

Organizational Factors Associated with Using Telehealth Services: Perspectives from Leaders of Rural Health Clinics and Federally Qualified Health Centers

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Key Findings

- Clinic leaders perceive telehealth as a helpful technological aid to the tools available to increase access and facilitate direct patient contact.
- Telehealth implementation challenges include building clinician support, developing a shared understanding of appropriate clinical care for telehealth, supporting telehealth implementation based on shared goals and understanding, and creating a telehealth experience for the patient that is easy, available, and supportive of a patient/provider relationship.
- Operational challenges include standardizing and simplifying rules and policies, aligning financial incentives to support telehealth implementation and growth, creating measures for monitoring out-comes to ensure accountability, and reducing obstacles such as limited connectivity to telehealth platforms in rural areas and reimbursement that favors in-person care.
- Innovative telehealth opportunities include telehealth pre-visit contact or confirm an initial visit, use of mobile telehealth clinics with necessary technology, after hours and weekend coverage via telehealth, providing telehealth in schools for both behavioral and medical services, tele-dental services, chronic care telehealth follow-up visits, and telehealth visits that take advantage of in-home remote monitoring equipment.

Introduction and Purpose

The COVID-19 Public Health Emergency (PHE) drove the expanded use of telehealth,^{1,2} during which time healthcare providers deferred elective and preventive visits and many patients avoided necessary healthcare services to minimize their risk of exposure³, resulting in a shift to telehealth to provide access to essential healthcare services.

To date, little information has been available on the organizational challenges associated with the provision of telehealth services by Rural Health Clinics (RHCs) and Federally Qualified Health Centers (FQHCs). This project asked leaders in selected RHCs and FQHCs to identify challenges, trends, and resources needed in adapting telehealth services to their settings. It is a companion to a previously completed project that used 2019 to 2021 Medicare Outpatient and Carrier claims files to explore the provision of telehealth services by RHCs and FQHCs (reported separately).⁴

Background

The social distancing and lockdown requirements that federal and state governments implemented in March and April of 2020⁵ dramatically affected healthcare use and provider revenue.¹ Telehealth quickly became recognized as a solution to maintain patient access to care and stabilize healthcare providers. Telehealth use rose significantly in early

2020 following the passage of the Coronavirus Aid, Relief, and Economic Security (CARES) Act which implemented temporary regulatory changes that substantially expanded the scope of Medicare reimbursement for telehealth.⁶

Medicare regulations related to telehealth use identify **originating site providers** as those who host the patient in the clinic and are considered the site of the telehealth service, connecting the patient to a provider located outside the clinic. For facilitating the telehealth connection with remote site providers, RHCs and FQHCs, along with other defined originating sites, can bill Medicare for an originating site fee paid under the Medicare Physician Fee Schedule. The originating site fee is designed to compensate the originating site for the cost of hosting the encounter, maintaining appropriate medical records, and maintaining the telehealth connection. Both RHCs and FQHCs are reimbursed for the provision of telehealth services outside of their bundled all-inclusive rates and use a separate procedure code (G3014) to bill for telehealth originating site services.

In addition to serving as an originating site for telehealth, RHC and FQHC providers can also serve as **distant site providers**, providing professional services to patients located in their homes, in other clinical settings (*e.g.*, nursing homes), or in other providers' offices. Prior to the CARES Act, telehealth for RHCs and FQHCs was limited to the originating site model as neither provider type was included on the list of specified distant site providers authorized to provide Medicare-covered telehealth services, and was further limited to providers in rural areas. RHCs and FQHCs typically served as telehealth originating sites to facilitate access to specialty care provided by distant site specialists.

