Telehealth in School-Based Clinics: Opportunities and Recommendations for the Future

Background

Telehealth is defined by the Health Resources and Service Administration (HRSA) as "the use of electronic information and telecommunication technologies to support long-distance clinical health care, patient and professional health-related education, health administration, and public health." The Center for Connected Health Policy (CCHP), describes telehealth as a "broad term that encompasses a variety of telecommunications technologies and tactics to provide health services from a distance. Telehealth is not a specific clinical service, but rather a collection of means to enhance care and education delivery." Both definitions describe the breadth of telehealth, which can take many forms though generally fall into one of four modalities outlined by CCHP, which include (1) Live Video (2) Store-and-Forward (3) Remote Patient Monitoring, and (4) Mobile Health.

Telehealth is a way to deliver healthcare and has been used in various capacities since the late 1800s. However, routine use of telehealth to care for patients remains a relatively new practice. The rapid need to serve people in new ways during the COVID-19 pandemic served as a catalyst for policy reform, technological advances, and attention to decreasing barriers to accessing healthcare without going to an office and by using technology. The long history of telehealth details an impressive evolution of the interplay between technological advances and the delivery of healthcare. Yet the slow uptake of a model of care delivery that is over 100 years old also holds important lessons.

Over a period of three years, Youth Healthcare Alliance, with funding from Kaiser Permanente, supported three organizations in creating pilot programs that sought to use a hub-and-spoke model of telehealth to expand integrated primary care and behavioral health services to schools that did not have a school-based health center. In this model, an existing school-based clinic or community clinic served as a "hub," where the provider was located and in-person care could be delivered. Each

organization worked with a school in their community to establish a telehealth "spoke" site, where there was a designated place for youth to receive primary and behavioral care services through technology supportive of live video delivery of care.

Over the course of the project, many state and national changes impacting patient and provider use of telehealth occurred, from an end to the COVID-19 public health emergency, to codifying billable telehealth services in Colorado's Medicaid program. The overall landscape in schools and in healthcare also shifted in the move from heavy in-person restrictions throughout the pandemic to the process of rebuilding and reconnecting as those lifted. For YHA, what started as a pilot project focused on a hub-and-spoke model of telehealth care evolved to become more responsive to school partners, youth, and organizational needs and abilities.

As we look to the future, telehealth is likely to remain an important and growing modality for delivering healthcare. How, when, and where telehealth fits into the myriads of work school-based clinics engage in will depend on the specific needs and goals of each organization and the schools and communities they serve. The takeaways from the work with organizations in this project as well as insights gained from outside research are reflected in this paper to help inform that work into the future.

Identifying Where Telehealth Fits

Before advancing telehealth work within your school-based program, consider this question:

"What goal, challenge, and/or need can telehealth help our clinic reach?"

The answers to this question will inform what type of telehealth model, equipment, and staffing you explore. Additionally, understanding community need and perception of telehealth and school-based health is critical to developing a successful model of care delivery. Flexible and innovative approaches to align community insights with organizational goals are necessary when designing this model of care delivery. Assessing needs and assets at both levels is a continuous, concurrent practice in the planning, design, and implementation of this model of care delivery. Educating the community on what is possible and the operating agency on what is (and is not) desired is foundational for a collaborative planning process.

In all telehealth delivery models, ensuring that services are designed and implemented with patient, family, school, and provider feedback and in response to community needs is critical to success of the program. Organizations exploring a hub-and-spoke model of telehealth delivery are encouraged to approach a spoke-site as a new clinic, with a similar process for planning as would be done for a brick-and-mortar clinic.

Planning: Utilizing YHA's Opening a School-Based Health Center Manual

There are many similarities between establishing a telehealth spoke site and opening a traditional school-based clinic. Completing a needs and assets assessment is the best practice for opening a new school-based clinic. Understanding community need, interest, and buy-in as well as school district and school-specific level investment in the school-based program is equally important when exploring the use of telehealth to deliver care, even if the organization operates existing school-based clinics. Unique telehealth considerations, such as the level of autonomy needed on the part of patients and families and the balance of in-person and virtual support the operating organization can

staff, will all shape the type and structure of telehealth services and are explored throughout the planning process.

