HRSA Bureau of Primary Health Care Quality Improvement Fund Optimizing Virtual Care Toolkit:

Insights & Tools from 29 Health Centers

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Table of Contents

Quality Improvement Fund Optimizing Virtual Care Toolkit:
Insights & Tools from 29 Health Centers

HRSA Health Center Program

| Overview | Planning Insights | Engagement Insights | Delivery Insights |
| Assessment Insights | Sustainability Insights | Case Study & Resources | Acronyms, Glossary & Appendices |

SECTION 1: OVERVIEW

≫ What Can I Find in This Section?

- Background
- Toolkit Purpose
- Toolkit Audience
- Toolkit Organization & Navigation

Background

The COVID-19 pandemic resulted in a massive shift from in-person health care visits to virtual care.[1] Virtual care, also known as telehealth, uses technology to "support long-distance clinical health care, patient and professional health-related education, health administration, and public health."[2]

This shift impacted all levels of the health system, from hospitals to local health centers. Health centers faced unique challenges with implementing virtual care, including limited financial resources to purchase new technology and supporting patients who face challenges accessing virtual care. In addition, they had to quickly expand their virtual care services or build them from the ground up, which required major changes in their health center processes to meet the new demands.

Recognizing these challenges, the Health Resource and Services Administration (HRSA) launched the Optimizing Virtual Care (OVC) Project under its Quality Improvement Fund (QIF) Program to spur innovation among health centers. The QIF Program supports health centers to pilot and test new ideas.

The QIF-OVC Project funded 29 health centers from 2022–2024 to develop, implement, and evaluate virtual care strategies that 1) optimize the use of virtual care to increase access and improve clinical quality for underserved communities and vulnerable populations; and 2) can adapt and scale across the Health Center Program. Through the QIF Program, HRSA gathered awardee data on successes and challenges, provided guidance and technical support, and supported peer-to-peer interaction.

HRSA acknowledges the 29 QIF-OVC awardees for sharing their journeys, knowledge, and accomplishments that form the basis of this Toolkit. For more information on the QIF-OVC Project and awardees, see the QIF-OVC webpage, Appendix A: QIF-OVC Project Awardee Background, and Appendix B: QIF-OVC Project Data Collection Overview.

Toolkit Purpose

This Toolkit compiles insights and lessons learned by the QIF-OVC awardees, offering valuable takeaways from on-the-ground health center staff who have implemented virtual care services at their health centers. Health centers can use this Toolkit at any point in their virtual care journeys. It can help health centers plan for virtual care delivery, tackle challenges implementing virtual care, and enhance virtual care sustainability. It also aims to promote collaboration across the health center community.

This Toolkit supplements comprehensive virtual care implementation guidebooks. For additional virtual care implementation guidance, consult the Telehealth Implementation Playbook, Federally Qualified Health Center (FQHC) Telehealth Consortium Telehealth Playbook, and the Remote Patient Monitoring (RPM) Toolkit. Further, the Resources section at the end of this document contains additional resources.

Toolkit Audience

This Toolkit presents insights and resources for health centers at all stages of virtual care implementation, including:

- Health centers beginning to use virtual care.
- Health centers that have some virtual care activities.
- Health centers with well-established virtual care services.

Primary Care Associations (PCAs) and National Training and Technical Assistance Partners (NTTAPs) can also benefit from this Toolkit when considering how to support health centers on their virtual care journeys.

Before using the Toolkit, consider your health center's current stage of virtual care implementation and the challenges you face. View the Toolkit's Table of Contents to identify the section that best suits your needs. For instance, if you are just starting remote patient monitoring (RPM) services, you might find Section 2: Planning Insights useful, especially when buying new technology. If you have offered virtual care services for a while, you could consult Section 6: Sustainability Insights for tips on reviewing your finances and navigating future policy changes.

Most of the insights in this Toolkit are geared toward health centers beginning to use virtual care or those who have implemented some virtual care. If your virtual care services are well established, keep an eye out for Advanced Tips.

Toolkit Organization and Navigation

The Toolkit is organized around the basic steps that a health center would take to plan, deliver, evaluate, and sustain virtual care. The Toolkit structure includes constructs adapted from the Consolidated Framework for Implementation Research (CFIR).[3] Key Toolkit sections include:

- **Section 2: Planning Insights:** Describes how to choose the right technology, collect data, prepare workflows, and staff virtual care.
- **Section 3: Engagement Insights:** Describes how to identify and address patient barriers to accessing virtual care and how to promote virtual care in communities.
- **Section 4: Delivery Insights:** Describes settings for virtual care delivery, how to schedule virtual care services, support patients and providers during visits, and follow up after virtual care encounters.
- **Section 5: Assessment Insights:** Describes how to collect feedback from patients, providers, and staff, and how to use data to improve virtual care services.
- **Section 6: Sustainability Insights:** Describes how to review financial sustainability and sustain technologies.

To find out more about the content in each section, navigate to the front page of the section for a quick overview. For example:

≫ What Can I Find in This Section?

Each Toolkit section follows the organization below:

- **Section Overview:** Describes what is included in the section to inform you of upcoming content.
- **QIF-OVC Awardee Insights:** Provide insights, lessons learned, and actionable takeaways from QIF-OVC awardees.
- **Virtual Care Spotlight:** Summarizes a fictional health center's experiences related to a virtual care topic area relevant to that section.

Supplemental information at the end of the Toolkit includes the following sections:

- **Case Study:** Includes a fictional health center's virtual care journey and discussion questions.
- **Resources:** Includes resources from virtual care cross-cutting topic areas.
- **Acronyms & Glossary:** Includes acronyms, key terms and definitions used throughout the Toolkit.
- **Appendices:** Includes additional information, tools, and resources referenced in the Toolkit.

To go back to the Table of Contents, click the yellow "Home" button in the upper left corner.

HOME

Overview	Planning Insights	Engagement Insights	Delivery Insights
Assessment Insights	Sustainability Insights	Case Study & Resources	Acronyms, Glossary & Appendices

SECTION 2: PLANNING INSIGHTS

Planning Overview

A key part of implementing virtual care is planning. It's about developing a plan to reach goals, which helps put the virtual care services into action and boost local capabilities.[3]

What Can I Find in This Section?

QIF-OVC awardee insights and resources for health centers planning virtual care. Learn more about:

- 2.1 Choosing the Right Technology
- 2.2 Deciding How to Collect Data
- 2.3 Preparing Workflows
- 2.4 Staffing Virtual Care

2.1 Choosing the Right Technology

Virtual care technologies vary widely and change quickly. When planning your virtual care services, take the time to explore technology options. This can help you implement services that meet your patients' needs, fit your service areas, align with your strategic goals, work with your existing systems, and match your available resources.

At a high level, consider the following approaches for choosing technology:

- Form strong teams and involve patients.
- Select user friendly technology for patients and providers that is compatible with your existing systems and meets patient needs and project goals.
- Consider the cost and which technologies your health center can afford.
- Promote health equity by ensuring technologies are accessible to your patients.

> **QIF-OVC Awardee:** *"Choosing the wrong telehealth technology can be extremely costly and can strain budgets. Careful consideration must be given to the total cost of ownership of the technology, not just the upfront cost, to ensure costs align with the organization, budget, and goals."*

When choosing and implementing technology, think about how to:

- Plan for technology delivery delays.
- Perform necessary tests during new technology rollout.
- Manage manual processes for uploading patient data, including remote patient monitoring (RPM) data updates in the electronic health record (EHR).
- Anticipate vendor support needs.

Health equity is the ability for every person to attain the highest level of health possible, especially among populations that face inequities due to injustices and circumstances that are socially determined.[4]

Remote patient monitoring technologies collect medical data from patients and transmit it to health care providers in a different location for monitoring and evaluation.[5,6]

Technology Types

Consider various virtual care technology types, depending on your desired outcomes.
Table 1 provides definitions and examples of different virtual care types used by QIF-OVC awardees.

Table 1. Virtual Care Technology Types

Virtual Care Type	Definition	Examples
1. Audio-Only (**Synchronous, Real-Time**) **(i.e., Live Audio)**	Use of two-way interactive audio (i.e., telephone) technology connections between a provider and a patient.[7]	• Telephone call for talk therapy with a health care provider.
2. Video-Based (**Synchronous, Real-Time**) **(i.e., Live Video)**	Use of two-way interactive audio and video technology, such as video connections between a provider and a patient (i.e., "Facetime").[7]	• Video call with a health care provider.
3. Store and Forward (**Asynchronous, Not Real-Time**) **(i.e., Store and Forward Telehealth, Asynchronous Telehealth**)	Electronic transmission of medical information, such as digital images, documents, and pre-recorded videos.[8] *May include communication or information shared between providers, patients, and caregivers.	• Patient X-rays or other images are sent to a provider for evaluation. • Email or text messages sent with follow-up instructions or confirmations.[10]
4. RPM (**i.e., Remote Monitoring, Remote Physiologic Monitoring, Remote Therapeutic Monitoring, RTM**)	Electronic transmission of collected medical data, such as vital signs and blood pressure, from patients in one location to health care providers in a different location.[7]	• Continuous glucose monitor. • Blood pressure monitor. • Pulse oximeter. • Telemetry monitor (when automatically collected).
5. Mobile Health (mHealth)	Technologies, such as smartphone and tablet apps, that enable patients to capture their health data without a clinician's assistance or interpretation.[7]	• Sleep tracker. • Fitness tracker. • Calmness app. • Step counter.
6. Other Asynchronous Services	Includes any other asynchronous virtual care types not described in the categories above.	• Generative artificial intelligence (AI) chatbot interactions that simulate human interaction. • Asynchronous portal, email, or text messaging for general health promotion.

Technology Tips

The following tips can help you develop virtual care technology strategies for your health center.

Tips for Involving Teams in Choosing Virtual Care Technology

- **Create Teams:** Include people like technology experts, leaders, care teams, strategists, legal and financial staff, and outside partners in teams.
- **Engage Teams Early:** Involve teams early in the planning process and keep them involved. They can help with technology selection, vendor collaboration, and budget expenses.
- **Involve Patients:** Make patients key partners in choosing and using technology. Gather patient feedback through your board and/or Patient Advisory Council, focus groups, interviews, or surveys.
- **Understand Patient Preferences:** Find out what devices or software patients like to use and any past problems they've had with virtual care, like not having access to reliable, high-speed internet.
- **Balance Priorities:** Use teams to balance different priorities across the health center. Team members can respond to urgent patient needs, develop workflows for new technology, get early buy-in from providers and staff, and prepare for future technology use.

Explore different vendors and technologies, making sure they meet your health center's technology requirements (e.g., EHR integration, reporting platform compatibility) through testing.

Tips for Working with Vendors to Assess Technology Needs

- **Explore Various Options:** Research multiple vendors and technologies.
- **Collaborate with Vendors:** Work with vendors to make sure the technology fits your health center's needs.
- **Test Devices:** Try out different devices with various care teams and check if they work well with current health center systems before purchasing.
- **Establish a Quality Check:** Set up a process to check if the virtual care technologies work and replace any that don't work before distributing them to patients. This will help avoid issues for patients and staff.
- **Expect Potential Delays:** Anticipate the need for vendor support for technology and programming issues.

Identify factors contributing to technology expenses, including staffing and resources. Be sure to account for the full lifecycle costs of technologies and any additional expenses.

Tips for Planning Technology Expenses

- **Assess Staffing Needs:** Determine what staff support and resources you need to look at options, test, refine, and maintain technologies.

- **Consider Full Costs:** Identify the full lifecycle and additional costs of technology, such as integrating and maintaining equipment, remote monitoring, mobile devices, setting up information technology (IT) networks, subscription fees, refreshing and reusing technology, and ongoing training.

- **Allocate Budget for Translation Services:** Set aside money for translation services in different languages for virtual care technology.

Tips for Planning Technology Support

- **Provide Remote and Hybrid Staff Equipment:** Provide equipment such as laptops, monitors, smartphones, charging stations, wireless internet hot spot devices, ergonomic desk supplies, and audio and video conferencing supports (e.g., webcams, headsets, virtual backgrounds). Adapt the equipment you provide based on staff feedback.

- **Consider Establishing Technical Support Teams:** Cross-train staff (e.g., administrative staff, community health workers (CHWs), IT teams), information technology teams) and engage external vendors to provide real-time technical support to patients and providers. Include team members who share the patients' lived experiences and culture (e.g., language, race/ethnicity).

- **Schedule Routine Software Updates:** Complete updates for EHR and device software packages to ensure compatibility with newer software and current security features.

> **Community health workers** are trusted members of the community being served.[10,11] CHWs serve as a bridge between health care providers and communities.

Choosing the Right Technology for Your Health Center's Needs

When choosing virtual care technology, develop selection criteria to ensure alignment with your health center's priorities. Key priorities related to technology selection include delivering person-centered care, advancing health equity, maintaining health center operations, and managing system integration.

Table 2 presents common priorities and key questions to consider when selecting virtual care technology. To access a fillable version of this table, see Appendix C: Virtual Care Technology Checklist.

For additional resources on selecting virtual care technologies, see the American Medical Association (AMA) Telehealth Implementation Playbook (pages 32–38) or the Federally Qualified Health Centers (FQHC) Telehealth Consortium Telehealth Playbook (Technology and Tools section).

