinate care across specialties.³ Long wait times and limited access can prevent a patient from establishing a relationship with a PCP, with the median wait times for a new patient appointment in primary care of 13 days in the third quarter of 2022.⁴ The option of a virtual appointment can provide flexibility and ease to patients who desire this type of access channel who might otherwise seek care elsewhere. Telehealth also offers providers the flexibility to extend office hours and avoid leakage outside of the organization, especially during times of high demand and/or volumes when increased capacity is required. These additional access pathways are a key component of primary care's emphasis on "first contact" and ensuring patients have access to the health system when needed.²

Telehealth allows providers to engage more with certain patient populations, such as those with chronic conditions. Patients suffering from chronic conditions are significant contributors to health care expenditures, and appropriate use of telehealth services can reduce these pressures.⁵

Patients need to feel empowered and be part of the decision-making process when it comes to their care, and the option of a virtual visit gives them a choice. Table 1 describes key elements to ensuring comprehensive, patient-centered care throughout a telehealth encounter.

Table 1. Telehealth Visit Elements

SCHEDULING	BEFORE THE VISIT	DURING THE VISIT	AFTER THE VISIT
Promote telehealth services through marketing and digital front door.	<p>Ensure that patients understand how to prepare for their upcoming telehealth visit.</p> <ul style="list-style-type: none"> • How to log in to the system. • Check technology for compatibility, sufficient bandwidth, and video/sound. • Give clear expectations for the patient after they join the visit (e.g., waiting room, communication for any delay). 	Ensure easy process to join telehealth appointment (no additional login or password required).	Give clear expectations post-visit, including providing guidance on follow-up and next steps.
Patient portal allows easy self-scheduling.	Have a clear and convenient check-in process (e.g., call from care team member pre-visit or completion during the visit).	Provide contact information for immediate support for any technology issues. (This should not be the responsibility of the provider.)	Have a check-out procedure to help patients schedule necessary follow-ups and their next appointment (including virtual or in-person, as appropriate).
Screen and follow up with patients who may need additional support (e.g., telehealth readiness assessment).			Survey patients for quick and easy feedback on their telehealth experience.

EFFECTIVE STRATEGY 3: METRICS AND ANALYTICS

Organizations collect and use operational telehealth metrics to drive program improvement and ensure appropriate application of telehealth across departments and providers.

Nearly all organizations are tracking the number of telehealth visits. However, to truly make the case for further investment and commitment to a telehealth program, it's essential to be able to show how telehealth has contributed to organizational goals. Beyond utilization metrics, organizations should also be collecting telehealth quality metrics, satisfaction metrics (patient, provider, staff), and financial metrics.

Across a survey of 24 CPSC-member health systems, the most tracked metric of telehealth in primary care metric was the volume of synchronous visits (e.g., video, telephone/audio) (refer to Figure 3).