Taking the time to develop agreements with the school-level staff where the spoke site will be located requires heightened attention when pursuing telehealth delivery of care, as there will be a greater need for school support with a lighter in-person footprint by the operating organization. That said, perhaps the most significant takeaway from the telehealth pilot project is the importance of the operating organization ensuring in-person staff, employed by that organization, are present at the school telehealth hub location. What type of staff, how often, and in what capacity will all be determined in partnership with the community and school as part of the planning process.

Youth Healthcare Alliance's Manual for Opening a School-Based Health Center has detailed information to support this process. Below are considerations for how to apply the information in the manual to the opening of a telehealth hub-and-spoke model of care delivery. This information is meant to complement the existing manual that was created to aid organizations in opening a brick-and-mortal school-based health center with an understanding that there will be some aspects that do not apply to telehealth hub-and-spoke models. Additional information and resources for implementing telehealth in school-based care can be found on the Youth Healthcare Alliance website under Starting a School-Based Clinic, which has additional planning formation for starting an in-person school-based clinic that may also be of help.

- **Chapter 1: Overview**
  - Beginning to think through how a telehealth hub-and-spoke model can bring the advantages of school-based health center to the school(s) being considered
  - Identify which services lend themselves to a telehealth hub-and-spoke model of care delivery, and which are not suitable for this model
  - Remember that the three key components for a sustainable school-based health clinic are foundational across care delivery types
- **Chapter 2: Strong Partnerships**
  - A telehealth model of care delivery is dependent on buy-in from staff at the school where the telehealth services are located. Ensure district-level staff communicate with school-level staff who will be impacted.
    - Include revisions to existing MOU with district as needed
    - Create new MOUs with the district as needed
  - Clarity on the asks and responsibilities of school staff to support telehealth services is a critical part of the planning process.
    - Consider how different approaches and staffing structures for the telehealth site could both benefit school health services staff as well as how they might tax their existing capacity.
  - Throughout the planning process, in-person engagement and communication strategies are necessary. Review chapter 2 subsection "Who Should Be Involved."
    - This will vary based on the staff structure, services offered, and ages served.
    - Learning about youth perceptions, interest, and hesitancy in receiving healthcare via telehealth services is key part of the planning process
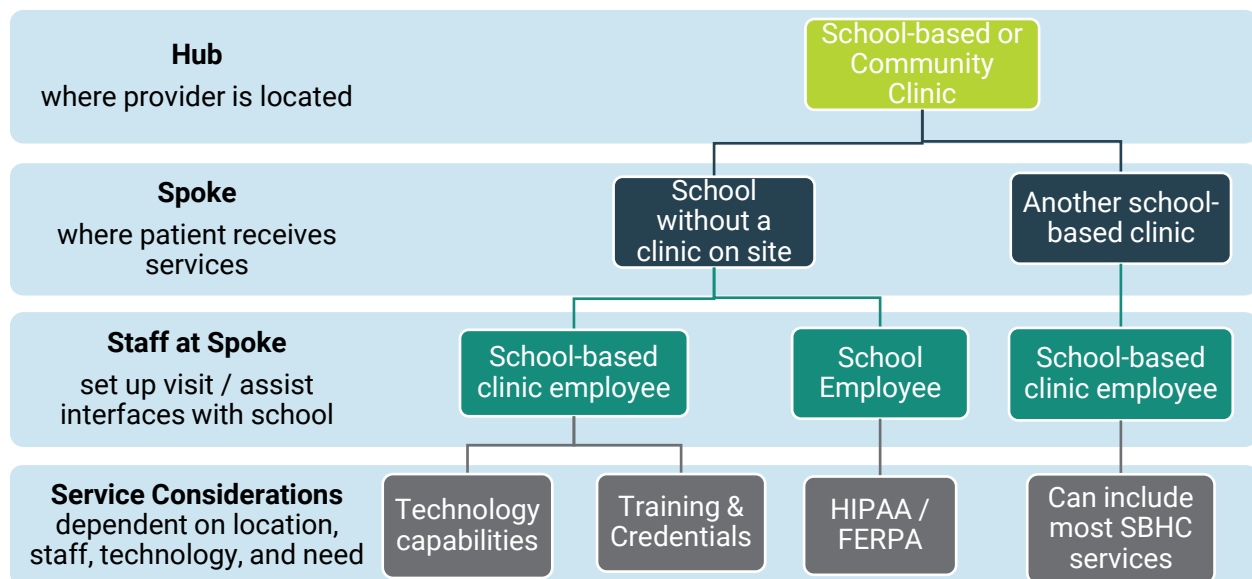- **Chapter 3: Sound Business Model**
  - Financial Plan: Consider services that are common in school-based healthcare and what is and is not billable in telehealth delivery (for example well visits and immunizations)