Table 2. Virtual Care Technology Questions

Health Center Priority	Technology Selection Questions
Person-Centered Care	• Can patients access technology on devices and digital platforms? • Are technical support resources readily available? • Are the technologies compatible with the patients' readiness and comfort in using them? • How responsive is the technology to patient concerns about information privacy and security? • Do the technology features effectively meet your patient's needs? • Are messages and materials available in patients' preferred languages?
Health Equity Promotion	• Can the technology help you identify and report on how different users are using it? • Is the technology easily accessible to health centers, providers, and patients, considering language and disability-related needs? • Can the technology help you better identify or address patient's needs? • Will the technology increase patient access to important information or virtual care appointments?
Health Center Operations	• Can you maintain the costs in the long term? For example, costs with acquisition, customization, and maintenance? • Can you apply the technology across multiple services at your health center? • Is the technology easy for staff to use? • Does the technology meet your privacy and security standards? • Does the technology work well with your internet access? • Does the technology provide data to help improve quality and health outcomes?
System Integration	• Does the technology work well with your current technology, like your EHR system? • Does the technology work with your reporting platform? • Is the technology flexible enough to meet the needs of your different workflows, patient populations, and locations? • Do you have enough IT staff to support the technology now and in the future?

Fictional Planning Spotlight: How Healthy Families Clinic Chose Their Virtual Care Technology

Health Center Background:

Healthy Families Clinic serves a diverse patient population in rural and urban areas. Many of its patients face barriers to in-person appointments and live with multiple chronic diseases.

Recognizing the increasing demand for virtual care services, Healthy Families Clinic implemented new virtual care services to improve patient access to care. The health center's goal was to use virtual care for first-touch, initial appointments. Since the health center was building its virtual care services from the ground up, one of its major considerations when planning was choosing a technology that was cost-effective and user-friendly for patients and providers.

How Healthy Families Clinic Included Technology Selection in Their Planning Process:

Healthy Families Clinic outlined the following activities to plan their technology selection:

- Establish a committee to select technology, made up of technology leaders, care teams, strategists, legal and financial staff, and external partners.
- Assess several technology types using the Virtual Care Technology Checklist.
- Decide on a technology type to pilot their program (synchronous real time telehealth video-based and audio-only visits).
- Survey patients to consider comfort, privacy concerns, and support needs around technology.
- Consider things like lifecycle costs, ease of use and accessibility, and compatibility with existing systems.

After the health center completed the activities above, they selected a platform that fulfilled their criteria for video-based and audio-only visits and moved forward with purchasing the technology from the vendor.

2.2 Deciding How to Collect Data

Data collection refers to the organized ways health centers gather, analyze, and use information to support patient care.[12] Collecting data for virtual care helps health centers understand patient and provider needs, measure success, and make necessary adjustments to improve virtual care delivery. Start a data collection plan early to gather useful data to track changes and trends in your virtual care services.

> **QIF-OVC Awardee:** *"Social determinants of health (SDOH) screenings continue to be documented using the Protocols for Assessing Patients' Assets, Risks, and Experiences (PRAPARE) tool template. If the patient does not have time to complete the screening by phone or through the digital PRAPARE tool, the CHW will offer the screening during a second phone call attempt. Additionally, Health Educators continue to provide support to CHWs by incorporating SDOH screenings as an extension to their follow-up appointment workflow."*

During planning, consider developing a data collection plan that includes the following:

Assess your health center's readiness for virtual care delivery.

- Complete questionnaires, like the Virtual Care Strategic and Tactical Deployment Maturity Self-Assessment Model (VCSD) spreadsheet, to assess your readiness for virtual care delivery. Check your organization's capacity to put virtual care services into action and find areas that need improvement.
- Review existing Uniform Data System (UDS) data on virtual and in-person visits to understand your health center context for virtual care delivery.

Assess community and patient needs.

- Review community health assessments to identify unmet heath needs and resources in your community. To learn more about community health assessments, visit the CDC's Community Health Assessment Page.
- Identify ways to assess patient social factors and needs using SDOH screening tools.

Identify key measures and processes to support virtual care progress.

- Establish monthly reporting processes to identify successes, challenges, and lessons learned from virtual care delivery.
- Adapt existing measures to collect information on virtual care utilization, clinical quality and care outcomes, care coordination, and health equity.
- Identify data collection instruments and workflows for capturing patient and provider satisfaction. Consider using existing tools, such as the Consumer Assessment of Health Providers and Systems surveys.
- Establish processes for monitoring community engagement with virtual care marketing materials and online tools (e.g., tracking website impressions).

Identify various data types to collect:

- Patient population.
- Amount of virtual care services provided.
- Impact of virtual care on health outcomes and finances.
- Health center's readiness for implementing and expanding virtual care services.

Assessing Virtual Care Readiness

Assess your current virtual care maturity level. Use the Virtual Care Strategic and Tactical Deployment Maturity Self-Assessment Model (VCSD), a spreadsheet questionnaire to better understand readiness for virtual care delivery.

The VCSD tool measures an organization's readiness to provide virtual care, considering leadership, technology, operations, and health aspects.[11] Health centers can complete a questionnaire to determine their virtual care maturity level:

- **Basic:** Health centers who are just getting started with virtual care and who may use virtual care in one-off situations, for emergency situations, or basic operations.
- **Foundational:** Health centers who integrated virtual care into a few health care services with established workflows and staffing. Virtual care implementation contributes to the health center's strategic priorities and goals.
- **Advanced:** Health centers who achieved widespread use of virtual care across their organization with established policies and processes. Advanced organizations use effective virtual care to differentiate themselves from other health care organizations.

Table 3 contains adapted VCSD questions that you can discuss with your team to begin thinking about:

- Understanding your readiness to provide virtual care.
- Planning for future data collection.
- Supporting your organization's strategic planning.
- Identifying gaps in virtual care areas.

Table 3. Adapted VCSD Maturity Assessment Questions

VCSD Category	Maturity Assessment Question
Leadership	What is your health center leaders' commitment to immediate and long-term adoption of virtual care operations?
Governance	What is your health center leaders' commitment to a permanent health center–wide virtual care governance/strategic oversight structure?
Technology Platforms: Virtual Care Devices	How successful is your health center in meeting the hardware and software support needs of providers, staff, and patients for the desired synchronous and asynchronous virtual care operations?
Technology Platforms: Technology Support	How successful is your health center in meeting the technical support needs of providers, staff, and patients for the desired synchronous and asynchronous virtual care operations?
Technology Platforms: Cybersecurity Support	How would you describe your health center's cybersecurity infrastructure protections, user protocols, and training necessary to counter existing and emerging cybersecurity threats?
Virtual Care Operations: Operational and Clinical Standards	At your health center, how well do virtual care services and operational quality standards meet or exceed those for in-person care?
Virtual Care Operations: Provider/Staff Engagement	At your health center, how proficient or engaged are patients, families, and caregivers in virtual care in terms of access (hardware, software, connectivity, setting, language), digital literacy, and use?
Health Equity: Awareness	How successful is your health center in creating awareness about the different levels of virtual care access and use in the patient population? How successful is your health center in creating awareness about the impact of virtual care on inequities in patient access, care, experiences, and outcomes?
Health Equity: Action	At your health center, how well are virtual care processes intentionally designed to create equitable access to care and reduce health disparities in the population served?

SDOH Screening Considerations

Many health centers use SDOH screening tools to monitor how virtual care affects health equity among their patients. SDOH data can highlight social inequities and help your health center tailor care to each patient.[14] Connecting patients with appropriate resources to address unmet social needs is also important for sustaining patient trust and engagement in care.

Standardized SDOH screening tools are available to assess patients' health-related social needs. These include the Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences (PRAPARE) and the Accountable Health Communities Health-Related Social Needs Screening Tool.

Use SDOH screening tools to tailor virtual care to patients' digital needs, train staff to better serve patients, and work with community organizations to connect patients with resources for their health-related social needs.

Table 4 provides virtual care considerations for the SDOH screening process, based on insights from QIF-OVC awardees.

Table 4. SDOH Screening Considerations

SDOH Topic Area	Steps	Considerations
Screener Tool Selection	Choose a SDOH screener suitable for virtual care.	• Use validated instruments. • Follow the guidance provided by the instrument creators including target population, administration method, and frequency. • Ask direct questions about access to technology (e.g., broadband, cellphones, smartphones) and digital literacy.
Timing	Identify when you screen patients, how long patients will need to complete screenings, and the frequency of rescreening.	• Accommodate patient schedules using asynchronous virtual care technology, such as mobile applications and patient portals, allowing patients to complete SDOH screening questions when convenient. • For patients who face barriers to using virtual care technology outside of the clinic, develop processes for gathering SDOH screening information during in-person visits. • Use virtual care technologies to improve workflow timing and flexibility.
Staffing & Data Collection	Identify staff for screening administration and data collection. Choose the format for administering screening.	• Offer multiple methods to collect SDOH data such as audio-only phone calls, asynchronous virtual care portal messaging, and community kiosks. • Use non-clinical staff for screenings or have patients complete self-administered surveys. • Offer screenings in multiple languages. • Send reminder messages to patients. • Train staff on sensitive topics (e.g., trauma-informed care) and bias.

SDOH Topic Area	Steps	Considerations
Managing SDOH Screening Data	Decide on data management and analysis methods.	• Integrate SDOH screening data into EHR systems. • Filter patient data to understand the impact of SDOH on health outcomes. • Use machine learning to identify indicators of unmet needs. • Standardize data for insights across patient populations.
Responding to Patient Needs	Develop strategies to address identified patient needs.	• Improve capacity to connect patients with resources. • Facilitate warm hand-offs for services (e.g., behavioral health providers) through video-based conferencing technology. • Connect patients with social services. • Share informational resources during and/or after care visits. • Engage with health IT vendors who provide SDOH network services.

Community kiosks are digital platforms that provide health-related information and services to the public, such as health information, patient self check-in, and telemonitoring.[15] They can be set up in community locations to help address barriers to internet access at patient homes, allowing patients to engage in virtual care services.

Measures to Consider for Virtual Care Planning

In addition to knowing your current level of readiness for virtual care, it's important to identify measures to gauge the success of your virtual care plan. This involves gathering various types of data, such as success metrics, patient data, and quality improvement data.

While your health center may already gather some measures as part of quality assurance processes, some of the measures recommended below may require updates to your EHR.

Quality Improvement Fund Optimizing Virtual Care Toolkit:
Insights & Tools from 29 Health Centers

HRSA Health Center Program

HOME

Table 5 provides examples of virtual care measures to consider collecting during planning.

Table 5. Examples of Virtual Care Measures

Measure Category	Example Measures
Virtual Care Encounters[14]	• Provider type. • Provider location. • Patient location. • Technology type (e.g., audio-only or asynchronous store and forward). • Technical issues encountered. • Conversion from video to audio visits.
Virtual Care Implementation Success[15,16]	• Virtual care visit volume. • Proportion of all patient visits that are virtual care visits. • Patient adoption and engagement with asynchronous virtual care technology. • Number of patients and staff who received virtual care training. • Number of additional appointments available because of virtual visits. • Reduced appointment no-show rates. • Reduced absenteeism from school and work for patients and parents. • Improved utilization of space and resources. • Increases in service revenues.
Quality Improvement	• UDS quality of care measures. • Patient and provider satisfaction.

2.3 Preparing Workflows

Health centers setting up new or enhanced virtual care will need to recreate staff workflows for patient care delivery. Work with your planning team to update workflows for virtual care services at different stages of patient care. This includes scheduling, setting up, completing, and following up after virtual care visits. Determine if you need additional staffing resources, structural changes, physical clinic changes (e.g., creating private spaces for virtual visits), or equipment (e.g., software, technology devices) to implement new workflows.

> **Workflow** refers to "the sequence of physical and mental tasks performed by various people within and between work environments."[19]

To prepare your health center workflows for virtual care, consider conducting these activities:

• Facilitate team discussions and administer staff surveys to identify workflow processes and gaps.
• Assess proposed work plans to ensure they are feasible with existing health center technology platforms (e.g., EHR systems).
• Review privacy and security measures across workflows to keep patient data safe.

HOME

> **QIF-OVC Awardee:** *"Engaging our patients at the time of scheduling an appointment has better outcomes in data gathering, allowing our registration staff time to work on other elements of the registration process. The Patient Access Team has presented a new workflow to add dedicated registrars to the virtual team across the organization for real time assistance and has plans to introduce a more robust pre-registration process days ahead of the scheduled appointment."*

Workflow Tips

Health centers may face challenges when implementing new workflows, like poor internet connection, lack of space for virtual visits, and issues with securely sending patient data. Anticipate these potential issues and be ready to adapt. Also, consider patients' needs when changing workflows. For more insights on engaging patients and addressing patient challenges, see Section 3: Engagement Insights.

Tips for Promoting Smooth Workflows

- **Enhance Connectivity:** Improve the internet connection in places with poor connectivity, like clinics and community kiosks.

- **Adapt to Infrastructure:** Change virtual care services depending on the location's infrastructure. For example, use audio-only services, if available, when the patient's internet access is too poor for video calls.

- **Update Equipment:** Replace desktop computers in health centers with laptops or thin client laptops to give providers more flexibility in their workspaces during online visits.

- **Automate Tasks:** Adapt virtual care technology features to automate routine tasks (e.g., sending appointment reminders, patient check-in).

- **Engage Staff:** Communicate with health center staff to understand impacts of workflow changes and identify pain points and resource needs (e.g., technical support, private spaces to complete virtual visits).

- **Offer Training:** Provide in-person and remote training sessions to staff when launching new virtual care technologies and services.

- **Identify Champions:** Identify members of leadership who can serve as virtual care "champions" by promoting virtual care use and encouraging staff to adopt new workflows.

- **Involve Staff in Referrals:** Involve all patient-facing staff in referring patients for virtual care services to increase enrollment opportunities.