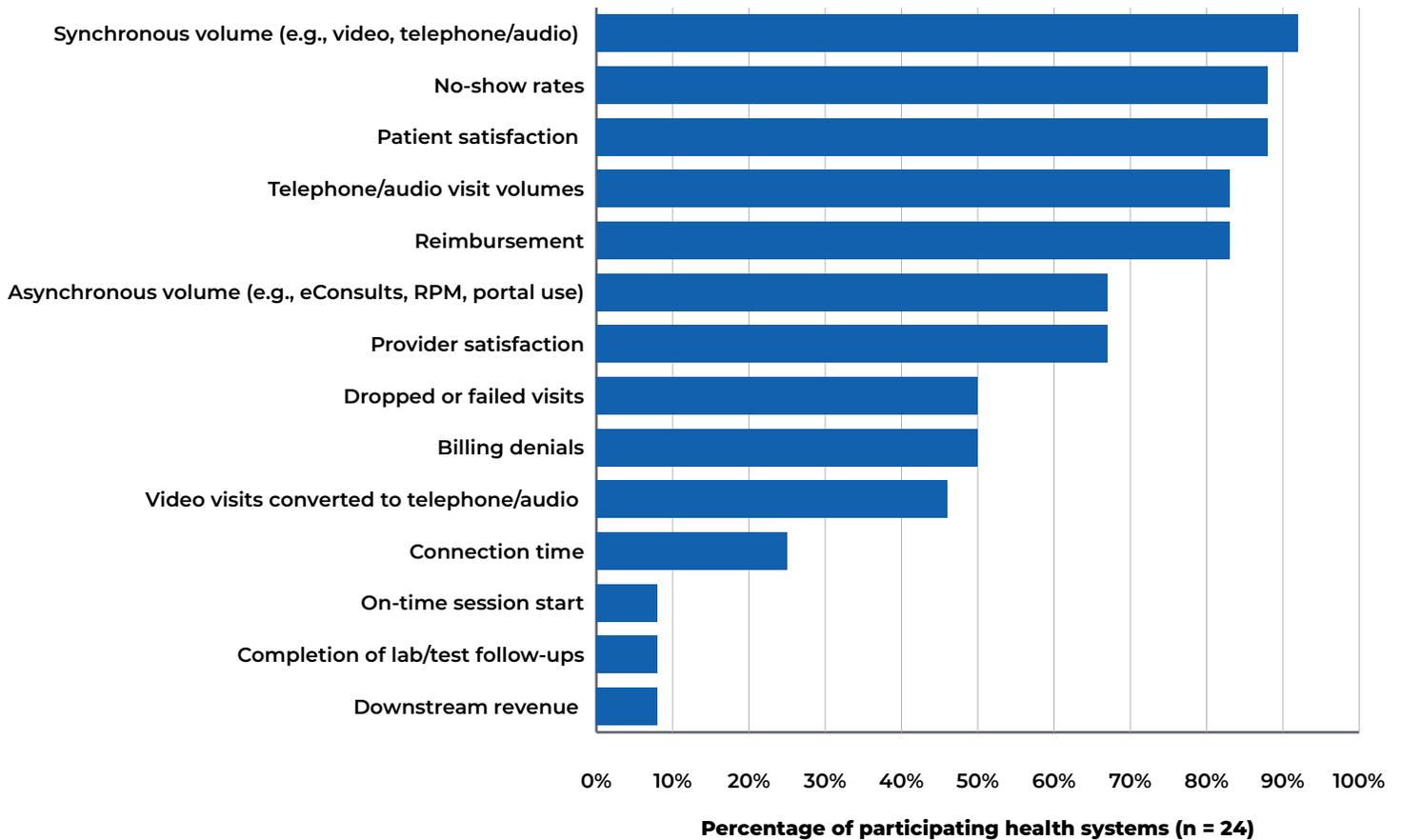


Figure 3. Telehealth operational metrics measured in primary care.

Beyond tracking key telehealth metrics, organizations must also engage stakeholders in collection, analysis, and reporting of the data and act on said data. This involves sharing specific telehealth dashboards and/or reports with leaders as well as providers across the organization.

Questions your organization should consider when examining your own data and performance are:

- **How is your telehealth utilization trending over time, overall, by specialty, by practice site, and by individual provider? What can you learn from the specialties, practice sites, and individual providers trending in a positive direction that might be applicable to outliers on the other end of the spectrum?**
- **Are there certain patient populations with increased telehealth use? Low use? What is driving the variations in telehealth use across populations?**
- **What are your rates of audio versus video visits?**
- **Are any quality concerns identified?**
- **How many visits are being rescheduled from a telehealth visit to in-person?**



Barriers to Sustained Use of Telehealth in Primary Care

Telehealth can increase access to primary care services and improve patient outcomes by enabling timely care interventions. However, the implementation of telehealth in primary care faces challenges from regulatory, technology, capacity constraints, and quality barriers.

REGULATORY

During the public health emergency, Medicare removed geographic and site-of-service limitations on telehealth services and allowed other flexibilities, which enabled patients to maintain access to their usual source of primary care in a safe manner. However, these geographic and site-of-service limits have only been temporarily removed, and Congress and the Department of Health and Human Services (HHS) must modify legislation and regulations to make permanent the provision of telehealth in all geographic regions and in the patient's home while ensuring that reimbursement remains at a level that will support the infrastructure needed to continue to provide telehealth services.

Telehealth has been instrumental in providing care to more patients in more locations. However, in addition to the geographic and site-of-service limitations, there is also variability in liability insurance coverage and medical license coverage to practice across state lines. Telehealth services in primary care can enable continuity in care for many patients, including individuals who may live in multiple locations, such as college students. Concerns by providers related to ability to provide care for patients in other states and the related liability is a significant hinderance to adoption and acceptance of telehealth by providers.