Provisions of the CARES Act that applied to RHCs and FQHCs included the ability to provide distant site telehealth services to Medicare beneficiaries during the COVID-19 Public Health Emergency (PHE).⁷ This change was necessary to allow RHCs and FQHCs to provide services while complying with social distancing and lockdown provisions. In addition, the CARES Act encouraged the relaxation of interstate practice and privacy regulations and improved reimbursement for telehealth use. State and private payors quickly followed suit.⁸ Following the PHE-related uptake in use, telehealth use has declined steadily since early 2021, but it remained higher than pre-pandemic levels.⁶

The CARES Act required Medicare to develop payment rates for RHCs and FQHCs serving as distant site providers similar to the national average payment rates for comparable telehealth services under the Medicare Physician Fee. Distant site services are billed using the G2025 procedure code. Reimbursement for this code is adjusted annually and paid at rates ranging from \$92.03 in 2020 to \$99.45 in 2021, with a current rate of \$95.27 in 2024.⁹

Subsequent legislation, including the Consolidated Appropriations Act of 2021, the Consolidated Appropriations Act of 2022, and the Center for Medicare & Medicaid Services CY 2022 Physician Fee Schedule, made the following telehealth provisions permanent:

- RHCs and FQHCs can serve as distant site providers for behavioral/mental telehealth services;
- Medicare patients can receive telehealth services for behavioral/mental health care in their home;
- Geographic restrictions for originating sites for behavioral/mental telehealth services were eliminated; and
- Behavioral/mental telehealth services can also be delivered using audio-only communication platforms.¹⁰

The remaining telehealth provisions originally slated to end on December 31, 2024, have been extended to March 31, 2025.¹¹

Findings from the previously referenced study of 2019 to 2021 Medicare Outpatient and Carrier claims⁴ highlighted the key role played by telehealth services in RHCs and FQHCs in response to these Medicare billing policy changes. To complement those findings, we conducted interviews with a small sample of rural RHC/FQHC staff to better understand the barriers to increasing the use of telehealth and the facilitators that would support greater use. This information can assist in improving beneficiaries' access by identifying the challenges faced by these organizations in expanding telehealth, fostering acceptance of telehealth use by administrative and clinical staff, funding the resources and technical assistance to expand or improve telehealth, and planning the continuation of these services.

Methods

This study aimed to identify the perceptions of RHC and FQHC members about the use of telehealth services. We conducted interviews between May-September 2024 with key informants (leaders and staff) from a convenience sample of RHCs and FQHCs from five regions of the country who volunteered for this study (see Table 1). Using a structured interview guide (see Appendix), we identified perceived barriers to using, increasing, and expanding telehealth services, including whether clinics were disadvantaged or discouraged from using telehealth under the current reimbursement schedules.

Participants were invited to volunteer through professional associations and networks in their local areas. These leaders and staff participated in a two-stage data collection process: 1) a survey (10 minutes for each participant) to identify key characteristics of their organization and the top issues that affected their continued use or expansion of telehealth services and 2) an individual interview to confirm or expand on those issues (up to 60 minutes per interview). The results of the survey (stage 1) were used to finalize the interview scripts (stage 2). Interviews were recorded and transcribed by the Zoom remote, virtual communications platform and stored on the Zoom site. Survey data were administered through the Qualtrics data collection program and stored on a secure platform. Participants were not compensated for time spent on behalf of this study.

The research team conducted a thematic analysis of the interview data, identifying common facilitators for and barriers to using or expanding telehealth services. Each team member summarized their own notes from each interview and cross-compared them in a common data set, using the constant comparative method¹² to continually refine and update identified themes and document them in an interim memorandum. Between interviews, team members conferred on any alternative themes or different interpretations in synchronous meetings, resolving any differences before moving forward. Notes from the in-person interviews were used to supplement findings.

Both the University of Vermont and University of Southern Maine Institutional Review Boards deemed this study exempt from approval.

Findings

We reached out to seven FQHCs and 10 RHCs to interview one to three leaders or team members per site familiar with their telehealth services. We were able to interview eight individuals from four FQHCs (57% response rate) and two RHCs (20% response rate): one provider-based and one independent RHC (see Table 1).

Table 1: Characteristics of Key Informants by Region of Country

Census Region: State	Primary Care Organizations and Role Key Informants
Northwest: Washington State	Provider-based RHC acting as a distant site provider Clinic Manager
Northern Midwest: Michigan, Nebraska	FQHC acting as a distant site provider Chief Operating Officer Independent RHC acting as a distant site provider Physician Assistant
Southern Midwest: Missouri	FQHC acting as both a distant site provider and an originating site Family Nurse Practitioner – Certified
Northeast: Vermont	FQHC acting as a distant site provider Medical Director, Assistant Medical Director/Nurse Practitioner, Director of Primary Care
Southeast: Virginia	FQHC acting as a distant site provider and rarely as an originating site Virtual Care Coordinator

Individuals interviewed included a chief operating officer, a clinic manager, a medical director, an assistant medical director/nurse practitioner, a family nurse practitioner, a physician assistant, a director of primary care, and a virtual care coordinator. These organizations were spread across five regions of the country and offered two versions of telehealth services:

- **Distant site provider:** The provider, who can be located in a clinic or a separate location, provides services to the patient who can be located in their home, in another clinical setting, or other separate location.
- **Originating site:** The patient comes to the clinic to join the virtual meeting; the provider joins from his/her office or a separate location.