- **Conduct Walkthroughs:** Conduct mock walkthroughs with patients ahead of time to troubleshoot challenges that arise and answer patient questions.
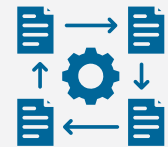
> **Thin client laptops** are computers that use resources housed inside a central server as opposed to a hard drive.[20]

Tips for Addressing Information Security, Privacy, or Compliance

- **Repurpose Offices:** Convert administrative offices into private virtual care rooms for clinical staff.
- **Review Compliance:** Review documentation for adherence to health center, state, and federal compliance standards (e.g., Health Insurance Portability and Accountability Act (HIPAA)) for virtual care visits prior to onboarding patients.
- **Establish Guidelines:** Create clear "Member Use Agreement" guidelines to outline equipment usage requirements and expectations for patients.
- **Enhance Security Measures:** Implement practices for data encryption, user authentication, and malware detection to protect patient data. Use a digital platform to capture patient signatures and facilitate smoother virtual registration processes that comply with state and federal requirements.
- **Provide Staff Trainings:** Communicate ways to protect patient privacy and data security.

The following tips can help you adapt workflows for virtual care.

2.4 Staffing Virtual Care

Virtual care workflows will require new staff roles and expertise. Create a dedicated virtual care team or incorporate virtual care staff into existing teams. Think about expanding the roles of existing positions. Also, balance new virtual care responsibilities with other job duties to avoid employee burnout.

Staffing shortages may create challenges that can delay securing key personnel for virtual care roles. Competing priorities and limited staff bandwidth can also present challenges for adopting new workflows. Given these potential challenges, you may wish to change your hiring strategies and

> **QIF-OVC Awardee:** *"Pilot and study the impact of different staffing models and workflows tailored to the needs of specific patient groups to identify how to effectively support patients and providers with virtual [behavioral health] care"*

broaden staff roles. This could involve defining virtual care job responsibilities and hiring new staff, as detailed below.

Staff Positions and Responsibilities

Add staff to support your virtual care services or adjust staff responsibilities to better serve patients before, during, and after virtual care visits.

Table 6 outlines examples of virtual care staff roles and responsibilities to consider as you develop your staffing plans.

Table 6. Examples of Virtual Care Staff and Responsibilities

Example of Staff	Example of Virtual Care Responsibility
Front Desk Staff	Recruit and enroll patients in virtual care.
Care Teams	Engage with patients during virtual visits and review/evaluate data submitted to the EHR.
CHWs	Inform the community about virtual care services, enroll patients in virtual care services, distribute devices, and provide technical support to patients.
Digital Marketing Strategist	Develop materials describing virtual care services.

Recruiting Tips

Thoughtful recruitment is critical to ensuring the right mix of staff when implementing virtual care. This includes determining when to hire internally versus externally and which positions need to be filled first.

Tips for Recruiting Staff for Virtual Care Services

- **Start Recruitment Early:** Begin the recruitment process early to avoid delays due to onboarding new staff.
- **Promote Equity in Staffing:** Align job descriptions with equity goals. Consider a patient's location, cultural representation, and language needs to promote equity.
- **Look to Internal Staff:** Build upon the knowledge and relationships of internal staff. Train internal staff to handle different roles.
- **Prioritize Critical Positions:** Hire for key roles first to prevent bottlenecks.
- **Hire CHWs:** Employ CHWs who can support multiple roles in virtual care services.
- **Seek Support from Others:** Seek help from partner health centers and advisors in creating job descriptions for new virtual care roles.

Equality and Equity

It is important to know that Equality ≠ Equity.

Equality is the state of being equal, especially in status, rights, and opportunities. Equality means each individual or group of people is given the same resources and opportunities, regardless of their circumstances.[21]

Equity is the consistent and systematic fair, just, and impartial treatment of all individuals, including individuals who belong to underserved communities that have been denied such treatment, such as Black, Latino, and Indigenous and Native American persons, Asian Americans and Pacific Islanders, and other persons of color; members of religious minorities; lesbian, gay, bisexual, transgender, and queer (LGBTQ+) persons; persons with disabilities; persons who live in rural areas; and persons otherwise adversely affected by persistent poverty or inequality.[22]

Section 2 Reflection Question

What is the next step your health center can take in preparing to launch, continue, or expand virtual care?

Think about:

- Technology your health center currently uses (devices, EHR, etc.).
- Types of virtual care services you currently offer, if any.
- Patient populations or conditions that may benefit from virtual care.
- Staffing model your health center currently uses.

Overview	Planning Insights	Engagement Insights	Delivery Insights
Assessment Insights	Sustainability Insights	Case Study & Resources	Acronyms, Glossary & Appendices

SECTION 3: ENGAGEMENT INSIGHTS

Engagement Overview

Engagement involves attracting people to participate in virtual care services.[3] Health centers can increase patient engagement by developing virtual care services that respond to community needs, address barriers to patient care, and promote services among individuals in the community.

What Can I Find in This Section?

QIF-OVC awardee insights and resources for health centers engaging patients in virtual care services. Learn more on:

- 3.1 Identifying and Addressing Patient Barriers to Accessing Virtual Care
- 3.2 Promoting Virtual Care in Communities

3.1 Identifying and Addressing Patient Barriers to Accessing Virtual Care

Identifying and addressing patient barriers to virtual care can help you improve your virtual care services, leading to better health outcomes and patient satisfaction. This also promotes health equity by ensuring patients of all backgrounds and abilities have fair opportunities to access virtual care.

> **QIF-OVC Awardee:** *"[…] Some patients still have challenges with connectivity or connecting to the telehealth platform. Our Telehealth [Navigator] continues to contact patients ahead of their appointment and will send a community health worker to their home to help with connectivity or problem-solving issues."*

Identifying Patient Barriers to Accessing and Using Virtual Care

Patients can experience many challenges when accessing and using virtual care, even from the same communities. These challenges can also change over time. Start by figuring out what might make it difficult for people in your community to use virtual care.

Use multiple strategies to learn how clinical and non-clinical factors may impact patients' participation in virtual care services.

- Consult patient advocates (e.g., Patient Advisory Council members) and/or members of your health center boards.
- Gather information about patient barriers to accessing and using virtual care from patients, patient-facing staff, and community leaders (e.g., surveys, interviews, listening sessions).
- Administer social determinants of health (SDOH) screening questions.
- Explore the QIF-OVC journey map resources to find ways you can improve access to your virtual care services (see the Journey Map Highlight to learn more).

Explore ways to gather information about access barriers using the following tips.

Tips for Identifying Access Barriers

Gather information about barriers from patients, patient-facing staff, and community leaders. Include questions about:

- Patient care needs.
- Comfort with technology.
- Appointment preferences.
- Spoken languages.
- Access to translation services.
- Access to communication services for persons with disabilities.
- Access to devices.
- Privacy concerns.
- Preferred access to care.

Assess patients' SDOH. Use standardized screening questions that ask about:

- Demographics (e.g., race, ethnicity, age).
- Educational attainment.
- Emotional health (e.g., stress, depression).
- Neighborhood and community characteristics.
- See the SDOH Screening Considerations subsection for more information on measuring SDOH.

Consider creating virtual care journey maps to identify potential challenges patient population groups may face when accessing your services.

QIF-OVC Project Highlight: Journey Maps

What Are the QIF-OVC Journey Maps?

These four journey maps illustrate the challenges faced by select populations in accessing, receiving, and engaging in virtual care at a health center. Created to support QIF-OVC awardee implementation, they aim to help health centers support virtual care and health equity. Your health center can adapt these journey maps to understand your community's needs and use the Build Your Own Journey Map tool to create a tailored journey map for a specific patient group.

The intent of these journey maps is for your health center to gain additional understanding of:

- Issues impacting people's ability to access, receive, and engage with virtual care at a health center.
- Actionable strategies to address populations' barriers to equitable access to virtual care.

How Your Health Center Can Use Journey Maps:

Your health center staff can apply information from the journey maps to promote equity in virtual care services to:

1. Consider strategic approaches to improve virtual care access and delivery.
2. Identify equity-related issues and actionable strategies to mitigate health care disparities.
3. Prepare to establish or expand virtual care.
4. Implement and evaluate virtual care.
5. Improve supportive processes in health care delivery.

Start with the Guide to the Virtual Care Journey Maps before looking at each Journey Map.

The Four Journey Maps Include:

- People Experiencing Homelessness
- Older Adults
- Residents of Urban Public Housing
- Adolescents

The Build Your Own Journey Map tool provides instructions to make your own journey map for a specific group of patients.

Addressing Patient Barriers to Accessing and Using Virtual Care

Once you identify virtual care access and use barriers, think about how to address them using the tips below.

Tips for Helping Patients Get and Use Needed Technology

Find Out if Patients Have the Right Devices or Apps for Virtual Care

- Look at patient records (e.g., unfinished video visits) for problems with accessing virtual care services.

Help Patients Get and Use Needed Technology

- Give patients the devices and software they need for virtual care, like laptops, cell phones, tablets, remote monitors, internet hot spots, and headphones. If your health center doesn't have access to these devices, connect patients with state resources or community partners who can help.
- Deliver devices to patients or create easy pick-up spots and locations.
- Install kiosks at your health center or partner with local organizations to set up kiosks or virtual care devices at their sites.
- Provide technology support and training for patients and providers.

Solve Technology Problems and Boost Connectivity

- Find ways to help patients solve technology problems, like identifying programs for affordable devices and internet services from the federal government or local internet companies.
- Change virtual care services based on patient circumstances, like using audio-only when a patient's internet access is too limited for video-based visits.
- Think about places in the community with free internet for patients to use for their virtual care appointments.
- Identify connectivity issues in your health center by using a device to detect signal strength and overlaps in your area.

Understanding digital health information is also crucial. Patients may find it difficult to use virtual care due to digital literacy challenges. They may struggle with virtual visit instructions, using remote patient monitoring (RPM) devices, and sharing data with providers. Providers may also face their own challenges with virtual care technology.

> **Digital literacy** refers to "the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills."[23]

Explore various methods to improve digital literacy and comfort with virtual care technology using the tips below.

Tips for Improving Digital Literacy

Build Staff Capacity

- Hire and train staff (e.g., community health workers (CHWs), digital navigators, and information technology (IT) specialists) to support patients with lower levels of digital literacy.
- Conduct mock virtual care sessions with IT support teams and staff involved in virtual care appointments to prepare for virtual care visits.
- Appoint a digital navigator to assist patients with digital literacy needs.

Educate Patients and Providers

- Contact patients before virtual visits to assess their digital literacy and readiness to use virtual care technology.
- Offer digital literacy training for patients and providers.
- Partner with trusted community-based organizations (e.g., libraries, nonprofits, public housing communities) to connect patients with technology education resources and training.

Provide Technical Support

- Provide technical support to patients who do not complete scheduled virtual visits due to technology challenges.
- Create workarounds to accommodate patients' technical difficulties (e.g., CHWs collecting data by phone when patients cannot upload it remotely from devices).
- Provide IT support to help address technical issues before or during a visit.
- Conduct home visits to assess patient readiness, assist with connectivity, and provide connection hot spots using mobile vans, with support from CHWs and/or Medical Assistants.

> **Digital navigators** work with community members to address digital needs.[24]

> 💡 **ADVANCED TIP**
> Use a digital literacy scale to assess the ability of patients to access, understand, and use digital health information and services effectively.[25]

Fictional Engagement Spotlight:
How Mountain State Health Center
Improved Digital Access for Older Adults

Health Center Background:

Mountain State Health Center serves a patient population of approximately 15,000 in a low-income region. Many of the health center's patients are older adults who have trouble getting to the health center or using virtual care because they don't have transportation or good internet access.

When the COVID-19 pandemic started, Mountain State Health Center began a few initiatives to help their older patients use their virtual care services.

How Mountain State Health Center Engaged Their Older Adult Community in Their Virtual Care Services:

The health center decided to do the following to reach their older adult community:

- Started an in-person pilot program where a CHW teaches older adults one-on-one how to use virtual care services.
- Provided used tablets to enrolled patients, which they could keep after receiving clear instructions on how to use them.
- Implemented a check-in system where a CHW contacts patients before appointments to make sure they feel comfortable using their devices.
- Set up virtual care kiosks in places like libraries and large churches to address the challenge of poor internet connection.

3.2 Promoting Virtual Care in Local Communities

A robust marketing and communication plan can help increase awareness of your virtual care services among patients and the wider community. It is important for these groups to understand the benefits of virtual care and how to access your services. Health centers use a variety of strategies to market their services through traditional media, social media, and community venues.

Work with your team to develop a plan for creating tailored, culturally responsive communication with patients and the wider community. Involve patients, patient-facing staff, and community members in developing and reviewing the plan. View the marketing guidance from The National Consortium of Telehealth Resource Centers for a sample plan.

Here are a few things to do before you begin drafting the plan:

- **Review the results of assessments** you completed with patients and community members to understand barriers to care. Consider their habits, cultures, languages, geographic locations, and factors impacting access to technology.
- **Make a list of population groups** that may have differing information needs. For example, people experiencing homelessness, older adult patients, teenage patients, and other types of patient groups.
- **Assess your health center's online presence** to identify where to promote virtual care services and understand patient online experiences. This involves reviewing metrics from your health center's website and social media platforms to see where people are already going for information and where users are coming from.

> *QIF-OVC Awardee: "…[T]he Virtual Care Support Specialist visited numerous distant sites in the rural communities [served] to extend the reach of [the health center's] telehealth services. They distributed telehealth flyers at community centers, libraries, and public gathering places to inform residents about the convenience and accessibility of telehealth services."*

HOME

Tips for Promoting Virtual Care Services

Use the information gathered in the section above to develop a marketing and communication plan. Consider what you need to communicate, who should convey the message, and how you will get the message out.

Tips for Considering WHAT You Need to Communicate

Think about both content and style when developing marketing materials.

