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Practice Summary & Implementation
Guidance**

Integrated Services Program: Facilitating telehealth through the loan or lending of cellular technology and tablets

The Bureau of Children with Special Health Care Needs (CSHCN) created a “lending library” of the 30 laptops and mobile hotspots to be available to families who would benefit from telehealth visits. The lending libraries are located at various agencies throughout the State of Utah.



		
Location	Topic Area	Setting
Utah	Telehealth/Emergency Preparedness	Rural, Urban
		
Population Focus	NPM	Date Added
CYSHCN	NPM 11: Medical Home	July 2021

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Section 1: Practice Summary

PRACTICE DESCRIPTION

The Bureau of Children with Special Health Care Needs (CSHCN) purchased 30 laptops and mobile hotspots to allow for increased access to telehealth services in rural, urban, and underserved communities throughout Utah. CSHCN created a “lending library” of the devices to be available to families who would benefit from telehealth visits. The lending libraries are located at various agencies throughout the State of Utah, which include trained professionals with backgrounds in medicine, nursing, social work, care coordination, family peer support, audiology, physical and occupational therapies, and speech/language pathology. These devices were distributed to 4 local health departments (LHDs) in extremely rural areas of Utah. The lending libraries are marketed through the hospital systems, Utah Parent Center/F2FHIC, Help Me Grow Utah, state and local health departments, and local primary care providers. Families are able to connect with primary and specialty care, EI, and care coordination to facilitate connection with services and medical providers. Care coordinators and F2FHIC worked with families to connect with telehealth providers and provide additional telehealth education and support.

The lending library aids families who have limited time off of work or who would have had to travel incredibly long distances to get an assessment and receive care at a time of the day or day of the week that works for them. This means parents don’t have to miss work, or as much of their work day; and children don’t have to miss school for the evaluative and diagnostic services offered. Our care coordinators work with families to find times that are best for them, then coordinate with our providers to schedule the appointment. Families save money in travel, and air quality is increased with less driving. An additional benefit when evaluating and diagnosing development delay is that with telehealth, the child is often in his/her natural environment, not a medical provider’s office filled with foreign object and strangers. This is a literal example of meeting the family where they are to best fulfill the needs of the family and patient.

CORE COMPONENTS & PRACTICE ACTIVITES

The Bureau of Children with Special Health Care Needs is unable to provide direct face-to-face visits with patients and families due to COVID-19 restrictions and concerns with spreading the virus within the special populations we serve. CSHCN quickly converted live visits to telehealth to provide continuity of care. Over the past six months, through surveys and phone discussions with families, we have found many have been experiencing access issues because of lack of available technology, sparse or inconsistent internet availability or connectivity, and inability to coordinate telehealth visits with primary care providers and specialists. This practice allows us to reach many families by increasing access to technology that facilitates the telehealth experience and connects our families to needed supports, specialists, and services during the pandemic, and improve access to care for families that faced barriers to meeting in-person with providers and specialists prior to the public health emergency.



Pre-COVID, historically our multidisciplinary staff (OT, PT, SLP, APRN, psychologist, and audiologist) had been traveling on a state plane to evaluate and diagnose developmental delays in several underserved rural areas of the State at a cost of \$2500-3000 per trip. Traditionally, our team traveled to our rural partner sites approximately 6 times per year per location, with a total of 24 traveling clinics annually. Converting to telehealth has allowed us to provide assessments whenever both the patient and provider are free. This flexibility allows to meet families where they are, albeit virtually, and no longer means families have to wait for the next time we will physically be in their location.

One challenge continues to be the lack of cellular service in some remote areas of the state. When this is the case, access to a hotspot may not make a difference. To this end, we purchased four additional Chromebooks that are kept at the local health department so that families may conduct their remote telehealth visit where there is wireless access AND technical support from LHD staff. This may not be as convenient as participating in the telehealth visit from home, but does eliminate long distance travel for a face to face visit in a remote urban center. The ability to adapt to the families' unique circumstances is paramount. One size does not fit all.

As appropriate and practical, families pick up the Chromebooks and hotspots the hub (local health department or Parent Center); where indicate, staff will deliver equipment to families instead. Equipment has also been left with other organizations (e.g., secretary at the school). Overall, flexibility and adaptability are key components with the lending library program.