Based on the surveys and interviews conducted, the following themes were consistently identified:

- Patient preferences are drivers of telehealth services: Patients have preferences that strongly influence providers' own behavior related to telehealth services. Even though a telehealth service may be available more quickly than an in-person visit, many patients, particularly older patients, are perceived as preferring an in-person visit.

Several reasons were proposed for this perception: the complexity of the technology (ease of getting to and using the remote platform), accessibility to the technology (having Internet or cellular access), and the need for social contact and in-person engagement as part of a health care service. Some providers base the decision to offer telehealth services on whether the patient, at the time of appointment scheduling, specifically asks for a telehealth visit, after which a set of clearance questions must be completed (such as "are you in the state of XXX" to ensure licensing coverage of the provider) to determine the appropriateness of telehealth for their specific treatment needs.

All providers interviewed agreed that patient preference drives the scheduling of telehealth visits.

Providers have learned that there are social and clinical reasons that favor telehealth services, such as lack of childcare, being a care provider for a dependent in the home, lack of transportation, or having an established clinical condition that can be supported with less in-person contact, such as a behavioral health condition. Despite the presence of some factors that favor telehealth, providers perceive that many patients prefer in-person visits. All providers interviewed agreed that patient preference drives the scheduling of telehealth visits.

- Providers adapt to new technology when it is easy and useful but prefer "in-person": Providers also frequently endorse a preference for in-person visits. Even when they have favorable perceptions of telehealth services, "no one wants to be virtual all the time," indicating that the nature of primary care work includes some aspect of in-person care and is an expectation of the provider, not just the patient. Providers describe themselves in ways that represent the well-established innovation adoption curve¹³ of "early adopters" to "late majority" (and even some "laggards"). The "late majority" is hesitant, needs to be heard, and needs to know that they will be supported. In support of these more hesitant adopters, healthcare organizations can influence the preferences of providers through preparation and maintenance of technical support (see "Organizations can influence telehealth use" below).

The degree to which healthcare organizations prepare for and support providers and patients prior to and throughout the delivery of telehealth services facilitates successful uptake.

For all providers, even the early adopters, operational change in the current primary care environment is difficult. Providers need "the right push" to help them move to the telehealth platform as a standard method for patient care. That push can include:

- Smooth scheduling, integrated with the rest of the visit schedule
- Support for using the technology, particularly prior to and during start up
- Equitable reimbursement (see "Funding drives organizational behavior" below)

For providers who have adopted telehealth, repetition makes the process easy: "now it's a routine that can work well and can handle a lot of patient needs." Some respondents reported that telehealth is simpler and faster than an in-person visit. Even these providers, however, do not prefer

telehealth visits. The advantage of in-person visits, where facial expressions, body language, and physical closeness are a part of the encounter, is valuable enough to make them consistently preferred across all respondents in this study. In addition, in-person visits provide clinical information that cannot be assessed via telehealth when a patient is located outside the clinic (*e.g.*, heart sounds and other aspects of a complete physical exam).