- **Draft Informative Messages** that provide the following useful information:
  - Benefits of virtual care services.
  - How to get the needed technology.
  - The costs of virtual care, including what is covered by insurance.
  - How to make and prepare for an appointment.
  - How to connect to the technology platform.
  - Information on new features as they become available.
- **Tailor the Content for Different Patient Populations:**
  - For example, older adults may need a more basic explanation of how to access technology than adolescent patients. Rural patients may require different information about how to access virtual care than urban patients with broadband access at home.
- **Use Plain Language:** Write messages your audience understands and that they are comfortable with.[26]
- **Translate Messages:** Convert content into the community's most spoken languages.
- **Review Cultural Appropriateness:** Consult your CHWs and digital navigators to ensure that messages, images, and colors are culturally appropriate.

ADVANCED TIP

Hire a digital marketing strategist or engage a digital marketing firm to help you design, implement, and evaluate social media campaigns. They can help get the most "bang for your buck" when it comes to purchasing social media ad space and selecting the right platforms to reach different population groups.

Tips for Considering WHO Should Convey the Message

The messenger matters as much as the message, especially in communities with a history of distrusting the medical establishment. It's important to involve people and partners that your patients trust in any promotional efforts.

- **Involve Trusted Staff:** Engage trusted and familiar staff members, like nurses and CHWs, in outreach efforts.

- **Leverage Health Center's Governing Board:** Work with patient advocates (e.g., Patient Advisory Council members) and/or members of your health center's boards to spread the word within their networks.

- **Recruit Trusted Opinion Leaders:** Enlist elected officials, local celebrities, or faith leaders to help raise awareness of virtual care services.

- **Partner with Community Organizations:** Work with trusted community partners to promote virtual care services through their own communication channels (e.g., newsletters, social media platforms, websites, bulletin boards, and presentations). Partners could include places of worship, schools, libraries, shelters, food banks, aging and disability network organizations, community centers, and other health centers.

Tips for Considering HOW You Will Get the Message Out

Consider how your patients prefer to get information, both inside and outside of the health center.

- **Consider Different Formats:** Develop materials in your audience's preferred formats—such as videos, social media graphics, posters, flyers, and postcards.
- **Distribute Materials Widely:** Distribute and/or post materials inside your waiting room, exam rooms, and at popular community locations.
- **Promote Through Various Channels:** Promote services through your health center's electronic and online channels:
  - Send promotional messages through the patient portal. Consider sending messages tailored for different age groups.
  - Develop social media campaigns (e.g., Facebook, Twitter, Instagram), including organic posts and purchased ad space. Leverage social media "stories," videos, and graphics to increase views.
  - Add digital banners with kiosk information to health center websites.
  - Use chatbot or artificial intelligence (AI) technology to answer patient questions and connect them with providers.
- **Collaborate with Ethnic Media Outlets:** Ask local ethnic media outlets to run public service announcements (PSAs). Ethnic media include TV, radio, print, and online outlets that produce content for cultural and linguistic groups. Draft pre-written PSAs and articles for them to use.
- **Think About Easy and Accessible Outreach:** Make outreach efforts easy and accessible for patients, such as using mobile services for older adults who can't travel far and creating accessible digital content for individuals with disabilities.

Section 3 Reflection Question

What else can health center do to increase patient and community engagement?

Think about:

- Identifying barriers to care.
- Addressing patients' access to virtual care.
- Marketing and promoting virtual care services.

Overview	Planning Insights	Engagement Insights	Delivery Insights
Assessment Insights	Sustainability Insights	Case Study & Resources	Acronyms, Glossary & Appendices

SECTION 4: DELIVERY INSIGHTS

Delivery Overview

Virtual care delivery includes health center operations that take place before, during, and after virtual care encounters. Smooth operations can help health centers manage workforce shortages, staff burnout, data integration limitations, and digital inequities.

⟫ What Can I Find in This Section?

QIF-OVC awardee insights and resources for health centers delivering virtual care services.
Learn more about:

- 4.1 Settings for Virtual Care Delivery
- 4.2 Scheduling Virtual Care Services
- 4.3 Supporting Patients and Providers During Visits
- 4.4 Following Up After Virtual Care Encounters

4.1 Settings for Virtual Care Delivery

The clinical and community settings health centers select for delivering virtual care services can greatly affect patient experiences and health care access.

Consider transforming your current clinical setting(s) to accommodate virtual care delivery. Teaming up with local organizations to offer virtual care services in convenient, community settings can also improve your patients' access to virtual care. Remember to consider state and local licensing, scope of practice, and other regulations. These may limit the places where you can provide care to your patients.

> **QIF-OVC Awardee:** *"[Health center] launched [a] telehealth room for family planning patients at a satellite site located in the [local] youth engagement program centered around bicycle shop operations."*

Transforming Clinical Settings

Adapt spaces within your health center to improve virtual care delivery. For example, installing kiosks for patient visit check-ins can improve workflow efficiencies and reduce patient wait times. Redesign office spaces to create specific areas for virtual visits to enhance the provider experience and promote patient privacy. See the following tips for more details.

Tips for Transforming Clinical Spaces

Install Kiosks

- Set up virtual care kiosk stations with tablets and seating at each health center. This enables patients to check in for appointments and complete social determinants of health (SDOH) screening assessments.
- Design or adapt kiosks' physical layout and placement based on clinic workflows, possible visit scenarios, privacy, and available clinic space.

Create Dedicated Virtual Care Spaces

- Transform administrative offices into private virtual care suites for clinical staff (e.g., installing room dividers).
- Support patient privacy when completing virtual visits in shared office spaces (e.g., supplying providers with noise machines and headsets).
- Equip virtual care workspaces with supplies staff need for virtual visits (e.g., monitors and charging stations equipped with outlets and laptop chargers).

> 💡 **ADVANCED TIP**
>
> Establish kiosks at community sites featuring real-time, video-based visits with remote, comprehensive medical exams. Use health center–provided technology to conduct visits in a private space. Hire technicians to employ devices like stethoscopes, otoscopes, dermatoscopes, pulse oximeters, and blood pressure monitors to collect clinical data for telemonitoring or synchronous video visits.

Community Settings for Virtual Care

By offering virtual care in community settings, health centers can help reduce barriers patients face when visiting the health center, such as limited transportation. Patients with limited access to private space, internet connectivity, or technology can use community settings to access virtual care.

Table 7 illustrates different community settings and how they could support virtual care.

Table 7. Virtual Care Setting Options

Community Setting	Examples of Virtual Care Services Offered
Local Libraries	Offer free patient education classes to build digital literacy skills and increase comfort with virtual care technology.
Grocery Stores	Offer real-time video visits with comprehensive exams, using health center-provided technology in a private space. Provide enrollment assistance for social support services, such as the Supplemental Nutrition Assistance Program (SNAP).
Public Schools	Offer real-time video visits at school-based clinics when a provider is not on site.
Social Support Organizations	Provide free internet and private space for patients to access virtual care appointments on their devices. Provide on-demand technical support by community health workers (CHWs) and digital navigators.
Residential Facilities*	Provide private virtual care kiosks equipped with internet and devices for real-time audio-only and video-based visits. *Facilities include mental health facilities, substance use facilities, universities, and homeless shelters.*
Mobile Vans	Provide real-time audio-only and video-based visits in multiple community locations via vehicles equipped with internet, private space, and virtual care devices.
Pharmacies	Provide virtual supervision for pharmaceutical-based care programs (such as those involving chronic care management) using remote patient monitoring (RPM) devices or other technologies.[27]

4.2 Scheduling Virtual Care Services

To encourage more patients to use virtual care, make scheduling easy and efficient. Educate patients and train staff on how to schedule appointments. Consider how scheduling can impact access and either promote or hinder health equity.

> **QIF-OVC Awardee:** *"Our Virtual Care Support Specialist traveled […50 miles...] to help a community member connect to a clinician through telehealth. The patient had been unable to connect on his own. […] He has subsequently been able to schedule his own appointments and connect on his own."*

Scheduling Considerations

Health centers can handle scheduling many ways, some more automated than others. Leverage external resources for virtual care enrollment and appointment scheduling. Consider call centers, community partners, online platforms, and automated processes to improve access while reducing staff burden.

It's also important to consider patient needs when scheduling. When possible, encourage patients to select the appointment type (e.g., in-person, video-based, or audio-only) that best fits their health care needs, not just the first available appointment. Consider scheduling extended visit times for patients who are less comfortable with virtual care technology.

The following tips can help streamline your scheduling system, making virtual care more accessible for patients.

Tips for Scheduling Appointments to Increase Virtual Care Access

Provide Flexibility and Reminders to Patients

- Send reminders and virtual technology information in ways that are suitable for patients.
- Adapt virtual care technology features to automate routine staff tasks such as sending appointment reminders and completing patient check-in.
- Establish processes to accommodate patient rescheduling needs.
- Set appointments for times that are convenient for patients.
- Offer different types of virtual care appointments (e.g., audio-only calls).
- Offer real-time virtual visits during evenings and weekends when in-person visits are not possible.
- Leverage community partners to help patients request virtual care appointments.

Fictional Delivery Spotlight: How Northeast Health Center Addressed Virtual Care Delivery Challenges

Health Center Background:

Northeast Health Center is based in a large city and serves a patient population of 75,000. It provides hundreds of virtual care visits each month. Recent provider feedback indicates that care teams enjoy providing virtual care, but often struggled to find the space within the clinic to conduct visits.

How Northeast Health Center Enhanced Virtual Care Delivery:

To address the concerns about privacy and space, the health center set up a dedicated, soundproof area in the clinic for conducting virtual visits. This allows providers to deliver care effectively and maintain patient privacy during the virtual visits. Eventually, the health center renovated the space, creating two soundproof, virtual spaces that support concurrent visits. This allowed for greater virtual care capacity in the clinic, and Northeast Health Center was able to add several virtual care appointment slots per day.

4.3 Supporting Patients and Providers During Visits

Virtual care may be new to many patients and providers, making it difficult for them to get started. Adequate support will help you achieve high levels of satisfaction among patients and providers. Provide technical and language support, as well as other types of support to increase comfort with technology before and during visits.

> **QIF-OVC Awardee:** *"[Support staff] review the digital literacy scale when they encounter a patient having difficulty with the telehealth platform [enabling] staff to gauge where the patient is on the scale and how detailed they need to be in their explanations."*

Tips for Addressing Patient Discomfort with Technology

Engage Patient's Family Members and Caregivers

- Use technology with an "add a guest" feature that allows caregivers and family members to attend the virtual care visit with the patient and provider.

Introduce Patients to Virtual Care

- Introduce patients to virtual care services in person, with staff such as CHWs available to answer questions.
- Offer virtual care support to patients prior to virtual visits:
  - Facilitate mock virtual care visits to allow patients to test technology.
  - Send instructions and virtual care website links prior to encounters.
  - Assist virtual patients in "waiting rooms" to troubleshoot technical issues prior to provider joining.

Provide Language Support

- Pair patients with providers who speak their primary language.
- Include translation services in virtual visit workflows.
- Offer technology training in multiple languages.
- Check that virtual care technology provides messages and materials in the patient's primary language.

> 💡 **ADVANCED TIP**
>
> Explore ways to use machine learning technology, such as artificial intelligence (AI) chatbots, to answer questions about virtual care devices or services. This could improve patient service and lessen health center staff workload. Be sure to account for patient privacy and data security.

4.4 Following Up After Virtual Care Encounters

The virtual care encounter doesn't end when a patient leaves the appointment. Follow-up is critical for ensuring that patients understand next steps and adhere to treatment plans.

> **QIF-OVC Awardee:** *"The Program Manager developed a search to identify RPM enrolled patients who have a blood pressure >140/90 in the last week and do not have an upcoming provider visit. The CHW and Health Educators outreach to these patients to provide hypertension management education and schedule a follow up visit for the patients to check their blood pressure."*

It is important to set clear expectations for providers regarding patient follow-ups.

Tips for Setting Up Virtual Care Follow-Up Processes

- **Make Sure Providers Can See the Patient's Entire Medical Record:** Check patient's records to find and address any gaps in care. Decide if a patient needs to come in for a follow-up visit.

- **Set Up Clear Processes for Follow-Ups Within Your Electronic Health Record (EHR) Platform:** Establish guidelines for answering patient questions, getting specialist advice, and scheduling follow-up visits for things like shots, lab tests, or physical exams.

- **Monitor How Patients Use Virtual Care Devices (e.g., RPM):** If a patient is struggling to use a device, help them understand how to use it. Teach patients how to read their health measurements from remote monitoring devices.

- **Decide When a Patient Should Stop Using RPM for Specific Health Conditions:** Tell patients and care teams about the eligibility criteria for virtual care services. Think about ways to keep patients involved after the virtual care services end.

Section 4 Reflection Question

What else can your health center do to improve virtual care delivery?

Think about:

- Settings where you conduct virtual care.
- How you support patients and providers.
- How you use data collected during virtual visits and by virtual care technologies.

Overview	Planning Insights	Engagement Insights	Delivery Insights
Assessment Insights	Sustainability Insights	Case Study & Resources	Acronyms, Glossary & Appendices

SECTION 5: ASSESSMENT INSIGHTS

Assessment Overview

Assessment in virtual care involves gathering feedback on the progress and quality of services, which can be coupled with frequent individual and group discussions about experiences and processes.[3] This section helps health centers assess virtual care services; consider what feedback to collect from patients, providers, and staff; and use data to improve virtual care.

⫸ What Can I Find in This Section?

QIF-OVC awardee insights and resources for health centers assessing virtual care. Learn more on:

- 5.1 Collecting Feedback from Patients, Providers, and Staff
- 5.2 Using Data to Improve Virtual Care Services

5.1 Collecting Feedback from Patients, Providers, and Staff

Collecting feedback from patients, providers, and staff is a critical part of assessment. Patient feedback helps you understand their needs in a virtual care encounter as well as preferences and satisfaction with virtual care services. You can use this information to improve the quality of care. Provider and staff feedback helps identify challenges and improve system efficiency while creating buy-in. It can also highlight any training or resource gaps to better support staff.