Core Components & Practice Activities

Core Component	Activities	Operational Details
Convenience	Making technology available where families live	Technology is readily available for loan, and travel to pick it up from loaner sites is not cumbersome.
Ease of Use	<p>Providing written instructions on use of technology.</p> <p>Providing live demo on how to use the technology.</p> <p>Helping families understand telehealth links and ensuring they are functional.</p>	<p>Provide families with written instructions on hotspots and Chromebooks, then show families how to operate both with actual equipment, and answer any questions. Care coordinators then work with families remotely to re-test equipment to ensure adequate cellular coverage and connectivity of Chromebook. The family clicks telehealth links from provider to ensure they are functional, and if</p>



		not, care coordinator provides assistance and helps problem solve.
Patient/Parent Satisfaction	User survey administered post-telehealth encounter.	A brief survey is emailed or texted to family to ensure the process worked well and technology was functional. Overall patient satisfaction is measured.

HEALTH EQUITY

The clientele served by this grant come from diverse backgrounds, cultures, languages, races, and ethnicities, including, but not limited to American Indian, Hispanic or Latino, Native Hawaiian/Pacific Islanders, and refugee populations. Per US Census data, the average broadband internet subscription in Utah is 85.7%; while some rural areas like Piute County is at 67.1%, and San Juan county is only at 52.7%. Providing this technology will expand capacity within these local areas to connect with many already existing telehealth programs and reduce stressors to families that don't have the knowledge or expertise to use telehealth; resources to purchase required technology; and/or live in an area which has limited internet infrastructure.

To address access barriers faced by families who live in areas with no cell coverage, the program purchased four more Chromebooks that are not for loan but are permanently stationed at the nearest LHD. These families are able to visit the LHD and have their appointments/receive services there. This flexibility highlights how the program does not take a "one size fits all" approach to ensuring that families have access to telehealth services.

Another way the program addresses equity is through contracting with an online interpreting company to ensure that families receive care in the language that is best for them. The program staff is also bilingual, with the psychologist and two care coordinators speaking Spanish.

Having local care coordinators who live in the community has been crucial to the success of the program. These individuals have been living in and working with these communities for years and have a deep understanding of the community and resources. One example of this is the care coordinator working with the Navajo health system. She understands those children and has professional relationships with those service organizations. Our strong partnership with the Utah Parent Center ensures the family voice is heard throughout planning and implementation of this project and other with which we are mutually affiliated. .

EVIDENCE OF EFFECTIVENESS



- Anecdotally, the program has heard success stories from parents indicating that this program allowed them to have appointments with providers at times and on days that more readily fit their schedules. For example, our psychologist and APRN were able to meet with a family at 7:00 p.m. and stayed in the assessment and evaluation until 9:00 p.m.
- Staff are deeply committed and going out of their way to make sure families access to the technology within our lending library. This includes both internal staff and our contracted care coordinators at the local health departments.
- Staff felt that often services like developmental screenings, evaluations, and diagnoses are easier and better via telehealth because children are in their natural environment.
- Word of mouth from families, providers, and our partners continues to serve as our best advertising for the availability of our lending library technology.
- The Chromebooks are having positive impacts in the community beyond the delivery of telehealth services: COVID vaccine sites were hosted using Chromebooks to help with registration.
- Care coordinators residing and working in the catchment area of the four local health departments bring an intimate knowledge of local community, culture, values, and beliefs. They easily foster and grow relationships of trust with the families they serve. They are viewed as public health experts and are relied upon for their skill in assessing, evaluating, and problem solving for families. Often these care coordinators work as a conduit between the family and the far distant telehealth provide by facilitating the telehealth visit and providing a trusted and supportive presence in that visit.

Section 2: Implementation Guidance

STAKEHOLDER EMPOWERMENT & COLLABORATION

This project will continue the collaborative partnership established years ago between Title V-CSHCN, local health departments, the University of Utah, Intermountain Health Care, and the Utah Parent Center/F2FHIC. Local care coordinators and F2FHIC staff act as the conduit between these organizations, parents and patients, and local and distance providers. Utah's Title V-CSHCN has partnered throughout the years with the UPC/F2FHIC. These agencies continue to provide us with meaningful consultation and perspective while ensuring peer to peer and family to family support. UPC feels this is a valuable project and has worked with the Title V-CSHCN Bureau to ensure families have access to the technology they need to have effective and efficient telehealth experiences.