- Examine how telehealth delivery of school-based healthcare fits in the overall organization business model (opportunities to maximize provider schedules, staffing using nurses at spoke site for billable services, etc.)
- Ensure a market analysis specific to telehealth delivery of care is carried out and provide education as needed to increase understanding of ways in which the model can be used. The needs assessment, focus groups, community surveys, and other strategies outlined in the manual speak to ways to gather this information.
    - Providers and patients need to be on-board with telehealth services for success. Previous lessons in piloting telehealth services indicate that just because telehealth is the only way to receive services does not mean people will use it if there is hesitance.
- **Chapter 4: Business Plan – Governance and Management Structure**
    - In addition to the considerations in the existing manual, when planning for a telehealth hub-and-spoke school-based site, consider additional asks that may be needed of the school and district, such as increase IT access and support, broadband and network security needs, and distribution of clinic enrollment forms, and overall marketing and promotion needs.
- **Chapter 5: Business Plan – Operations**
    - Review the categories of operations through the lens of telehealth delivery of care and think through the questions below.
        - What are the space, equipment, and storage needs?
            - Will you have medications on site? Laboratory capabilities? Vaccines?
        - How will enrollment paperwork and scheduling be facilitated with families and students seeking minor consent services?
        - Will hours of operation include any in-person services, be by appointment only, etc.?
        - What organizational structures are needed to ensure providers are available?
        - What might need to change between telehealth processes for existing outpatient clinics to adapt to seeing youth at school – particularly with HIPAA, FERPA, minor consent, and confidentiality considerations?
        - How might integrated care look in a telehealth setting?
- **Chapter 6: Business Plan - Financial Pro Forma & Sustainability**
    - Examine current telehealth billing within the organization and current telehealth billing allowances under state and federal law
    - Explore ways to support services that are not billable via telehealth (such as well child checks) through workflows that allow easy access for in-person care at the hub location or that involve a provider having weekly/monthly/quarterly hours to provide in-person care at the spoke-site
- **Chapter 7: Business Plan – Marketing**
    - When designing marketing strategies for a telehealth site, consider how to be present in-person and what school and district mechanisms you can utilize for promoting the clinic
    - Consider an "open house" where you can demonstrate how telehealth services are provided
- **Chapter 8: Data Collection, Reporting, and Evaluation**
    - Consider what exists in the telehealth platform and your EHR to capture visits done via telehealth at the spoke site

- Create virtual options for capturing family and patient experiences at the telehealth spoke site
- Determine how you will continue to capture staff, community, school, district, and youth input to inform and refine the telehealth program beyond service user feedback
- **Chapter 9: Advocacy and Recruiting Champions**
  - Establishing an in-person presence at the telehealth spoke-site location allows operating organizations more opportunities to advocate and identify champions
  - Consider how a successful telehealth hub-and-spoke model of school-based care might open the doors to advocate for increasing school-based healthcare at the spoke-site school, through the addition of more services and/or transition to a brick-and-mortar location

Telehealth Hub-and-Spoke Staffing and Technology Considerations

Delivering healthcare to youth at schools using a telehealth hub-and-spoke model requires unique staffing considerations and can require different technology than is typically found at a brick-and-mortal clinic. The type of services offered at the spoke site will impact staffing structures and technology needs. Who is being served and how those services are provided will also impact staffing, technology, and supplies. Takeaways from pilots of this model of healthcare delivery underscore the need to include in-person staff (employed by the spoke site operator) at the spoke site to facilitate all types of visits, whether directly involved in the telehealth visit or peripheral to the visit and supportive of logistics such as enrollment, visit set-up, crisis support, follow-up, and promotion. The graphic below provides an overview of elements that impact these structures.