TECHNOLOGY

Many organizations are implementing policies and tracking data to decrease audio-only visit rates. Early in the pandemic, the mean percentage of total visits that were audio-only peaked at 20% in May 2020, but this has steadily decreased to a mean of 2% in the third quarter of 2022.¹ Figure 4 illustrates the significant range in audio-only versus video visit rates across CPSC-member organizations.

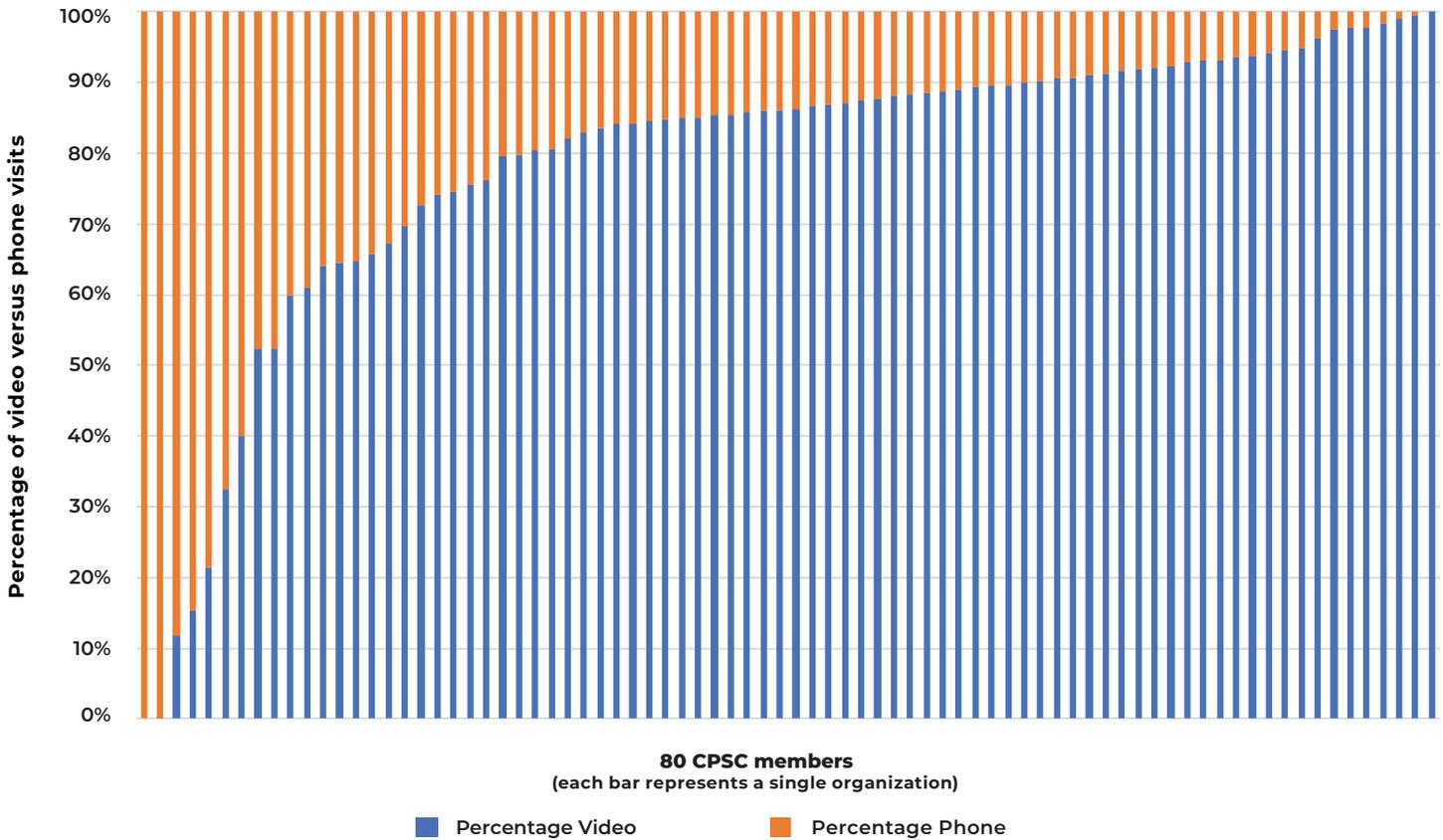


Figure 4. Video versus phone telehealth use in primary care, quarters 1-3 (January-September 2022).¹

While it's important that organizations understand and address barriers to video visits, coverage of audio-only services is particularly important for patients who may not feel comfortable with or not have access to video platforms and technologies. A study by the Federal Communications Commission found that counties with the worst access to primary care physicians are also typically the least connected to broadband services, with over 40% of consumers in these counties lacking access to even basic internet at home.⁶ To avoid exacerbating disparities in access to primary care and other telehealth services, it is important that HHS and payers continue to pay for audio-only services while improving access to broadband.