CSHCN subcontracts with four local health departments and pays for a care coordinator at those sites. These positions are funded through Title V monies. These care coordinators are local "boots on the ground" and provide institutional knowledge; understand the community, traditions, and values; and know the families with whom they are working. In these communities, the LHD is a trusted source of knowledge, resources, and public health problem solving. Families use the LHD for WIC, immunization, well-woman care, and COVID and other communicable disease concerns. Including the lending library into the services they already provide was a logical solution to ensuring



families have access to this technology. Turned into others duties as assigned for them. Had strong existing partnerships with these care coordinators.

We have an in-house care coordinator stationed in Ogden Utah, an urban site with high inner-city poverty. This was felt to be the best urban location because of the high need and often lack of coordinated services.

REPLICATION

The model seems to be working well in the selected locations. With time, and feedback from parents, patients, providers, and our care coordinators, we would like to be able to place hotspots and Chromebooks for loan in the other nine health districts/departments across the State. User experience from surveys will be analyzed to improve both process and access.

PRACTICE TIMELINE

Phase: Planning/Pre-Implementation		
Activity Description	Time Needed	Responsible Party
Notice of RFP announced by AMCHP: Aug 19, 2020	Two weeks to submit letter of interest	CSHCN/ISP Management Team
Discussion with partners and stakeholders	One week	CSHCN/ISP Management Team
AMCHP Q&A Telehealth RFP and Q&A Webinar: Aug 26, 2021	One hour	CSHCN/ISP Management Team
Letter of interest submitted: Sept 1, 2020	1 day	CSHCN/ISP Management Team
RFP received and proposal prepared (Aug 31-Sept 15, 2020)	2 weeks	CSHCN/ISP Management Team/Partners



Research and obtain bids for telehealth technology (includes time frame to procure tech purchases): Aug 31- Sept 10, 2020	10 days	CSHCN/ISP Management Team/State of Utah Dept of Technology Services/State of Utah Purchasing (Procurement)
Meet with Utah Department of Health Grant Governance: Sept 8, 2020	1 hour	ISP Manager/ Governance Committee
Obtain letters of support: Sept 10, 2020	1 week	Community Partners
Proposal submitted to AMCHP: Sept 15, 2020	1 day	ISP Program Manager
Notice of Award and draft contract from AMCHP received: Sept 29, 2021	n/a	AMCHP

Phase: Implementation

Activity Description	Time Needed	Responsible Party
AMCHP contract and FFATA submitted to UDOH legal for review: Sept 20, 2021	1 week	ISP Manager/UDOH Legal Dept
Proposed contractual changes submitted to AMCHP: Oct 6, 2020	2 weeks	ISP Manager/AMCHP Legal



Fully executed contract received: Oct, 28, 2020	3 weeks	AMCHP
Timeframe to procure Chromebooks through State Purchasing confirmed: Nov 2, 2020	90-150 days	ISP Manager/State Purchasing
Communication with AMCHP for alternative purchasing options (AMCHP procurement); Nov 2, 2020	1 day	ISP Manager/ AMCHP
Chromebooks ordered and shipped (Nov 2, 2020)	1 week	Amazon
Chromebooks Delivered to UDOH: Nov 6, 2020	1 week	Amazon
Ordered carrying cases for Chromebooks and Hotspots: Nov 9, 2020	1 day	ISP Manager/ CSHCN Admin Assistant
Approval from State Purchasing to procure Hot Spots (Verizon State contract); Nov 12, 2020	1 week	CSHCN Admin Support/State Purchasing
AMCHP sends revised contract (minus the cost of the Chromebooks they procured on our behalf): Nov 16, 2020	2 weeks	AMCHP
Hotspots received at UDOH administrative office: Nov 16, 2020	1 week	UDOH Finance
Revised and signed contract returned to AMCHP: Nov 24, 2020	1 week	CSHCN/UDOH Management and Finance