Hub where provider is located	School-based or Community Clinic		
Spoke where patient receives services	School without a clinic on site		Another school-based clinic
Staff at Spoke set up visit / assist interfaces with school	School-based clinic employee	School Employee	School-based clinic employee
Service Considerations dependent on location, staff, technology, and need	Technology capabilities / Training & Credentials	HIPAA / FERPA	Can include most SBHC services

More specific considerations impacting staffing and technology needs for telehealth hub-and-spoke sites are listed below.

- Patients at spoke site are scheduled by appointment only and/or are seen as walk-in/same day

- Ensuring a provider is available when patients expect to be seen is critical. If they have to wait, telehealth will not be seen as reliable care. If designing a program in which patients can be seen as a walk-in, you will need a dedicated telehealth provider schedule to cover these appointments.
- Visit types require a presenter to use telehealth equipment (such as a scope or skin camera) at the spoke site or can be accessed just by patient
- Visits at spoke include services that have standing orders or are billable nursing services (such as vaccines or injectable medication)
- Care offerings are within a specific service line (primary care or behavioral health) or are multidisciplinary
- Services are only provided to established patients within the operating organization or new patients can receive telehealth
- Services will only be offered via telehealth at the spoke site or a hybrid model is in place
  - Hybrid structures include a mix of in-person and telehealth – this could be on a daily, weekly, monthly, or quarterly basis. It could be that some services are provided in-person and others are only provided via telehealth.

When delivering care through a telehealth hub-and-spoke model, a dedicated and consistent, predicable staff schedule is essential, both at the school spoke site and at the hub. Additionally, it is important to have the necessary technology to support visits with plans for how to address technical issues quickly. Clear expectations of who is providing what type of IT support (school, operating organization, technology vendor, EHR vendor) and how to access that support will increase the success of your telehealth program.

Challenges and Lessons Learned

The three-year pilot project brought to light common challenges to effective telehealth hub-and-spoke delivery of school-based healthcare. Of note, this project did not begin with a needs and asset assessment, which in retrospect would have aided greatly in the program design for each clinic. While some of the project challenges were community or organization specific, several commonalities arose and are mentioned below, with guidance on potential ways to mitigate and overcome them. At the heart of these lessons is the importance of a formal planning phase using the information in the previous section. Additional factors for guidance to address challenges around establishing a telehealth hub-and-spoke model of school-based health services are below.

Staffing

Staff at the Spoke

As noted throughout this document, having a staff member employed by the operating organization as a regular and predictable presence at the school spoke site was determined to be a necessary staffing structure for effective telehealth hub-and-spoke model of care delivery. Relying on school health services staff, such as a school nurse or health tech, presented many challenges and ultimately did not lead to successful uptake of telehealth services at the school.

An initial challenge to this structure is how to cover the cost of staff at the spoke site, especially if they are not providing billable services and/or do not have full schedules. Figuring out what type of staff member to have stationed at the school spoke site and how often depends on the type of

services offered. Consider what a staff might be able to provide outside of provider role that could be billable as well as what work they may be able to do between spoke patient sites.

Pilot sites had the most success with staffing health educators 2-3 days per week and gained further traction with a nurse practitioner onsite once every one to two weeks to do in-person visits, facilitate vaccine clinics, and work more closely with school administrative staff. One pilot program focused on behavioral health found success with having an (adult) peer mentor on-site at the school two days per week to support enrollment paperwork work needs and help with getting initial visits set up virtually and able to build relationships with school staff to support referral.

All the pilot sites found that having consistent staff at the spoke site to provide an on-site direct service such as enrollment support, patient education and care coordination as well as engage with students in other ways, such as lunch tables and classroom education, was beneficial. Additionally, a provider's presence on a limited basis (at least monthly) seemed to increase overall utilization of telehealth services. For all staff types at the spoke site, their willingness and ability to interface with school staff greatly increased the school's awareness, understanding, and promotion of telehealth services and even sparked interest in conversations about in-person school-based health center options in the future. Being able to operate in multiple roles and adapt to emergent needs of youth, the school, and the organization were important characteristics.