> *QIF-OVC Awardee:* *"The implementation of a digital health program requires an ongoing evaluation of both effectiveness of the intervention and the patient's experience and feedback. To ensure our intervention is being evaluated, we've teamed up with the [information technology (IT)] department to send assessment templates to patients in one of our use cases."*

HOME

See the following tips on gathering patient, provider, and staff feedback to better understand their experiences, identify issues, and gather suggestions for virtual care improvement.

Tips for Gathering Patient, Provider, and Staff Feedback

- **Gather Feedback Early:** Collect feedback in the project implementation phases to provide valuable opportunities to learn and adapt.
- **Use Mixed Data Collection Methods:** Use both quantitative and qualitative data collection methods, including questionnaires and facilitated interviews, to collect feedback on virtual care experiences for quality improvement.
- **Adopt Standardized Data Collection:** Use standardized data collection questions from existing literature to save time on development and adapt instruments to fit patient populations.
- **Collaborate with Similar Health Centers:** Reach out to similar health centers for measurement resources.
- **Ask Patients a Variety of Questions About:**
  - Ease of accessing virtual care appointments or equipment and comfort level with using technology.
  - Availability of technical support when needed and types of technical issues faced (e.g., logging into software or using equipment).
  - Satisfaction with the virtual care experience, including ease of use and convenience.
  - Effectiveness of virtual care in managing health.
  - Preferences for future care delivery, such as continuing virtual care or returning to in-person visits.
- **Ask Providers and Staff a Variety of Questions About:**
  - Satisfaction with virtual care.
  - Processes for using patient data (e.g., remote patient monitoring (RPM) findings) to inform care team workflows.
  - Technical issues encountered during virtual care visits.
  - Impact of virtual care on patient health outcomes, workflows, and program efficiency.

Fictional Assessment Spotlight: Precision Health's Evaluation of RPM Services Provides Opportunities to Enhance Patient Satisfaction

Health Center Background:

Precision Health delivers care to a population of around 500,000 people just outside a large metropolitan area. It provides RPM services with the goal of addressing chronic disease in the community. It supplies blood pressure cuffs to patients with hypertension to monitor their health at home.

How Precision Health Used Feedback to Improve its RPM Services:

The health center surveyed its patients enrolled in RPM services to assess satisfaction and identify challenges.

The survey included questions on:

- Overall satisfaction with RPM services and device usability.
- Technical issues faced with logging measurements.
- Preferences on reminders and communication.

Survey respondents appreciated RPM's convenience but felt they often forgot to take their daily measurement. To address this, the health center piloted an automatic reminder program that sent SMS messages prompting patients to log their blood pressure. Overall, patients appreciated the onboarding and individualized help they received from the care coordinator and reported feeling empowered by the program to take charge of their health. The health center formalized the feedback questions into a biannual patient survey to continue assessing satisfaction and engagement with RPM services.

5.2 Using Data to Improve Virtual Care Services

Examining data provides health centers insights on the effectiveness of virtual care services and reveals opportunities for improvement. It aids in identifying disparities and facilitating targeted interventions. It also helps to optimize virtual care delivery by uncovering patterns, trends, and patient needs.

Continually assess the impact of your virtual care services on patient health outcomes. Evaluate your virtual care services' ability to support patient health management. You can also use patient outcomes to guide health center decision-making about virtual care services.

> **QIF-OVC Awardee:** *"Our informatics [partner] reviewed the results of the provider survey on the [charting tool] and worked together with the IT team to implement feasible changes for easier usability and addressing certain quality measures."*

Using Data from Social Determinants of Health Screening

Use social determinants of health (SDOH) screening data on social inequities to help tailor patient care and guide improvements in virtual care strategies. See SDOH Screening Considerations for more details on SDOH screening.

Tips for Using SDOH Insights to Improve Virtual Care Access

- **Assess Barriers to Virtual Care Use:** Work with patients, providers, and community groups to understand why some people don't use virtual care. For example, compare data from SDOH screeners and virtual and in-person patient satisfaction surveys.

- **Adjust Virtual Care Processes:** Improve virtual care services to meet patients' digital needs. For example, deliver virtual care devices to patients who struggle with transportation.

- **Train Staff to Better Serve Patients:** Offer cultural competency training for staff and providers based on the patient populations served. For example, update training programs to increase staff awareness of the common challenges and advantages your patients face with virtual care.

- **Enhance Patient Education:** Develop processes and materials to educate patients in their preferred languages and modes of engagement. For example, create user-friendly guides and tutorials to help patients understand how to use virtual care devices.

- **Customize Virtual Care Campaigns:** To reach underserved groups better, create accessible and relatable campaigns for your patient population. For example, work with patients to create culturally responsive messages to encourage more people to use virtual care and include messages in different languages.

ADVANCED TIP

Engage in collaborative learning experiences to share best practices, measurement instruments, and workflow strategies. For example, join a health center learning group and use methods and measurements developed at other health centers to address food insecurity, housing instability, and lack of access to education for patients with diabetes.

Using Data Collected Before, During, and After Virtual Care Visits

Your health center needs processes for documenting and responding to data captured before, during, and after virtual care encounters and by virtual care devices. The data you collect before and during virtual care visits can help improve virtual care quality. Visit attendance metrics can also help providers identify patients who may be having difficulty with virtual care. For example, frequently incomplete video visits may signify that a particular patient is struggling with the software or is experiencing technical difficulties.

To build patient trust in virtual care services, it's important to share information about data privacy and security with your patients. They also need to know how data will inform and support their care. Ideally, your team shares this before virtual care visits in ways that meet patients' literacy and language needs. Your team should also be prepared to share information after patient encounters, such as by answering patient questions or addressing changes to policy.

Consider the following tips for effectively using virtual care data.

Tips for Using Virtual Care Data to Improve Delivery

- **Identify Ways to Report Usage Data:** Work with your electronic health record (EHR) vendor, other health centers, and/or your staff to identify how to best report on virtual care usage based on EHR system records of in-person and virtual visits.
- **Upload Device Data to EHR Prior to Visits:** Set up processes to upload patients' RPM data to the EHR for providers to review during virtual care visits.
- **Track the Quality of Virtual Care:** Compare the outcomes of virtual and in-person care to see if there are differences. Compare patient data and experiences to find any health care disparities.

💡 ADVANCED TIP

Use your data team to track trends in patients who switch from virtual to in-person appointments on the same day. This could point to technological problems, scheduling issues, worsening health, the need for in-person appointments based on patient symptoms, or changes to billing options. Use these insights to make decisions about tailoring your virtual care services to your patients' needs.

Section 5 Reflection Question

What else can your health center do to assess your virtual care?

Think about:

- How to gather data from patients, providers, and staff.
- How to monitor patient outcomes.
- How you use data collected to improve your virtual care.

Overview	Planning Insights	Engagement Insights	Delivery Insights
Assessment Insights	Sustainability Insights	Case Study & Resources	Acronyms, Glossary & Appendices

SECTION 6: SUSTAINABILITY INSIGHTS

Sustainability Overview

Sustainability refers to the extent health centers can maintain and continue delivering virtual care innovations over the long term.[3] With that in mind, this section can help health centers improve sustainability of virtual care services.

What Can I Find in This Section?

QIF-OVC awardee insights and resources for health centers sustaining virtual care services. Learn more about:

- 6.1 Financial Sustainability and Reimbursement
- 6.2 Sustaining Technologies

6.1 Financial Sustainability and Reimbursement

For virtual care services to succeed long-term, health centers need sustainable funding approaches to cover costs like technology and software updates, staff salaries, hiring and training, and other expenses associated with virtual care.

Virtual care may have varying revenues and costs compared to in-person care. Changes in reimbursement policies for different types of virtual care and/or health conditions can significantly affect the types of services you can offer in the future. Therefore, you should develop strategies early on to promote virtual care sustainability and overcome potential obstacles.

> *QIF-OVC Awardee: "The new [Medicare] reimbursement model will make it difficult to offer audio-only visits at a cost that is sustainable. […]*
> *To address this, we are developing a campaign for our staff and patients promoting in-person or tele-video as the preferred visit type."*

Financial Sustainability Tips

You can adopt certain practices to reach better financial sustainability. Plan proactively for financial sustainability to promote long-term virtual care options for your health center's patients. Consider the following tips when planning your virtual care sustainability plans.

Tips for Improving Financial Sustainability

Health Center Practices

- Assess the impact of virtual care on patient outcomes and identify any cost savings resulting from improved outcomes.

- Exchange best practices on financial sustainability for virtual care strategies with similar health centers.

- Adjust virtual care purchases to manage cost limitations. For example, consider the trade-off between adding services and providing devices to more patients.

- Compare payor-specific reimbursement rates and virtual care service costs for each type of virtual care offered.

Data Review

- Collect and analyze virtual care usage data and reimbursement rates by payor to better understand revenue sources.

- Collect and analyze no-show rate data to better understand potential cost savings. For instance, reducing the number of no-show rates by making virtual care more convenient for patients could lead to cost savings.

- Collect and review user experience data, including patient and provider satisfaction, to improve virtual care.

Vendor-Related Efforts

- Explore vendor compassionate care pricing or reimbursement for devices for uninsured or Medicaid-insured patients.

- Before purchasing products, work with vendors to identify costs for potential add-on technology services or features (e.g., automated messaging, data management support).

- Research multiple vendors and devices, including comparing technology costs over time to inform technology selection.

Adapting to Virtual Care Reimbursement Policy Changes

Health centers may need to adapt to federal, state, and commercial reimbursement policies so virtual care services can remain financially viable. Check out resources like the Center for Connected Health Policy to review federal and state policy changes.

Be prepared to respond to changes in reimbursement for your virtual care services. This may require adjusting your health center operations and monitoring program quality. Collaborating with others inside and outside of your health center can improve this process. Consider the following tips for adapting to reimbursement policy changes.

Tips for Adapting to Reimbursement Policy Changes

- **Create a Team:** Form a team to monitor reimbursement changes and develop a plan to address any changes that impact your health center.
- **Learn from Other Health Centers:** Engage with other health centers to learn how they approach the changing reimbursement landscape.
- **Engage with Payors:** Communicate with payors about required billing documentation and coding to ensure your health center can reach full reimbursement potential.
- **Communicate Virtual Care Policy Updates:** Clearly communicate virtual care policy updates to staff and patients, highlighting how these changes will influence staff workflows, patient care, and patient and health center expenses.
- **Minimize Reimbursement Impact:** Lessen the effect of reimbursement changes on patients' access to virtual care. For example, use health center resources, apply for supplemental grant funding, and request compassionate care discounts from technology vendors to provide access to virtual care devices if patients' insurance plans stop covering them.

🏠 **HOME**

Fictional Sustainability Spotlight: Sunnyvale Clinics' Partnership Pilot Promotes Virtual Care Sustainability

Health Center Background:

Sunnyvale Clinics operates six locations in the Pacific Northwest spanning two metropolitan areas. Its virtual care program began in 2017 and now runs very smoothly. Today the health center offers remote patient monitoring (RPM) and most behavioral health services virtually. To promote virtual care sustainability, the virtual care manager proposed sharing best practices inspired by other health centers.

How Sunnyvale Clinics Used Partnerships to Enhance Sustainability:

Sunnyvale's virtual care manager started a collaborative, named the Northwest Digital Resiliency Collaborative, that included four other health centers in its first year. They meet quarterly to discuss topics including:

- Reimbursement policy changes.
- Virtual care best practices.
- Cost-effective strategies.
- Potential partnerships.

Sunnyvale Clinics improved its virtual care sustainability through strategic partnerships with the Northwest Digital Resiliency Collaborative. This collaboration enhances health care delivery and contributes to community resilience against evolving health care challenges.

6.2 Sustaining Technologies

Maintaining technology infrastructure is crucial for your health center's virtual care sustainability. This includes financial planning for information technology (IT) staffing, operations, and technology-specific reimbursement needed to support the virtual care technologies your team uses. From the start, consider both short- and long-term technology support needs to help you allocate program resources effectively.

> **QIF-OVC Awardee:** *"Ensuring [technology] suitability for our patients adds complexity to the decision-making process...Considering factors like patient engagement, and specific health needs can contribute to a more tailored and effective choice."*

Sustainability Planning for Virtual Care Technology

When creating your sustainability plan and considering how to maintain technologies, remember it's not just about the cost of the initial product. Also consider factors like IT staffing support, operating costs, short- and long-term updates and upgrades, electronic health record (EHR) integration, and technology- and payor-specific reimbursement. Think about how to support patients and providers and modify operations for long-term use. See the following tips for more details.

Tips for Sustaining Virtual Care Technology

Patient and Staff Support

- **Measure Satisfaction:** Regularly measure patient and staff satisfaction with virtual care technology to promote use.
- **Provide Staff Trainings:** Offer ongoing technology training for staff. Review technology training content to identify opportunities for process improvements that save staff time and improve virtual care delivery.
- **Inform Patients of Low-Cost Options:** To support continued access over time, inform patients of ways they can sign up for low-cost devices and internet services through government and other sources.
- **Explore Translation Services:** Consider including translation services in the technology selection and lifecycle planning process. This can help improve usability for different patient groups, streamline workflows, and possibly lower costs.

Virtual Care Operations

- **Plan for EHR Integration:** Map out EHR integration with virtual care technologies and include it in cost planning.
- **Create Maintenance Plans:** Develop plans for technology and infrastructure maintenance. Include who is responsible for each maintenance step.
- **Consider Technology Lifespan:** Consider the timeline for technology lifespan as well as associated costs when making technology selections.