Policy and Procedure and Acceptable Use documents for Lending Library created: Dec 2, 2020	1 week	ISP Manager
P&P and Acceptable Use documents sent to State Legal for review: Dec 2, 2020	1 day	ISP Manager
P&P and Acceptable Use documents Approved: Dec 3, 2020	1 day	UDOH Legal
All carrying cases received: Dec 17, 2020	1 month	Amazon
Chromebooks and Hotspots configured and inventoried: Jan 22, 2021	1 month	ISP Manager
Chromebooks and Hotspots mailed to rural health departments; and hand-delivered to Utah Parent Center and ISP Ogden Site; Jan 29, 2021	1 week	ISP Manager
Instructions on use and connectivity for Chromebooks and Hotspots created and disseminated: Jan 29, 2021	2 days	ISP Manager
Chromebooks and Hotspots received and inventoried by Lending Library sites: Feb 5, 2021	1 week	Care coordinators at LHDs, Ogden, and Utah Parent Center

Phase: Sustainability

Activity Description	Time Needed	Responsible Party
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Budget for ongoing cellular charges (hotspots) configured (portion of former in-state travel budget moved for this purpose)	1 week Ongoing prioritization	ISP Manager/ CSHCN Bureau Director/ Finance
Advertising by LHDs, CSHCN, ISP to inform of availability of this technology	Ongoing	ISP Manager/ Care Coordinators at LHDs/ Utah Parent Center
User satisfaction gathered, analyzed, and improvements to process and experience made	Ongoing	Families/Patients; ISP Manager/ Care Coordinators at LHDs/ Utah Parent Center

PRACTICE COST

Budget			
Activity/Item	Brief Description	Quantity	Total
Technology purchase	Asus 32G 14-inch Chromebooks	30 @ \$279	\$8,976.90
Technology purchase	Hotspots @\$79.99 per unit	30	\$2,399.70
Cellular charges	Ongoing monthly charges for cellular coverage (Hotspots) X 12 months	30 @ \$1050.30 per month	\$12,603.60
Total Amount:			\$23,980.20



LESSONS LEARNED

The COVID pandemic and the accompanying fears of travel and face to face encounters has pushed the healthcare and service delivery systems into a more readily available and accessible telehealth environment. As such, both providers and families have been encouraged to pursue telehealth as a viable alternative to the traditional live visit. While telehealth works very well in a wide range of patient encounters, it is NOT the solution for every situation. When we spoke with a medical group from Monticello, Utah, they indicated that well-child visits (Bright Futures) are not well suited to telehealth as both the hands-on physical evaluation AND subsequent scheduled immunizations cannot be completed virtually. For behavioral health evaluations, including testing for autism spectrum disorders, some children cannot or will not participate in front of a computer monitor, phone, or tablet. In these cases, live visits become the only option.

We've also learned that a hotspot is only as good as the wireless/broadband signal in the area. If families reside where there are no or very few cell towers, then a hotspot may not be the best option. In these cases, we have encouraged families and patients to schedule with the local health department, school, or library to use their wireless or wired connection to the internet. Most of these locations can provide a private room where the family may conduct the telehealth visit to remain HIPAA-compliant. Our care coordinators have helped to coordinate these arrangements between family, remote service provider, and the school, library, or health department.

Procurement on the State level can take a lot of time. In this instance, we discovered that Chromebooks within our price point (approximately \$300 per unit) were unavailable from State-approved vendors until several months into the project. We worked with AMCHP as our procurement agent for the Chromebooks and found that they were not only able to order much more quickly, but that the computers could be delivered within about a week by purchasing from a large on-line vendor. Because they make this purchase for us, our contract was amended to show the difference between original funding minus the cost of the computers.

NEXT STEPS

The technology is supported by state technology services and consultation with the Utah Telehealth Network. Post-grant, the lending library and hotspot connectivity will be sustained through reallocation of existing Title V monies that had previously been used for in-state traveling clinics, employee travel, and expense reimbursement. We will continue to look for other cost savings that can then be transferred to placing additional Lending Library technology at additional sites across the state.

RESOURCES PROVIDED

- Instructions to Patients: [Hot Spot](#)
- Instructions to Patients: [Chromebook](#)
- [Integrated Services Program Flyer](#)