Staff at the Hub

Timely, consistent, reliable access to a provider when expected is not only essential for a successful telehealth hub and spoke model of school-based health care, but also a cornerstone of quality care across all delivery models. To achieve this, organizations need to plan for whom at the hub site will be involved in providing telehealth services to the spoke, how these will be built into provider schedules, what backups will be in place in the event a provider is not available, and how the provider can be accessed for in-person appointments to ensure continuity of care when needed.

How spoke site services are scheduled, whether drop-in, same day, and/or scheduled ahead, will play a significant role in how to structure staff at the hub. In structures that allow for drop-in/same day care, consider what is a reasonable response time for a provider located at the hub once a service is requested and ensure that timing is clearly communicated to the school and patients and that it is honored. When a provider is expected and unavailable, both the school and patients lose confidence in the spoke site as a reliable place to access care and are less likely to look to it for future needs. Patients receiving telehealth services at the spoke site deserve access to a staffing structure that puts the same priority on staff reliability as is expected at the hub location.

While this sounds logical, it can be difficult for organizations to prioritize and maintain, especially if provider slots go unfilled and uptake is slow. Some creative provider staffing possibilities to mitigate this are below.

- Complement your existing schedule by evaluating when the hub site experiences lower patient volume (more no-shows or have fewer scheduling requests) and designate those days and times for telehealth appointments to start
- Create a structured telehealth provide schedule, with at least 2 backups for services being provided to walk-ins/same day patients

- o When possible, make one of the backups a provider in a largely administrative role who may be more likely to be available if a backup is needed
- Assign a provider to the telehealth site with only a few appointment slots at first and gradually increase the number of telehealth appointments available as demand increases
  - o Offset the slower start by having the provider go to the spoke site once a week

Trusted patient-provider relationships are at the core of successful school-based health programs. To maintain this in a telehealth hub-and-spoke model requires attention to designated, consistent providers delivering telehealth services and ensuring a smooth transition to these same providers for in-person services when needed.

Scheduling and Enrollment

Scheduling and enrollment processes for spoke-site patients are contingent on staffing models and types of services offered. Additional considerations include services that require parents to complete enrollment forms and those for which youth can self-consent. While youth may be able to consent for some services, they may have challenges scheduling for themselves if they cannot walk in to do so, as is the case with many in-person school-based clinics. Families may also struggle to return paperwork to a hub site, especially if they are not able to complete forms online due to accessibility barriers. A few strategies to support these challenges include the following.

- Make posters with a QR code that links to a site where youth/families can request someone from the organization contacts them to schedule an appointment via their preferred method of contact.
- Have paper enrollment packets available from school health staff, school administrators, and the front office as well as online with electronic signature capabilities.
- Develop a HIPAA and FERPA compliant process for the school to collect enrollment paperwork to handoff to spoke site staff at regular intervals. Have scanning and uploading processes in place for forms to be entered into the EHR in real time.
- Make sure staff answering calls that will be coming in for spoke site scheduling have a workflow for identifying that the appointment is being schedule for telehealth at the spoke site and communicate any enrollment paperwork needs and options for those as part of scheduling.
- Create enrollment processes that allow patients/families to return enrollment paperwork to the hub location as well as the spoke site for increase access opportunities.
- Utilize organizational staff at the spoke site in the enrollment and scheduling workflow, even if it is not part of their typical role.

Promotion

The power of a physical presence for promoting services is a huge asset for in-personal school-based health centers. School staff, students, and caregivers walk by the clinic daily and school-based clinic staff have the opportunity to engage with staff and students outside of scheduled appointments times. The pilot sites quickly realized how easy it is for telehealth services to fall off the radar. When operating a telehealth spoke site, there is a need for more intentional presence and outreach to let people know services are available. Student voice and school staff who are

champions of school-based healthcare can aid in spoke site promotion. See below for more ideas to keep telehealth services on the radar and increase awareness.