- Organizations can influence telehealth use by adequate preparation and support: The degree to which healthcare organizations prepare for and support providers and patients prior to and throughout the delivery of telehealth services facilitates successful uptake. This includes such strategies as:
 - Working with providers and their office staff before telehealth implementation to identify concerns, define solutions (*e.g.*, What are the telehealth documentation requirements? How long should a telehealth visit last? What policies are needed to ensure all payor requirements regarding telehealth will be met?), redesign workflows, provide training, set up a steering committee to monitor progress, provide documentation, and maintain open communication channels.
 - On-going support for operational issues, such as scheduling, staff interaction with patients prior to telehealth calls to obtain patient history and background information, telephone call management when clinics are closed or short-staffed, follow-up with patients redirected to the telehealth service for urgent needs, flexible scheduling when providers are not available, technical failures, and resources for billing questions.
 - Primary care providers often see four patients per hour. In a face-to-face setting, clinical support staff support this level of productivity by collecting patient histories and obtaining vital signs and other patient information needed by the clinicians. A telehealth encounter also requires obtaining formal consent to bill for the telehealth encounter and technical support to initiate the telehealth connection, which reduces providers' productivity and patient care time unless the clinic establishes protocols and procedures to minimize the loss of provider productivity. One clinician noted that, in his opinion, the difference in payment rates was less of an issue than the administrative burden and loss of productivity related to telehealth technology and services. He further noted that the available telehealth software could be modified to collect necessary consent and other information before the provider logs into the system.
 - Development of new services to meet patient and provider needs, such as the use of remote monitoring devices (*e.g.*, blood pressure, blood sugar, etc.) to provide data in preparation for a telehealth visit thereby reducing the need to come to the office to repeat these monitoring steps.

A possible benefit of such organizational preparation and support is the optimization of provider and staff scheduling, balancing provider workloads, and staffing support by sharing telehealth services across clinic locations. If "there's no one in the office, due to a staffing problem, then no one can put them on the schedule. Patients come and just wait..." One respondent noted that her system was able to accommodate patient needs by using the time of providers in their satellite clinic to see patients when there were no appointments available at the main clinic. As primary care services continue to be stretched due to staffing and provider shortages, telehealth may be able to provide an alternative that more productively uses scarce provider resources thereby reducing wait times for patients and the burden on providers. However, such efficiencies are not possible if the healthcare organization has not developed a remote access system that works easily and successfully for the patient and the provider, including technological systems (access to the platform) and operational functions (access to scheduling; availability of staff to set up the platform and keep the patient connected until the provider signs on from a different location).

As primary care services continue to be stretched due to staffing and provider shortages, telehealth may be able to provide an alternative that more productively uses scarce provider resources thereby reducing wait times for patients and the burden on providers.

- Technological capability, beyond the organization, is a significant constraint: The issue of connectivity, or the ability to sustain the virtual connection technologically by the patient and the provider, was a consistent priority across the study respondents. This was particularly true for respondents who serve vulnerable populations including patients who are low income; homeless; or live in conditions without electricity, phones, reliable transportation, or reliable high-speed internet access. Aging patients or those living in remote rural areas were two populations specifically mentioned by respondents.

Older patients were frequently identified as particularly vulnerable to technological limitations. Some members of this age group are still new to computers; their past places of employment were often not technologically focused. Clinic staff help these patients learn how to use their cellphones for telehealth, serving as technological guides for these clients. Respondents noted that some patients in this age group do not appear to be interested in learning how to access the available technical resources, which keeps patients' demand for telehealth services low (see "Patient preferences are drivers" above).

When the site is acting as an "originating site," in which the patient comes to the clinic for a telehealth visit with a provider located elsewhere, the stability of the remote platform is easier for the clinic to maintain. As a distant site provider, with patients signing on from their home or other settings such as a local library, the stability of the platform is outside the control of the clinic and dependent on both the patient's ability to afford a device with an adequate data plan and the local infrastructure's capacity to provide consistent access regardless of the season of the year or changes in weather. Overtime, clinics have trialed a variety of platforms. These experiments have added to the perceived instability of telehealth services and the burden of re-learning new technical skills. Often, a provider's response to delays in a telehealth visit is "to heck with the video, let's make this a phone call" and the visual aspect of the telehealth service goes unused.

- Funding drives organizational behavior: Billing and reimbursement support for telehealth services were uniformly considered essential across all respondents. Respondents spoke of the need for telehealth reimbursement to adequately cover the costs of implementing and maintaining the technology and support needed. In addition, reimbursement for telehealth visits should be equitable relative to in-person visits, or these low-margin organizations will favor higher-paying services that require the same amount of provider and staff time. It should be noted that Medicare payment rates for telehealth services may be less than the enhanced all-inclusive rates paid to RHCs and prospective payment rates paid to FQHCs. Whatever the reimbursement rules are for these providers, the structure of reimbursement and the rules for payment must be well defined and communicated to providers and patients regarding Medicare, Medicaid, and commercial insurance payers. While these rules can vary by state, and may change periodically, a clear explanation of the payment system and any changes that are shared with all parties is an ongoing expectation of expanding the use of telehealth services.