Technology Reimbursement

- **Consider Insurance Reimbursement:** Consider if insurance providers will reimburse claims for specific virtual care types or devices before selecting technologies, especially for RPM.
- **Provide Clear Guidance:** Create clear guidance for your providers to follow that outlines services and technologies covered by patient insurance plans, as well as guidance for when devices are not covered (or coverage changes).
- **Evaluate Virtual Care Costs:** Evaluate the short- and long-term costs of virtual care modalities and keep these in mind as you plan reimbursement approaches.

Section 6 Reflection Question

What aspects of sustainability should your health center consider based on your current stage of virtual care?

Think about:

- Financial sustainability with reimbursement changes.
- Operational needs for longevity.
- Technology lifecycle for selected devices.

Case Study Exercise: The Virtual Care Journey of Helpful Health Centers

Purpose

This case study describes a fictional health center that planned, delivered, and assessed virtual care services—with an emphasis on virtual care sustainability. It is organized as a narrative, followed by a series of question prompts. The health center itself is fictional, but the narrative reflects a synthesis of lessons learned from QIF-OVC awardees' experiences.

This case study can serve as a guide for your health center's virtual care planning. It is a tool to think about the actions of this fictional health center. It also provides ideas for how to apply the information to your health center and links to relevant content.

Instructions

To engage your team in the case study exercise:

1. Distribute copies for team members to review in advance.
2. Review and discuss this case study with your health center teams.
3. Have a team member lead a discussion, focusing on questions relevant to your health center's key issues. Use the discussion questions at the end of the case study to reflect on each section of the Toolkit.

Case Study Background

Denise Perez, Helpful Health Centers' Virtual Care Director, was thinking back on the launch of their virtual care pilot about a year ago. Her team developed their first virtual care services out of nothing. They ensured their patients received the best care while simultaneously overcoming a learning curve related to staffing challenges and patient/provider acceptance. Denise played a key role in choosing virtual care technologies, such as an electronic health record (EHR) system and virtual visit software. She worked closely with her team to set up new workflows, considering what was most important to the staff and patients at the time. Thanks to the team's hard work, Helpful Health Centers' pilot was successfully providing virtual care, and patients regularly used it.

Denise knew they were at a crossroads and it was time to optimize and expand virtual care for the future, based on the success of the pilot. With Medicare and Medicaid reimbursement policies often in flux and grant funding in question, she wasn't sure if the health center's finances could support both expanding and sustaining virtual care services. Even beyond the funding, sustainability questions

lurked everywhere. How could Helpful Health Centers increase provider and patient satisfaction? Could they accomplish workflow and technology integration within their budget?

Health Center Context

Helpful Health Centers has multiple sites in rural and urban service areas and serves approximately 12,000 patients annually across all sites. The health center serves two statutory special populations—people experiencing homelessness and migratory and seasonal agricultural workers. Of their patient population:

- About half are insured through Medicaid or the Children's Health Insurance Program.
- Twenty percent have private insurance.
- About ten percent are enrolled in Medicare.
- Twenty percent do not have health insurance coverage.

Virtual Care Pilot Overview

Helpful Health Centers' virtual care pilot served patients who primarily sought care at the Almond Street site. This site served approximately 1,000 patients. About 350 patients received virtual care services or had at least one virtual care encounter through the pilot. Not all patients receiving services at the Almond Street site have access to broadband. [See Section 3.1: Identifying and Addressing Patient Barriers to Accessing Virtual Care.]

Virtual care services offered through the pilot included:

1. Video primary care visits (i.e., synchronous).
2. Audio-only visits (i.e., synchronous) for some behavioral health services, including substance use disorder treatment.
3. Remote patient monitoring (RPM) services for eligible patients with chronic conditions.
4. A patient portal available to all patients, allowing patients to schedule appointments and to send non-urgent messages and questions to their provider.
5. Virtual care kiosks in homeless shelters in Almond Street's service area. The kiosks connected patients at shelters to providers. They also allowed patients to complete assessments, including health-related social needs assessments and mental health screenings.

[See Section 2.1: Choosing the Right Technology.]

HOME

Virtual Care Planning

First, Denise created a plan to optimize patient virtual care from start to finish. She expanded the pilot team to include additional patients, clinical staff, and administrative staff from scheduling, finance/ billing, contracts, and information technology (IT). She met regularly with the team to ensure effective communication and collaboration with its members.

Denise worked closely with the clinical and scheduling staff to set up new and improved workflows, refining them over time to fit as many requirements as possible from diverse communities. Denise also worked with her human resources manager to improve and expand staffing by:

- Recruiting and training additional staff to handle different virtual care roles needed for service expansion. [See Section 2.4: Staffing Virtual Care.]

- Holding regular training sessions to keep staff up to date on the latest virtual care practices and technology.

Denise collected data to assess Helpful Health Centers' readiness to expand virtual care by completing the Virtual Care Strategic and Tactical Deployment Maturity Self-Assessment Model (VCSD). She also reviewed community health assessments from her health center and community partners. The findings helped her understand shifts in the community that could impact virtual care. [See Section 2.2: Deciding How to Collect Data.]

See the **Planning Insights** Section for More Information.

Community Engagement

Denise and her team worked to expand virtual care outreach in the community. They engaged with their Patient Advisory Council on a regular basis to brainstorm outreach ideas. The Patient Advisory Council helped them develop new and expanded partnerships with community partners, local farms, and homeless shelters to spread the word about expanded virtual care services. These organizations expanded outreach to migratory and seasonal agricultural workers and people experiencing homelessness to raise awareness of virtual care and address language access. Helpful Health Centers improved their capacity to communicate with patients who didn't speak English as their first language. They hired additional community health workers (CHWs) and digital navigators to improve digital literacy and communicate with patients who spoke other languages. This helped build patients' trust in virtual care. Members of the Patient Advisory Council who spoke these languages tested materials for cultural appropriateness. [See Section 3.2: Promoting Virtual Care in Local Communities.]

See the **Engagement Insights** Section for More Information.

Virtual Care Delivery

Helpful Health Centers has multiple sites, serving the most virtual care patients at the Almond Street site through the pilot. As they moved beyond the pilot, Denise and her team expanded virtual care to two additional sites and enhanced the services that community partners could provide. For example, they partnered with homeless shelters to install virtual care kiosks in service areas surrounding the three virtual care sites. This allowed patients to get care without having to go to the health center sites in person. Patients used the kiosks to complete pre-virtual visit assessments like social determinants of health (SDOH) screenings, consent forms, and background forms. [See Section 5.2: Using Data to Improve Virtual Care Processes.]

To help expand virtual care, Helpful Health Centers optimized their workflows, including daily routines, communication, and documentation processes. [See Section 2.3: Preparing Workflows.] Some of the workflow improvements included:

- Providing additional training for homeless shelters installing new kiosks.

- Automating routine tasks to support expansion of care at additional health center sites.

- Optimizing the scheduling process for appointments. [See Section 4.2: Scheduling Virtual Care Services.]

> 💡 **ADVANCED TIP**
>
> Work with community partners to install virtual care kiosks at your health center sites. Use the kiosks for SDOH screenings in addition to providing virtual care. Consider employing digital navigators who speak other languages to help patients use the kiosks. This will help to increase digital literacy and health equity.

See the **Delivery Insights** Section for More Information.

Virtual Care Assessment

Helpful Health Centers sent online surveys to patients who participated in the expanded virtual care services. Of the 100 patients who responded, about 75% provided positive feedback and wanted to continue using virtual care (all modalities). Generally, the virtual care services showed promising results in satisfaction, but there was room for improvements in workflow, technology, and patient education. [See Section 5.1: Collecting Feedback from Patients, Providers, and Staff.]

Positive patient feedback included:

- Video and audio-only visits and the virtual care kiosks were easier and more convenient than in-person visits.
- Scheduling appointments, asking questions, and messaging providers through the patient portal was beneficial.

Patient-reported challenges included:

- There were issues logging into software for video visits.
- Patients didn't know how to contact Helpful Health Centers for IT assistance.
- Patients didn't know who owned patient data collected via virtual care and how it was used.
- Patients didn't understand how information from RPM devices would improve their health.

> See the **Assessment Insights** Section for More Information.

Virtual Care Sustainability

Denise and her team wanted to plan not only for expanding virtual kiosks to additional community and health center sites, but also for sustaining the program in the long term. [See Section 4.1: Settings for Virtual Care Delivery.] To do this, Denise formed a sustainability committee comprised of an IT specialist, a financial/billing analyst, a clinical quality advisor, a primary care physician, a nurse practitioner, and a patient representative. The committee's primary goal was to monitor and develop strategies to manage their areas of greatest cost and to optimize reimbursement in line with patient needs and policy changes. They also reviewed clinic operations and discussed new ways to ensure access to services and address health equity. The committee met monthly and developed a work plan with responsibilities and deadlines to sustain momentum.

> 💡 **ADVANCED TIP**
>
> Create a multi-disciplinary committee to plan for sustaining technology and finances over the long term involving patients and clinical and administrative staff. Develop a sustainability workplan and meet with the committee regularly to track progress.

Technology and Staffing Costs

Technology and staffing costs needed to sustain virtual care included:

- Ongoing implementation and maintenance costs for the virtual care equipment originally purchased for the pilot.
- Additional technology and kiosks for expansion to more health center and community sites.
- Recruiting additional staff and continually training them to keep virtual care services running smoothly.

To address these costs, the committee reviewed the budget regularly and explored cost-effective alternatives for technology, such as devices covered by Medicaid and/or health insurance plans. They planned to negotiate with vendors for better pricing and service packages as they expanded and could generate more volume. The committee suggested creating a train-the-trainer program, whereby virtual care staff could train other staff members in virtual care processes. [See Section 6.2: Sustaining Technologies.]

Reimbursement and Policy Changes

Helpful Health Centers purchased its virtual care equipment for the Almond Street site using grant funding, which ended after the pilot year. While current reimbursement covered part of overall operations, it did not completely cover the cost of purchasing additional kiosks. In addition, the team wondered how future policy changes would impact Medicare and Medicaid reimbursement rates.

The financial/billing analyst calculated how much current reimbursement would cover virtual care costs and the cost of purchasing more kiosks. The analysis revealed a budget gap that grant funding would need to fill. In addition to seeking additional grant funding, the committee also proposed to set up a virtual care contingency fund. This fund would provide a cushion for sudden changes in reimbursement rates and allow time for the health center to pivot while maintaining patient service continuity.

Given that 20% of the patient population was uninsured, the committee also recommended stepping up efforts to assist these patients with obtaining health insurance. This would help to increase reimbursement, contributing further to the sustainability of virtual care. [See Section 6.1: Financial Sustainability and Reimbursement.]

> 💡 **ADVANCED TIP**
> Review any current/potential federal and state policy changes related to reimbursement and virtual care delivery at each meeting. Consider networking with other health centers in your area to share reimbursement news and updates from your virtual care services.

See the **Sustainability Insights** Section for More Information.

Discussion Questions

Review the following questions to help you and your staff think through the different stages of virtual care development, expansion, and sustainability.

Helpful Health Centers

Based on the description of Helpful Health Centers and its virtual care pilot, consider the following questions.

Step	Question
Planning	1. What are three priority areas Denise should consider when planning to expand virtual care?
Engagement	2. What changes could Denise make to expand outreach among special populations and other patients who speak other languages?
Delivery	3. How could the lessons learned from the pilot at the Almond Street site inform the expansion of the program to other sites?
Assessment	4. What provider-focused metrics could Denise use to monitor virtual care services going forward?
Sustainability	5. What other strategies could Denise use to reduce delivery costs and/or increase funding for virtual care services?

Your Health Center

Discuss the following questions, as they relate to your own health center.

Step	Question
Planning	1. What are some potential benefits and challenges of involving providers, staff, and patients in the process of developing or modifying virtual care workflows?
Planning	2. What can your health center do to prepare and train staff for your virtual care services?
Engagement	3. How can your health center work with community partners to expand the reach of your virtual care services?
Engagement	4. How can your health center build trust with your patient population and wider community?
Delivery	5. Does your health center need to adapt its physical spaces to effectively deliver virtual care? If so, how?
Delivery	6. What approaches can your health center use to effectively deliver care to special populations?
Assessment	7. What assessment methods and metrics can your health center use to gather patient and provider feedback?
Assessment	8. How can your health center develop a monitoring and feedback program for implementing changes based on your assessment?
Sustainability	9. What is your health center already doing to promote the sustainability of its virtual care services?

HOME

Step	Question
Sustainability	10. What new approaches might you consider at your health center to promote sustainability?
Sustainability	11. Among the new sustainability approaches brainstormed in Question 10, which would you address first?
Sustainability	12. What sources of funding could you secure to sustain your virtual care services over time?
Sustainability	13. How can your health center contain costs of your virtual care services while considering patient care needs?