CAPACITY CONSTRAINTS

In-person volumes returned to normal at many organizations; simultaneously, many organizations are experiencing severe staffing shortages of both providers and other clinical staff. Almost every hospital in the country has been forced to hire temporary contract staff at some point during the pandemic to maintain operations.⁷ These staffing challenges make it difficult for organizations to have capacity to take on new care delivery workflows or work to expand telehealth. Staffing pressures for providers and health care workers are expected to persist and even worsen, with a predicted shortage of 3.2 million health care workers by 2026.⁸ These significant staffing challenges will severely impact health systems and primary care groups. Organizations should consider how telehealth may help relieve staffing shortages and can be implemented in ways that effectively engage providers and reduce provider burnout.

QUALITY

There are concerns from the Centers for Medicare & Medicaid Services, payers, patients, and health systems around quality of care provided via telehealth. While virtual visits have some limitations, including difficulty in conducting a thorough physical exam, a recent study in JAMA Network Open found that telehealth can expand health care capabilities and performs at the same level or better than in-person care on many key quality measures.⁹ Primary care addresses a wide array of conditions, and it is important to measure and understand the quality of telehealth in primary care and whether it serves as a cost-effective, patient-centered care delivery method¹⁰ and what conditions are most appropriate for a telehealth visit.



Practices in Action:
Case Studies From Two
Academic Medical Centers

Here is a look at two organizations that have sustained and optimized their telehealth use post-pandemic and have adopted telehealth as part of their strategy within primary care.



Prior to the COVID-19 pandemic, Stanford Medicine had several digital health tools available and was actively engaged in further developing its digital health strategy. Within primary care, providers actively used their eConsult program, and Stanford was in the process of launching a primary care video visit pilot. This planning and early adoption of technology allowed the organization to pivot quickly when the pandemic struck. Stanford has found it important to understand the needs and have a good use case, both operationally and clinically, before implementing technology.

Stanford Medicine has taken an enterprise approach through the creation of a robust digital health team that sponsors and promotes how to use digital health innovations to best serve clinicians and patients. The health system has incorporated a strategy arm that investigates and develops the types of programs or interventions that could be digitally enabled. The goal of this team is to drive telehealth and digital health utilization in ways that are productive and help meet the organization's needs. Alongside this strategy team, an integration team focuses on prioritization, ensuring value at scale, and operational sustainability to benefit the organization and the patients served.

Culture of Adoption

It was imperative that the digital health team partnered with both operations and clinical staff. The digital health team worked to cultivate rich connections and offer support to all staff across divisions. Primary care division made an investment early on to embrace video visits and telehealth. Leadership understood it was imperative to the success of the program that providers were comfortable using telehealth and video visits to engage with their patients. The digital health team engaged every department to conduct deep discussions soliciting feedback on improvements and develop clinical appropriateness guidelines for video visits.

Stanford Medicine is a large organization with many digital health stakeholders and representation across different telehealth workgroups. Specifically in primary care, a provider was designated to have awareness

and involvement in telehealth initiatives across the division. This has been an important way of gaining PCP buy-in for Stanford's telehealth implementation. Primary care leadership within Stanford Medicine has been a strong voice of support of telehealth, with endorsements around the value and risk, education of best practices, and active cross-talk between providers. This culture around telehealth within primary care has promoted sustained and optimized telehealth usage.

Patient-Centered Approach

Stanford Medicine views telehealth as a key strategy to drive value and scale patient care. Like most organizations, Stanford Medicine has a high demand for new patients and primary care services. Telehealth helps create additional access points for patients to reach their providers. Stanford understood that to gain buy-in from patients around telehealth, it was vital that providers and staff inform patients that telehealth was available to them and impart its value to the patient. These conversations help build trust in the patient-provider relationship and have been essential to sustained telehealth use within primary care.