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In addition to the above themes, respondents found **value** in telehealth services, as described in the following examples:

Innovation: Respondents agreed that telehealth provides "an opportunity to think differently about how to give care... (and) learn from others." Suggested ideas of how to move beyond telehealth as a substitute for a traditional face-to-face encounter included using telehealth for pre-visit contact to plan or confirm an initial visit, sending out mobile clinics which patients could use for stable and supported connections, after hours care on evenings and weekends via telehealth, providing telehealth in schools for both behavioral and medical services, tele-dental services, more chronic care management through telehealth, obtaining professional consults from off-site specialists to inform patient care, and telehealth visits that take advantage of in-home remote monitoring equipment.

Quality of care: Some advantages telehealth has over in-person visits include greater insight into the patient's home life, particularly their environment, and, for patients who suffer from anxiety or are immuno-compromised, the greater protection of an isolated environment. New advances in technology can also improve care through home-care monitoring or school-based devices such as scopes for ears, throats, lungs, and skin. Current technology with more

intensive monitoring capability (such as blood pressure readings) is available but may not be affordable without financial support.

More efficient care: Respondents noted that better operational support of telehealth could result in greater use but also more efficient and less expensive care. For example, a telehealth visit can be coupled with a subsequent lab draw at an express laboratory outlet - it is not necessary to ask the patient to come in for an in-person visit simply to collect a lab sample. Telehealth can, in many cases, be better integrated into providers' and staff's schedules, as long as the technology can keep track of where patients and providers are on-line and create a stable connection when both are available. Taking advantage of these opportunities, "telehealth could complement both what patients are asking for and what providers are willing to do."

However, respondents also had **substantial concerns** about the future of telehealth, with the following examples:

Quality of care: Most frequently voiced among their concerns, respondents are very aware that telehealth provides a limited view of the patient and their clinical signs/symptoms, and the higher the clinical risk of a patient, the easier it is to miss something important. A patient with hypertension, on a blood pressure medication, presents with more indications of their health status if seen in person. In addition, the in-person visit provides opportunities for preventive care that a telehealth visit cannot, such as vaccinations, certain tests, screenings, and PAP smears. These all currently require an in-person visit and substantially reduce the risk of future health problems. A key point made by one respondent was that telehealth can affect the nature of the provider/patient relationship, a significant factor in delivering primary care, suggesting that telehealth should be used to support that relationship. In addition, the provider has to determine when a telehealth visit is appropriate compared to an in-person visit. This decision must be based on the patient's condition and the provider's familiarity with the patient and their needs.

Less efficient care: Although telehealth provides opportunities for greater efficiencies in care (see "More efficient care," above), several respondents noted that their current operational arrangement results in less efficient care when compared to in-person visits due to technical problems related to access and the increased number and complexity of tasks required by clinical support staff (e.g., the medical assistant confirmation that the patient is present and available when the provider joins the session). There are inefficiencies in administrative functions as well, such as disparities in system performance, causing the clinical and billing staff in some cases to be shown conflicting information and a general lack of adequate reporting on performance related to telehealth services.

Reimbursement: Echoing the theme above that "funding drives organizational behavior," some respondents expressed additional concern that insurance companies might stop paying for telehealth visits or that approval for medical services by telehealth would not be provided. The billing process is described as "chaotic," and respondents want clear, comprehensive guidance. This was particularly true for clinical respondents and suggests the need for coverage and billing information to be clearly communicated to provider staff. Furthermore, if reimbursement for telehealth does not match that for in-person, it is not likely to be used often. This was reinforced by respondents that noted that the current Medicare reimbursement for telehealth is less than the enhanced rates received by RHCs and FQHCs.

Familiarity improves consistency of use and efficiency: Respondents noted that they may not use telehealth enough to be efficient in its use. "The less often we do telehealth, the harder it is to do it well" exemplifies the challenges involved in adopting new technology.