RESOURCES

General Virtual Care Resources

A National Strategy for Digital Health

Organization: MITRE, Year: 2022

Description: Offers a framework for guiding the development of the U.S. digital health ecosystem

Environmental Scan of Telehealth Technical Assistance Resources

Organization: National Association of Community Health Centers (NACHC), Year: 2022

Description: Provides curated technical assistance resources for federally qualified health centers (FQHCs) in eight categories

Health and Human Services (HHS) Telehealth Website

Organization: HHS, Year: N/A

Description: Landing page for HHS Telehealth website with information for both patients and providers

Telehealth Implementation Playbook

Organization: American Medical Association (AMA), Year: 2022

Description: Provides a guide to telehealth implementation for health practitioners interested in implementing digital health

National Consortium of Telehealth Resource Centers Website

Organization: National Consortium of Telehealth Resource Centers, Year: N/A

Description: Website landing page for a collaborative of 12 regional and two national Telehealth Resource Centers

Telehealth Playbook

Organization: FQHC Telehealth Consortium, Year: 2023

Description: How-to guide to support health center telehealth adoption

The Office of the National Coordinator (ONC) Health IT Playbook

Organization: ONC, Year: 2020

Description: Playbook developed by ONC covering health information technology (IT) topics such as electronic health records (EHRs), health information exchange, and patient engagement

Virtual Care Learning Hub

Organization: Center for Care Innovations, Year: N/A

Description: Learning hub that provides toolkits in several aspects of telemedicine

Addressing Digital Barriers

Federal Communications Commission (FCC) Affordable Connectivity Program

Organization: FCC, Year: N/A

Description: A program that helps ensure that households can afford the broadband they need for work, school, health care, and more

Health Literacy Universal Precautions Toolkit, 3rd Edition

Organization: Agency for Healthcare Research and Quality (AHRQ), Year: 2024

Description: Example questions used in a feedback survey to monitor activities in health literacy improvement activities

Making Health Literacy Real Planning Template

Organization: Centers for Disease Control and Prevention (CDC), Year: N/A

Description: Fillable worksheet that organizations can use to improve health literacy

Screening for Broadband Access and Digital Health Literacy in Public Housing Patients

Organization: National Center for Health in Public Housing, Year: 2022

Description: Webinar that provides resources for digital health literacy screening tools

Telehealth and Digital Tools Equity Assessment

Organization: Health Information Technology, Evaluation and Quality Center (HITEQ), Year: 2022

Description: Assessment tool with questions for health centers to ask potential vendors to ensure equitable access to digital tools

Data Collection and Screening

Assessing Provider Capabilities, Attitudes and Preferences about Telehealth

Organization: HITEQ, Year: 2023

Description: Question bank resource for surveying providers about telehealth

Consumer Assessment of Healthcare Providers and Systems (CAHPS) Patient Experience Surveys and Guidance

Organization: AHRQ, Year: N/A

Description: Website landing page for CAPHS patient experience surveys and guidance

Measuring Telehealth Success: You Can't Achieve it if You Can't Measure It

Organization: HITEQ, Year: 2021

Description: Webinar on setting success targets and measuring telehealth performance

Social Needs Screening Tool Comparison Table

Organization: University of San Francisco California Social Interventions Research and Evaluation Network, Year: 2019

Description: Table comparing several social health screening tools

Telehealth Taxonomy for Federally Qualified Health Center (FQHC) Data Capture

Organization: National Consortium of Telehealth Resource Centers, Year: 2020

Description: Guidance for health centers on a "minimum data set" they should be able to capture in their EHR

The Accountable Health Communities Health-Related Social Needs Screening Tool

Organization: Centers for Medicare and Medicaid Services (CMS), Year: N/A

Description: Screening tool developed by CMS to help providers identify patient needs in five core social health domains

The Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences (PRAPARE) Screening Tool

Organization: Association of Asian Pacific Community Health Organizations, Oregon Primary Care Association and NACHC, Year: N/A

Description: Screening tool for patient assets, risks, and experiences

Tools to Assess and Measure Social Determinants of Health (SDOH)

Organization: Rural Health Information Hub, Year: N/A

Description: List of tools, measures, and resources for assessing SDOH

Uniform Data System 2023 Manual

Organization: Health Resources and Services Administration (HRSA), Year: 2023

Description: HRSA's UDS data requirements for 2023

Using Z Codes: SDOH Data Journey to Better Outcomes

Organization: CMS, Year: 2023

Description: Step-by-step guide for mapping SDOH data to z-codes

Health Equity

Digital Equity Act Population Viewer

Organization: U.S. Census Bureau, Year: 2022 (at time of Toolkit development)

Description: Interactive map for all 50 states providing data on several digital indicators (e.g., broadband access, population not using the internet)

Health Equity in Telehealth

Organization: HRSA, Year: N/A

Description: Ways to improve health equity in telehealth through workflow, staff training, and community resources

Health Equity Training Series for Health Professionals

Organization: George Washington School of Medicine and Health Sciences, Year: 2019

Description: Online health equity series covering various topic areas

Multicultural Patient Engagement Strategies and Solutions

Organization: California Telehealth Resource Center (TRC), Year: 2020

Description: Webinar on how a two-way text service is leveraged to increase patient engagement and improve health outcomes

National Institute on Minority Health and Health Disparities Research Framework

Organization: National Institutes of Health, Year: 2018

Description: Model used to aid in understanding and addressing minority health and health disparities; an adaptation to the framework that considers digital health equity can be found in this journal article

Telehealth and Language Access

Organization: Mid-Atlantic TRC, Year: N/A

Description: Webpage covering considerations for translation and interpretation services

The U.S. Playbook to Address Social Determinants of Health

Organization: White House Office of Science and Technology Policy, Year: 2023

Description: White House playbook focusing on three pillars for addressing SDOH

Think Cultural Health: Cultural Competency Deployment Refresher

Organization: HHS, Office of Minority Health, Year: 2021

Description: e-Learning modules focused on culturally and linguistically appropriate services standards

Translated Materials for Telehealth Technology

Organization: Pacific Basin TRC, Year: N/A

Description: Provides instructional guides for Zoom and Doxy.me in twelve languages

Patient and Community Engagement

Best Practices for Phone and Virtual Interpretation in Health Centers
Organization: National Center for Farmworker Health, Year: 2023
Description: Webinar that provides guidelines and best practices for language access services

Telehealth Marketing Plan Development: A Step-by-Step Guide
Organization: California TRC, Year: 2022
Description: No-cost guide to telehealth marketing; includes a template that works for programs of any size

How to Measure Patient Experience and Satisfaction with Telehealth

Organization: Center for Care Innovations and RAND Corporation, Year: 2020

Description: Toolkit on collecting patient survey data that provides templates and annotated survey instruments

Transform Virtual Care: A step-by-step guide to integrate patient self-care tools into virtual care

Organization: NACHC, Year: 2021

Description: Guide providing tools and resources for health centers to integrate patient self-care into virtual care

Working with Patients and Families as Advisors Implementation Handbook

Organization: AHRQ, Year: N/A

Description: Guide for helping health organizations partner with families and patients to improve quality

Resources for Providers

General Provider Resources

Clinical Workforce Training

Organization: NACHC, Year: N/A

Description: NACHC landing page for clinical workforce training resources

HHS Telehealth for Providers

Organization: HHS, Year: N/A

Description: Telehealth resources for health care providers, including doctors, practitioners, and hospital staff

Telehealth for Providers: What You Need to Know

Organization: CMS, Year: 2023

Description: CMS resource kit for providers that covers implementing and sustaining telehealth as well as federal and state policy information on billing for telehealth

Telemedicine: Providing Safe Remote Health Care

Organization: AMA, Year: N/A

Description: Continuing medical education course for health providers on telehealth trends and lessons learned

Workforce and Workplace Burnout

Five Key Strategies to Help Health Centers Protect Against Staff Burnout

Organization: National Center for Farmworker Health, Year: 2022

Description: Fact sheet presenting activities that health centers can use to foster a healthy workplace and support the mental health and well-being of employees

Health Center Excellence: Essential Steps for Workforce Retention & Recruitment

Organization: Association of Clinicians for the Underserved, Year: 2024

Description: Fact sheet describing facts about the health center workforce, ongoing challenges, approaches to workforce strengthening, and steps in the journey to excellence in workforce recruitment and retention

Improving Workforce Well-Being at Health Centers

Organization: HRSA, Year: N/A

Description: HRSA webpage covering basics of worker well-being, including results from health center workforce surveys and resources for addressing workforce well-being

Resiliency Toolkit: A Comprehensive Guide for Health Centers & Their Staff

Organization: NACHC and Association of Clinicians for the Underserved's STAR2 Center, Year: 2022

Description: Toolkit connecting organization leaders with the understanding and strategies they need to support the health and well-being of their workforce

Resource Compendium for Health Care Worker Well-Being

Organization: National Academy of Medicine, Year: Various

Description: A collection of over 100 resources from different organizations that highlight strategies and tools health care leaders and workers can use across practice settings to move toward decreasing burnout and improving clinician well-being

Sample Telemedicine Job Descriptions

Organization: California TRC, Year: 2021

Description: Describes roles and responsibilities for six types of telemedicine clinic staff

What is physician burnout?

Organization: AMA, Year: 2022

Description: Overview of physician burnout, its causes, and resources for addressing burnout

Technology and Tools

Artificial Intelligence

Artificial Intelligence/Machine Learning Consortium (AIM-AHEAD) Courses

Organization: AIM-AHEAD, Year: N/A

Description: Course landing page for health artificial intelligence (AI) applications; includes trainings, webinars, and courses

Federal Government Artificial Intelligence Website

Organization: White House, Year: N/A

Description: Government website for AI that details actions of Biden administration around AI; provides information on Executive Order on utilizing AI responsibly across agencies

Principles for Augmented Intelligence Development, Deployment, and Use

Organization: AMA, Year: 2023 artificial intelligence (AI) artificial intelligence (AI)

Description: AMA guidelines for AI; includes required disclosures for health AI technologies

EHR Assessment and Selection

EHR Selection, Purchasing & Implementation Resources

Organization: HITEQ, Year: N/A

Description: HITEQ's landing page for resource sets dedicated to EHR selection, purchasing, and implementation

EHR Vendors Most Frequently Used by Health Centers

Organization: HITEQ, Year: 2021

Description: HITEQ publications informed by 2014 to 2020 UDS data to identify the most frequently used EHRs at health centers

Health Center EHR Transition Tips

Organization: HITEQ, Year: N/A

Description: HITEQ's resource page for EHR transition tools

To Switch or Not to Switch: A Guide for Community Clinics Considering Changing EHRs

Organization: California Health Care Foundation, Year: 2019

Description: Guide for health centers considering switching EHR systems

Selecting Virtual Care Technology

Considerations for Selecting a Technology Vendor

Organization: California TRC, Year: 2022

Description: Fillable toolkit that health centers can use when considering vendors for telehealth

Equipment Selection Guide

Organization: California TRC, Year: N/A

Description: Tool for helping with equipment selection based on type of telehealth service offered

National Telehealth Technology Assessment Resource Center Website

Organization: National Telehealth Technology Assessment Resource Center, Year: N/A

Description: Website landing page for National Telehealth Technology Assessment Resource Center, which includes toolkits, events, technical assistance, and other resources for telehealth technology

Remote Patient Monitoring (RPM) Toolkit

Organization: California TRC, Year: 2021

Description: Guide to implementing and optimizing RPM for health center providers

Virtual Care Sustainability

Build a Sustainable Telehealth Practice
Organization: HHS, Year: N/A

Description: HHS telehealth page for sustainability tips

Designing Space for Hybrid Care Models
Organization: Capital Link, Year: 2023

Description: Guidance on designing facilities to best accommodate both in-person and virtual care

Program Sustainability Assessment Tool
Organization: Washington University in St. Louis, Year: N/A

Description: Self-assessment tool for evaluating sustainability of a program

Rural Community Health Toolkit Module 5: Planning for Funding and Sustainability
Organization: Rural Health Information Hub, Year: N/A

Description: Rural health toolkit section on planning for sustainability and sustainability strategies

Telehealth Policy Finder
Organization: Center for Connected Health Policy, Year: N/A

Description: Free policy finder database for telehealth-related laws and regulations across all 50 states

Sample Telehealth Sustainability Worksheet
Organization: California TRC, Year: N/A

Description: Calculator tool for health centers to determine how contracting with providers will affect sustainability selection based on type of telehealth service offered

Quality Improvement Fund Optimizing Virtual Care Toolkit:
Insights & Tools from 29 Health Centers

HRSA Health Center Program

| Overview | Planning Insights | Engagement Insights | Delivery Insights |

| Assessment Insights | Sustainability Insights | Case Study & Resources | Acronyms, Glossary & Appendices |

ACRONYMS

AHRQ	Agency for Healthcare Research and Quality
AI	Artificial Intelligence
AMA	American Medical Association
BMR	Biannual Measures Report
CDC	Centers for Disease Control and Prevention
CFIR	Consolidated Framework for Implementation Research
CHW	Community Health Worker
CMS	Centers for Medicare and Medicaid Services
EHR	Electronic Health Record
FCC	Federal Communications Commission
FDA	U.S. Food and Drug Administration
FQHC	Federally Qualified Health Center
HCCN	Health Center Controlled Network
HHS	Health and Human Services
HIPAA	Health Insurance Portability and Accountability Act
HITEQ	Health Information Technology, Evaluation, and Quality Center
HRSA	Health Resources and Services Administration
IT	Information Technology
mHealth	Mobile Health
MPR	Monthly Progress Report
NACHC	National Association of Community Health Centers
NTTAP	National Training and Technical Assistance Partner
ONC	Office of the National Coordinator
QIF-OVC	Quality Improvement Fund - Optimizing Virtual Care
PCA	Primary Care Association
PRAPARE	Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences
PSA	Public Service Announcement
RPM	Remote Patient Monitoring
SDOH	Social Determinants of Health
SNAP	Supplemental Nutrition Assistance Program
TRC	Telehealth Resource Center
UDS	Uniform Data System
VCSD	Virtual Care Strategic and Tactical Deployment Maturity Self-Assessment Model

GLOSSARY

Asynchronous Telehealth

- A communication approach that uses technology (e.g., a patient portal) to electronically transmit medical information (such as x-rays, sonograms, other digital images, data derived from questionnaires, and pre-recorded audio or videos that are not real-time interactions) for remote evaluation.[9]
- Can include evaluation by a provider, which is defined as interpretation and follow-up.
- Also known as "store-and-forward."

Community Health Worker (CHW)

- A frontline public health worker who is a trusted member of the community being served or has a very good understanding of the community.[10,11]
- Supports work within and collaboration among the community, social services, and health centers to help the community know about and get services.
- Helps improve the quality of services available to the community and helps ensure services are in line with the needs and cultures of the community.