The digital health team, including Stanford's technology and digital solutions team and compliance team, prioritized patient engagement around telehealth. They provided technical support, created training videos, and partnered with Stanford collegiate and medical students to help vulnerable patients with limited technology literacy to access video visits. They have prioritized ease of use of scheduling and are continuously updating their scheduling algorithms to improve the effectiveness of self-scheduling for patients.

Metrics and Analytics

Stanford Medicine found that mandating an enterprise-wide telehealth usage goal was impractical, as clinical practice is unique to an organization, unique to the patient population, and, in some ways, unique to the actual provider population. Instead, the organization has approached its telehealth goal as a learning opportunity. Leadership asked departments to identify an estimated "virtual band" — not a target number, but a reference hypothesis to plan operations and support needs. The primary care department has set a telehealth allotment of approximately 25% for each provider's template; however, this is not mandatory, and providers can modify their template based on what's appropriate. In quarters 1-3 of 2022, telehealth represented 51% of visits within primary care at Stanford.¹

Within primary care, Stanford Medicine hopes to further leverage data to set a foundation for evidence-based approaches around the use of telehealth to provide improved patient experiences and outcomes. Currently, Stanford is working to understand the quality of video visits by tracking emergency department visits within seven days, resource utilization (need for repeat visits) within seven days, and demographic data to support diversity, equity, and inclusion. This data will help enable Stanford to expand telehealth in primary care to benefit patients and satisfy providers.



University of Michigan Health Case Study

University of Michigan Health (U-M Health) made efforts to expand its telehealth program before the COVID-19 pandemic, with telehealth included as part of the strategic plan. Primary care providers had access to many telehealth programs (e.g., eVisits, eConsults, RPM), with one challenge being the large number of programs and difficulty supporting patients in already resource-constrained clinics. Virtual care champions existed within each division, serving as a clear communication structure that helped the organization rapidly increase telehealth during the COVID-19 pandemic. Pre-pandemic, the organization had predicted eVisits would be the biggest telehealth increase, but video visits have been the primary telehealth volume in primary care. In quarters 1-3 of 2022, telehealth represented 33% of visits within primary care at U-M Health.¹

Culture of Adoption

Provider and staff engagement have been key to the success and sustained use of telehealth across U-M Health primary care. Leaders interviewed staff and faculty at clinics to understand staffing needs during video visits. Most primary care clinics preferred live, synchronous rooming with the medical assistant and patient to allow increased flexibility and time buffer for providers, as well as necessary orders or refills to be pended. Numerous surveys of providers also helped administrators understand pain points and receive feedback on the telehealth processes.

U-M Health has set a target of 20% of outpatient services to be delivered via telehealth (including eConsults and eVisits). This target is supported by revenue uplift where the medical group will compensate clinical departments should that target be met. Specifically in general internal medicine, clinics that meet virtual care targets will provide additional compensations to providers.

Patient-Centered Approach

U-M Health attempted mixed in-person and telehealth sessions in primary care but found this did not work well for providers or patients. Patients typically expected video visits to be timelier, and providers and clinics struggled to meet patient expectations with mixed scheduling blocks. U-M Health has adjusted telehealth scheduling to separate telehealth and in-person scheduling blocks to better meet patient expectations.

Equity has been a key piece of the U-M Health telehealth strategy. U-M Health created a dashboard that includes information on interpreter needs, disability, race, ethnicity, gender, and video versus phone visit rates. Patients complete a questionnaire on social determinants of health, and patients identified as having access barriers receive assistance through a patient-facing technical support desk (e.g., helping with patient enrollment, practice video visits, portal sign-up). This service was successfully piloted with cardiovascular patients and has been slowly expanding to other specialties. The service will be offered to all patients in early 2023. A key aspect of the telehealth equity approach has been the development of an interpreter services workflow. Originally, the organization had a high failure rate for patients who needed interpreter services to connect on telehealth visits, so the organization developed a workflow that allows a live interpreter to join video visits for most languages, with the option to move the interpreter to a virtual waiting room for any sensitive exams.

Metrics and Analytics

U-M Health is tracking many metrics related to telehealth use and is using this data to improve the telehealth program. As part of the evaluation, the organization has seen wide variability in telehealth use across individual providers and is leveraging this data to better understand the drivers of this variability. For example, newer providers in primary care with a primarily new patient panel tend to have more in-person visits as they get to know their patients. More-established PCPs who have taken a liking to telehealth have higher percentages of telehealth visits. Modifications to providers' templates to increase telehealth slots were more successful for more-established providers who were able to fill their telehealth slots.