- Make engagement part of the spoke-site staff role
  - Maximize the impact of staff who are in-person at the spoke site by including school staff and student engagement in their work descriptions (classroom education, enrollment paperwork and referral coordination, etc.)
- Be present outside of the spoke-site space
  - Learn about and use opportunities for student engagement, such as working with the student council, wellness committee, or a health class to share information about the clinic
  - Support school needs such as providing immunization clinics during class time for CNA class
  - Set up informational tables in the lunch room (with school permission) where spoke-site staff can share information – it's a great place to give out SWAG
    - Consider having student feedback surveys (access through a QR code) to learn about what youth know about the spoke site and what they'd like it to be
- Offer telehealth technology demonstrations to walk through how a virtual appointment works
  - Host an open house that corresponds with a school events that families often attend together
- Signage
  - Work with the school to have signage around the school and on the door to direct students to the spoke site location
  - In addition to providing direction, signs are reminders that the spoke site is there

Preference for in-person care

Perhaps the greatest challenge organizations in the telehealth hub-and-spoke model faced was that youth and their families reported a strong preference for in-person care, to the extent that they were okay not accessing care at all (or wait) rather than engage in virtual services. At the end of the telehealth hub-and-spoke project, all of the participating organizations had responded to this by pivoting to provide hybrid services, mixing in-person and virtual access. Beginning with a comprehensive planning process to assess community interest in and understanding of telehealth services (by service type) and addressing concerns, including providing education on the model upfront, would have been helpful for this work. In addition to the planning process, some ideas for balancing patient preference for in-person care with a telehealth hub-and-spoke model are below.

- Offer in-person services for establishing care (primary care and/or behavioral health) at the hub site, with follow-up appointments to be done via telehealth at the spoke site.
- Have a provider go to the spoke site school on a regularly scheduled basis (weekly, every other, monthly) to provide in-person appointments.
- Offer open houses to students, families, and school staff and provide demonstrations to walk through a virtual care appointment.
- Ensure patients seen at the spoke site have easy and timely access to in-person care at the hub, and clearly explain how to they can access care both in-person and virtually
- Check any assumptions that youth are naturally inclined to engage with providers online. Student surveys can be a great way to learn what they are and are not comfortable with and open to.

- Note that while telehealth for mental health services for adults has grown rapidly in the past five years, this trend has not been true for youth. Consider starting with primary care services before adding behavioral health.

Successes and Opportunities

The successes experienced in this project present several opportunities for using telehealth to deliver school-based care. The central role of relationship building and partnership with schools necessary for this model offers a natural platform for cultivating and strengthening collaborations between healthcare providers and schools to reach young people. All of the organizations in this pilot found increased understanding of the importance of increasing access to care and support for school-based care from their host schools. This opened the door for discussions of other types of school-based care, including brick-and-mortar clinics. There is significant potential for telehealth hub-and-spokes to serve as steppingstones to full service, in-person clinics.

The success of hybrid models of care that allowed for in-person care at times in addition to telehealth services surfaced with many opportunities to support the needs and desires of youth as well as staffing needs of healthcare organizations. Telehealth has the potential to fill provider schedules, increasing productivity and reach without having to increase the number of providers on staff. In less population dense areas, this could be especially beneficial, as a telehealth and in-person hybrid could allow a single provider to serve multiple schools in a community.

Recommendations for the Future

Moving forward, there is a need to have flexible and responsive mechanisms to deliver healthcare to youth. Telehealth is here to stay, and in-person care is desired and essential. A successful balance of delivery of care will vary by community, underscoring the need for community participation and education as part of the planning process. In addition to conducting community-led needs and asset assessments, employing in-person staff to be available to support telehealth at the school site rose to the top of the recommendations for future telehealth models of school-based care. Ensuring that access to providers using telehealth is consistent and reliable and that access to in-person care is barrier-free and ensures continuity of care are also important in all future telehealth endeavors at schools.

Currently, using telehealth in conjunction with in-person care options appears to meet this balance in the most ideal way. How this looks can take many forms, from a provider splitting in-person time across sites, to a mobile unit rotation, to decreased barriers to accessing care a near-by community clinic. What type of services are provided via telehealth and available in person will likely be community specific as well, though based on the experiences within this project, we recommend starting with primary care and patient support services before added behavioral health, at least for new patients.

This project's focus on telehealth hub-and-spoke models shaped the recommendations made in this report. Youth Healthcare Alliance is aware of many innovative uses of telehealth and encourages healthcare providers to use telehealth creatively when responding to community needs. Moving forward, Youth Healthcare Alliance will continue to engage with school-based clinics in Colorado and learn from other states to cultivate resources and share information for expanding access to care through telehealth services.