Community Kiosks

- Digital platforms that provide health-related information and services to the public, such as health information, patient self-check-in, and telemonitoring.[15]
- Can be set up in community locations to help address barriers to internet access at patient homes, allowing patients to engage in virtual care services.

Consolidated Framework for Implementation Research (CFIR)

- CFIR is a practical theory-based guide used to assess barriers and facilitators across five domains to tailor implementation strategies and adaptations for innovations.[3] In this document, CFIR is used as an adaptable guide to organize the content of the Toolkit; it is not anticipated that health centers will implement the CFIR framework itself.

Digital Literacy

- The ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills.[23]

Digital Navigator

- An individual who works repeatedly with community members to address all their digital needs (e.g., access to the internet, access to devices, digital skills).[24]

Electronic Health Record (EHR)

- A digital version of a patient's paper chart.[28,29]
- Real-time, patient-centered records that make information available instantly and securely to authorized users.

Equality

- The state of being equal, especially in status, rights, and opportunities. Equality means each individual or group of people is given the same resources and opportunities, regardless of their circumstances.[21]

Equity

- The consistent and systematic fair, just, and impartial treatment of all individuals, including individuals who belong to underserved communities that have been denied such treatment, such as Black, Latino, and Indigenous and Native American persons, Asian Americans and Pacific Islanders, and other persons of color; members of religious minorities; lesbian, gay, bisexual, transgender, and queer (LGBTQ+) persons; persons with disabilities; persons who live in rural areas; and persons otherwise adversely affected by persistent poverty or inequality.[22]

Health Equity

- The ability for every person to attain the highest level of health possible, especially among populations that face inequities due to injustices and circumstances that are socially determined.[4]
- Within virtual care, health equity includes the ability for everyone to be able to access, use, and engage in virtual care, especially among communities that have been marginalized.[30]

Journey Map

- A tool to show how a person or group accomplishes a goal.[31]

mHealth (Mobile Health)

- Technologies, like smartphone and tablet applications (apps), that enable people to capture or track personal health, fitness, or wellness information, or to access general health education materials independent of an interaction with a health care provider.[32,33]
- Capture data used for health self-management (it is the user's choice to share data with a provider).
- Do not meet the U.S. Food and Drug Administration (FDA) definition of a medical device.

Patient Advisory Council

- A group of patients and/or caregivers who share their perspectives and experiences with health system staff to provide insight to improve performance of a health system.[34,35]

Person-Centered Care

- A health care approach that prioritizes the individual's goals, values, and preferences. It promotes effective communication between the provider and patient, empowering both to collaboratively create effective care plans.[36]

Remote Patient Monitoring (RPM) Devices

- Devices that can be used to collect and transmit medical patient data, like pulse and blood pressure, from patients in one location (typically a home) to health care providers in a different location for monitoring and evaluation[.5,6]
- RPM technologies can:
  - Collect health data from patients in their daily lives to monitor their health conditions (e.g., a device that measures heart rate and rhythm to monitor heart conditions).
  - Transfer collected data to a secure location either synchronously (e.g., data are continuously sent to a health provider in real time) or asynchronously (e.g., a batch of data is transmitted only at specific points in the day).
  - Provide data to a provider or other qualified health professional in another location (e.g., at the health center) for analysis and interpretation to assess a patient's status or to develop or adapt a care plan.
  - Include a smartphone or tablet app that is used along with an FDA-regulated medical device used for RPM.
- For clinical care, RPM devices need to be:
  - Prescribed or recommended by a provider or by a qualified health professional who is under the general supervision of a provider.
  - Documented in the patient health record.

Social Determinants of Health (SDOH)

- Factors like financial stability, education, access to health care, neighborhood conditions, and community issues that can affect a person's health.[37]

Synchronous Telehealth

- Synchronous (real-time) telehealth services include audio-only services that use a two-way, interactive audio-only technology, such as a telephone for live or real-time interactions between a patient and provider.[8,38]
- Video-only services that use a two-way video technology or other HIPAA-compliant video connection to conduct a live or real-time interactive visit between a patient and provider.

HOME

Thin Client Laptop

- A computer that uses resources housed inside a central server as opposed to a hard drive. A thin laptop connects to a server-based environment that hosts most applications, memory, and sensitive data the user needs. Thin client laptops can also connect to servers based in the cloud.[20]

Virtual Care

- The use of technologies, such as telehealth, remote patient monitoring, and self-management tools driven by artificial intelligence (AI) and machine-based learning.[39]

Workflow

- The sequence of specific activities or tasks performed by individuals or teams sequentially or simultaneously.[19]

APPENDIX A:

QIF-OVC PROJECT AWARDEE BACKGROUND

Through the Quality Improvement Fund - Optimizing Virtual Care (QIF-OVC) project, the Health Resources and Services Administration (HRSA) funded 29 health centers to develop, implement, and evaluate innovative evidence-based virtual care strategies from March 2022 to February 2024. HRSA acknowledges the 29 QIF-OVC awardees for sharing their journeys, knowledge, and accomplishments that form the basis of this Toolkit. The virtual care strategies included the following:

- Expand on the national surge in virtual care utilization at health centers in response to the COVID-19 public health emergency.
- Optimize the use of virtual care to increase access and improve clinical quality for populations who are medically underserved and have historically faced barriers to care.
- Have potential to adapt and scale across HRSA's Health Center Program.

As shown in Figure 1, the 29 QIF-OVC awardees were located across the United States, representing 14 states and one territory. About half of the health centers serve rural service areas. The awardee health centers ranged in size and served between 2,681 and 239,574 patients (UDS, 2022).

Figure 1. QIF-OVC Project Awardee Locations

QIF-OVC Project Awardee Locations

The 29 QIF-OVC awardees vary widely by geography, rurality and other HRSA funding sources. QIF-OVC awardees are in **seven HRSA regions, 14 states, and one territory**.

QIF-OVC Awardee Map by HRSA Region, State and U.S. Territory

Legend
★ A star indicates a specific health center funded through OVC.

Awardees by Health Center Controlled Network (HCCN) (HRSA, 2024)

26 Participated in HCCNs

Awardees by Service Area Rurality (Self-Reported by QIF-OVC Awardees)

5 With only rural service areas
15 With only urban service areas
9 With rural & urban service areas

Awardees with Special Funding (HRSA, 2024)

16 Health Care for the Homeless
6 Health Centers for Residents of Public Housing
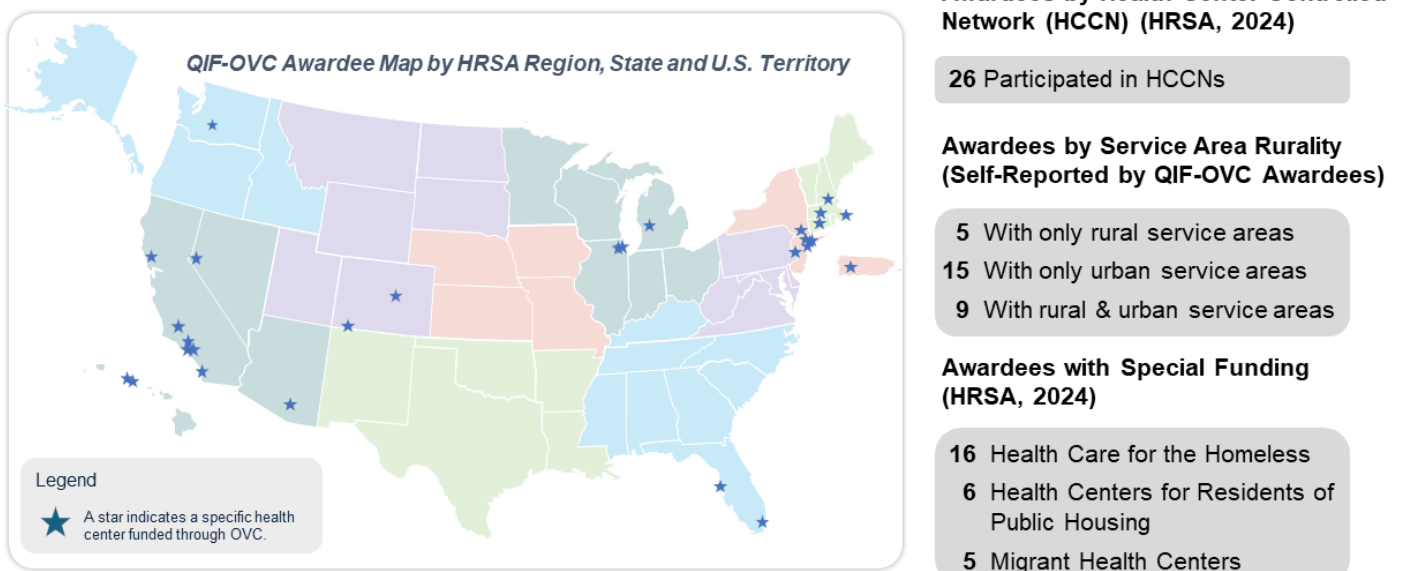5 Migrant Health Centers

Figure 2 provides an overview of awardee characteristics at the beginning of the QIF-OVC Project, based on public 2020 Uniform Data System (UDS) data and awardees' self-reported grant application submissions. QIF-OVC awardee grant application and public data were foundational to this information.

Figure 2. QIF-OVC Project Awardee Characteristics

Most planned to implement remote monitoring and synchronous virtual video/audio visits.	Slightly higher proportion of patients had Medicaid or CHIP insurance as compared to other HRSA health centers.	Fourteen served individuals experiencing homelessness. Three served migrant and seasonal workers.	Twenty-two planned to serve patients with limited English language proficiency.	Most common virtual care service areas were behavioral and mental health, general chronic conditions, and general health.

APPENDIX B: QIF-OVC PROJECT DATA COLLECTION OVERVIEW

To support Quality Improvement Fund - Optimizing Virtual Care (QIF-OVC) awardees in capturing information for QIF-OVC measures, HRSA developed two data collection instruments including a Monthly Progress Report (MPR) and a Biannual Measures Report (BMR). QIF-OVC awardees submitted data using MPR and BMR templates for 24 reporting months (March 2022–February 2024).

Monthly Progress Report (MPR): QIF-OVC awardees completed an MPR template in Microsoft Excel to share information about implementing the QIF-OVC project and related health center activities during the reporting month. The MPR template captured quantitative and qualitative data related to key activities and QIF-OVC objectives.

Biannual Measures Report (BMR): QIF-OVC awardees completed the BMR template in Microsoft Excel to share information about how health centers were using virtual care and to describe progress toward QIF-OVC project objectives, during the six-month reporting period. The template gathered quantitative information on patient volumes and claims and qualitative data on awardee experiences implementing virtual care.

The following assessment questions were used as the foundation for data collection.

1. **Context:** What is the context for health center implementation of virtual care strategies?
2. **QIF-OVC Project Implementation:** How are QIF-OVC projects implemented? How are health centers progressing toward their goals?
3. **Access:** In what ways does virtual care implementation contribute to patient access to care and information?
4. **Quality:** How do health centers' virtual care services contribute to clinical quality and health outcomes?
5. **Care Coordination:** How does virtual care contribute to patient care coordination?
6. **Health Equity:** In what ways does health center virtual care delivery contribute to advancements in health equity?

APPENDIX C: VIRTUAL CARE TECHNOLOGY CHECKLIST

This checklist is designed to help health centers evaluate potential technology solutions. Health centers can fill it out digitally or print a hardcopy to complete manually. Be sure to save the document after filling it out.

To complete the checklist:

1. Fill in technology solution names and descriptions (e.g., continuous glucose monitor (CGM) device brand and model number).
2. For each question, mark each solution area with a "Y" for Yes or "N" for No.
3. Add notes in the "Notes" column on the right.
4. Complete the Results Summary by tallying the total "Y's." Note: Not all boxes may need a "Y" for a solution to be adopted. It's up to the health center to decide the best fit.
5. Save the document.

Additional resources include the Telehealth Implementation Playbook (see page 32–38) or the Federally Qualified Health Center (FQHC) Telehealth Consortium Telehealth Playbook (Technology and Tools section).

APPENDIX C: VIRTUAL CARE TECHNOLOGY CHECKLIST

	Technology Solution Name	Description
Solution 1	_____	_____
Solution 2	_____	_____
Solution 3	_____	_____

⚙️ **Choosing the Right Virtual Care Technology Checklist**

Y Yes   **N** No

Person-Centered Care

	Solution 1	Solution 2	Solution 3	Notes
1. Can patients access technology on devices and digital platforms?				
2. Are technical support resources readily available?				
3. Are the technologies compatible with the patients' readiness and comfort in using them?				
4. How responsive is the technology to patient concerns about information privacy and security?				
5. Are messages and materials available in patients' preferred languages?				

Health Equity Promotion

1. Can the technology help you identify and report on how different users are using it?				
2. Is the technology easily accessible to health centers, providers, and patients?				
3. Can the technology help you better identify or address patient needs?				
4. Will the technology increase patient access to important information or to virtual care appointments?				

Health Center Operations

Health Center Operations	Solution 1	Solution 2	Solution 3	Notes
1. Can you maintain the costs in the long-term (e.g., costs with acquisition, customization, and maintenance)?				
2. Can the technology be applied across multiple services at your health center?				
3. Is the technology easy for staff to use?				
4. Does the technology meet your privacy and security standards?				
5. Does the technology work well with your internet access?				
6. Does the technology provide data to help improve quality and health outcomes?				

System Integration

System Integration	Solution 1	Solution 2	Solution 3	Notes
1. Does the technology work well with your current technology, like your EHR system?				
2. Does the technology work with your reporting platform?				
3. Does the technology meet the needs of your different workflows, patient populations, and locations?				
4. Do you have enough IT staff to support the technology now and in the future?				

Health Center Specific Questions

Results Summary

Results Summary	Solution 1	Solution 2	Solution 3	Notes
Total Yes				
Total No				

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