Conclusion

Telehealth helped enable PCPs to provide much-needed care for patients during the pandemic while limiting the spread of the virus. Telehealth use in primary care was relatively rare prior to the pandemic and increased dramatically during the pandemic out of need, but this data and project demonstrate that, while variable, its use in primary care is likely to continue across health systems in the future. Organizations that have been able to best sustain and optimize their use of telehealth have embraced a culture of adoption, patient-centered approach, and focus on metrics and analytics. Understanding telehealth's full potential in providing access to primary care can help ensure health systems are positioned to meet the needs of patients through improved care-delivery strategies.

NOTES

1. AAMC analysis of physician claims billed by Faculty Practice Plan members of the AAMC-Vizient Clinical Practice Solutions Center. A product of the AAMC and Vizient, the Clinical Practice Solutions Center (CPSC) collects billing data from member practice plans to provide benchmarks and help them improve performance.

Note: At the time of this analysis (January 2023), 80 CPSC members had shared their claims data through September 2022. "Claims" include in-person and telehealth evaluation and management (E/M) claims, including codes 99201-205, 99211-215, and 99241-245. Telehealth encounters were identified based on place of service = 02, 10 or modifiers 95, GT, GQ, GO on the claim; CPT codes 99441-443 were also counted as telehealth. Claims are across all payers and from service sites 02 – Telehealth, 10 – Telehealth Provided in Patient's Home, 11 – Office, 19 – Off Campus Outpatient Hospital, 22 – On-Campus Outpatient Hospital, and 99 – Other Place of Service. Claims are limited to primary care, which is defined as family medicine, general internal medicine, or geriatrics.

2. Jimenez G, et al. Revisiting the four core functions (4Cs) of primary care: operational definitions and complexities. *Prim Health Care Res Dev.* 2021;22:e68. doi:10.1017/S1463423621000669.
3. U.S. Office of Health and Human Services Office of Disease Prevention and Health Promotion. Increase the proportion of people with a usual primary care provider — AHS-07. Healthy People 2030. <https://health.gov/healthypeople/objectives-and-data/browse-objectives/health-care-access-and-quality/increase-proportion-people-usual-primary-care-provider-ahs-07>. Accessed Nov. 21, 2022.
4. The median lag days from scheduling an appointment for new patients is defined by CPSC as the median of the number of days between the date a new patient calls the practice to schedule an appointment and the date the appointment occurs for the completed new patient using the CPT codes (99201-205) + (99381-387)+ 92002 + 92004 + (99241- 245) at the following sites of service: office, on-campus outpatient hospital, off-campus outpatient hospital, telehealth provided other than in the patient's home, and telehealth provided in the patient's home.
5. Kobb R, Hoffman N, Lodge R, Kline S. Enhancing elder chronic care through technology and care coordination: report from a pilot. *Telemed J E Health.* 2003 Summer;9(2):189-95. doi:10.1089/153056203766437525.
6. Federal Communications Commission. Mapping Broadband Health in America 2017. https://www.fcc.gov/sites/default/files/connect2health.key_findings.pdf. Accessed Nov. 21, 2022.
7. American Hospital Association. AHA letter re: challenges facing America's health care workforce as the U.S. enters third year of COVID-19 pandemic. www.aha.org/lettercomment/2022-03-01-aha-provides-information-congress-re-challenges-facing-americas-health. Accessed Nov. 21, 2022.
8. American Hospital Association. Fact sheet: Strengthening the health care workforce. <https://www.aha.org/fact-sheets/2021-05-26-fact-sheet-strengthening-health-care-workforce>. Accessed Nov. 21, 2022.
9. Baughman D, Jabbarpour Y, Westfall J. Comparison of quality performance measures for patients receiving in-person vs telemedicine primary care in a large integrated health system. *JAMA Netw Open.* 2022;5(9):e2233267. doi:10.1001/jamanetworkopen.2022.33267.
10. Shuemaker JC, Phillips RL, Newton WP. Clinical quality measures in a post-pandemic world: measuring what matters in family medicine (ABFM). *Ann Fam Med.* July 2020;18(4):380-382. doi:10.1370/afm.2564.



**Association of
American Medical Colleges**
655 K Street, NW, Suite 100, Washington, DC 20001-2399
T 202 828 0400
aamc.org