Respondents were asked to identify their **top messages for regulators and policymakers** regarding the provision of telehealth services and noted four requests for action related to reimbursement, basic technology, policy guidance, and innovation.

1. **Reimbursement:** Allow permanent reimbursement for telehealth relative to in-person care; offer the same equitable reimbursement for telephone health encounters. Improve consistency with enhanced rates received by RHCs and FQHCs for face-to-face visits.
2. **Basic technology:** Increase connectivity to the Internet and cellular service to allow all patients who are willing the opportunity to connect with their providers via telehealth, especially those in rural locations.
3. **Policy guidance:** Provide clear and consistent guidance on how and under what circumstances telehealth can be used in safety net health care organizations. With permanent reimbursement for telehealth (see above item), provide clarity and support for translating the rules among providers and administrators to build confidence in the use of telehealth services.
4. **Innovation:** Provide funding and support for innovative ways to improve access, such as those demonstrated by experiments with mobile clinics, digital technology in schools, school- or home-monitoring devices (such as blood pressure or blood sugar monitors and cameras), and coordination with mini-clinics for patients to go to at their convenience (e.g., a commercial urgent center for labs at 7pm coordinated by telehealth).

Discussion and Conclusions

In summary, we found that telehealth services were used by all respondents interviewed, primarily as a substitute for in-person care for patients with transportation issues including long-travel distances, no personal or public transportation options, an inability to drive, or limited ability to have friends or family members drive them to visits. Telehealth services also served as a technological aid to improve care through better operational support and coordination with other institutions and resources. All respondents noted that innovation and growth of telehealth use are possible and would likely be tolerated, even welcomed, in many healthcare organizations. Such telehealth development could support better quality of care, increased patient-centered care, and more efficient care.

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Organizations can significantly influence the uptake of telehealth with a philosophy of shared leadership, in which organizational goals and mission shape the need and use of telehealth services. This preparatory work can build clinician support, develop a shared understanding of appropriate clinical care for telehealth, introduce clinicians to alternative use of telehealth to improve patient-centered care, provide more convenient care options for patients, and support telehealth implementation based on shared goals and understanding. For example, a common goal of a community clinic is to provide continuity of care rather than send patients to urgent care, which telehealth services can support by maintaining contact with clinic providers during off hours. Another example is using telehealth in case management support, following up with the patient as part of the telehealth visit or afterwards with an additional telehealth session. This goal and mission-oriented approach to planning and designing telehealth services also allows practice and administrative management to integrate telehealth into the clinic's workflow

and with administrative functions such as patient scheduling. One respondent noted that cultural change is necessarily slow; careful planning and implementation of system-wide changes are therefore important.

Although telehealth is here to stay, more policy and regulatory support to work effectively and sustainably is needed. The examples provided by respondents show the need for standardizing and simplifying rules and policies, aligning financial incentives to support telehealth implementation and growth, creating measures for monitoring outcomes to ensure accountability, and reducing obstacles such as 1) limited connectivity to telehealth platforms in rural areas and 2) reimbursement policies that favor in-person care. The pandemic waivers that allowed RHCs and FQHCs to serve as

distant site providers for behavioral/mental telehealth services, patients to receive tele-behavioral/mental care in their homes, and the delivery of behavioral health services by audio-only/telephone have become permanent Medicare changes.¹⁰ Alternatively, waivers allowing RHCs and FQHCs to serve as distant site providers for non-behavioral/mental telehealth services are set to expire March 31, 2025.¹¹

This study was limited by a small sample size of six rural primary care organizations, of which four were FQHCs and two were RHCs. Regionally, the sample favored the eastern half of the U.S. as well as the Midwest census region. Difficulties in gaining the voluntary participation of these organizations may be partly due to the increased demands on primary care, loss of primary care providers, and turnover in staff reported by those who were able to respond.

Future research should continue to explore and understand unique needs of rural health care organizations with respect to innovative use and development of telehealth in rural, primary care settings. Additional study is needed to identify opportunities to encourage RHCs and FQHCs to expand their use of telehealth in a way that not only improves access to care but also provides care management, urgent care, and other services that have the potential to reduce unnecessary readmissions and emergency care utilization as well as create rural primary care delivery systems that are more patient-centric and better address the needs of rural patients.

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