

REMOTE SUPPORTS

PREPARED BY

SHEA TANIS, PH.D.

University of Colorado
Department of Psychiatry



University of Colorado
Anschutz Medical Campus

CONTRIBUTIONS BY

DUSTIN WRIGHT

Founder and CEO
Disability Cocoon



Disability Cocoon
a technology movement



REMOTE SUPPORTS

Introduction

Remote supports "allows an off-site direct service provider to monitor and respond to a person's health, safety, and other needs using live communication while offering the person more independence in their home" (DODD OH, 2018). Remote support services are a relatively new "technology assisted support" services model that has gained popularity across the nation due to the ability of this service to address three critical areas of need: advancement in individual autonomy and self-direction, care efficiencies, and workforce shortages. The technology is perceived as both preventative and responsive in the supports of individuals with disabilities. In 2018, a nationwide survey of State Developmental Disability Agencies identified remote supports as the leading technology for current and future investment in IDD services and supports (Tanis, 2019).

While electronic monitoring has been captured within the Colorado Home and Community-Based Services (HCBS) waiver system, there is an interest in modernizing the service and definitions to allow for clarity, flexibility, and the opportunity to maximize administration and adoption by members, families, and providers. While there are many variables that add nuance to the service such as vendors, equipment, providers, staffing, etc. there are also unique opportunities to use remote supports to increase quality of life outcomes for individuals and families.

In this report we will examine:

- Opportunities for a new *remote support service* category in relationship to other services provided across Colorado HCBS waivers
- State models and promising practices related to remote supports
- Potential cost savings
- State personnel capacity and needs for the implementation of effective remote support services
- A Colorado state implementation process plan for remote supports

REMOTE SUPPORTS MAY USE MOTION SENSING SYSTEMS, RADIO FREQUENCY IDENTIFICATION, LIVE VIDEO FEEDS, LIVE AUDIO FEEDS, WEB BASED MONITORING SYSTEMS, OR ANOTHER DEVICE THAT FACILITATES LIVE TWO WAY COMMUNICATIONS



CREATION OF A NEW REMOTE SUPPORT SERVICE IN COLORADO

"ELECTRONIC MONITORING SERVICES INCLUDE THE INSTALLATION, PURCHASE OR RENTAL OF SERVICES THAT ALLOW YOU TO CALL FOR HELP IN AN EMERGENCY. SERVICES ALSO REMIND YOU OF MEDICAL APPOINTMENTS OR MEDICATION SCHEDULES."

Electronic monitoring as a service category to enhance care for people with disabilities was first introduced in 2006. Over time, the technology and terminology evolved to not only clarify the service but to reflect the values associated with its implementation. Electronic monitoring advanced to *remote monitoring* and is now favorably termed *remote supports*.

Colorado HCBS waivers still maintain the antiquated *electronic monitoring* service. The definition does not reflect the modernization of technology or the service delivery often associated with emerging remote supports. Remote supports (RS) are often encompassed in telehealth or telecare and include sensors and/or two-way communication systems to allow remote provision of care and safety. These services often involve a RS provider (company that holds the regulatory provision of the service); a RS vendor (company that supplies equipment, operates RS center, and employs RS specialist); and a back-up support person (someone who will physically respond to home if physical assistance is required).

It is the recommendation of the primary author, that Colorado adopt a new service category of *remote supports* with an all-inclusive rate to reflect the new technology service not otherwise captured in other waiver service definitions. This new remote support service category should include the assessment of individual goal alignment, rental/purchase of equipment, fee for service, training of personnel, training of families and members receiving services, initial installment of technology, ongoing maintenance, and outcome measurement.

EVALUATION OF COLORADO HCBS SERVICES

Home and Community-Based Service waivers vary significantly across states in definitions and administration. This lack of consistency has caused great confusion in comparing services across the nation. In Colorado, there are several service categories that are germane to remote supports: assistive technology, electronic monitoring, home accessibility adaptations, home modifications, personal emergency response, specialized medical equipment, and vehicle modification. It is the opinion of the primary author that there is an opportunity to restructure and re-define services in Colorado to add clarity and ease implementation across waivers and recipients.

Recommendations:

- Create a new *remote supports* service category to replace electronic monitoring and include personal emergency response within the service.
- Collapse home accessibility adaptations, home modifications, and vehicle modifications under a new *environmental accessibility adaptations and modifications* service.
- Create a new *technology solutions* service to keep pace with new and emerging technologies in the home and community that improve health, well-being and economic self-sufficiency.
- Maintain specialized medical equipment and assistive technology as separate services..

COLORADO WAIVERS AND RECIPIENTS

HCBS Waiver	Assistive Technology	Electronic Monitoring	Home Accessibility Adaptations	Home Modifications	Personal Emergency Response	Specialized Medical Equipment	Vehicle Mod.
Children's Extensive Support							
For Community Mental Health Supports							
For Persons with Brain Injury							
For Persons with Developmental Disabilities							
For Persons who are Elderly, Blind, and Disabled							
For Spinal Cord Injury							
Supported Living Services							



EVALUATION OF STATE MODEL AND COVERAGE

CONTRIBUTION BY DUSTIN WRIGHT

Founder and CEO
Disability Cocoon



Currently there are 19 states that have funding available for remote supports (or a similar service). Indiana was the first state to incorporate RS in their waiver system in 2008. Ohio, Missouri, and Kansas were among the first states to allow RS in their Medicaid system. The states mentioned had no benchmark for regulatory standards and reimbursement structures other than best practices collected from the handful of RS vendors across the U.S. There are six national vendors of remote care services (listed in no particular order): Night Owl, Rest Assured, Sengistix, SimpliSafe, Simply Home, and Therap.

State's RS implementation structure and standards vary widely because of: 1) lack of previously established standards, 2) complexities of already established waiver system structures (regulations, reimbursement methods, state vs. local oversight, private vs. state services coordination, etc.), 3) unique type of services offered by RS vendors, and 4) each states' "intentions" for RS. All of these factors combined with the state's current Medicaid waiver environment and varying perspectives of regulatory leadership create RS reimbursement models that vary drastically from state to state.

However, all the nuances can be categorized into two different RS Medicaid waiver reimbursement structure types: 1) daily rate reimbursement structures, and 2) unit based reimbursement structures.

States that reimburse for residential services in a daily rate structure tend to also fund remote supports in a daily rate structure. In many cases states essentially indicate that RS services are the equivalent of having a Direct Support Professional supporting the person in the home. In this model since reimbursement amounts are not adjusted residential service providers are able to realize the cost savings associated with RS. In other cases, RS is funded at a reduced rate at which the cost savings would be realized by the Medicaid division.

States that are funding residential support services in a unit-based reimbursement structure tend to also fund RS services using a unit-based methodology. Unit-based reimbursement system allows states to have flexibility to: define responsibility between the residential provider and the RS vendor, adjust rate structures to optimize equity of cost savings, and provide flexibility of back-up supports.

PROMISING PRACTICES

CONTRIBUTION BY

DUSTIN WRIGHT

Founder and CEO

Disability Cocoon

As the implementation of remote supports advances, new promising practices emerge. Here are some examples from vendors and states:

- Creation of rules and regulations that focus on individual outcomes instead of prescribing technological components.
- Establishment of all-inclusive rate structures vs. segmented rate structures.
- Avoidance of rules and regulations that are too prescriptive in nature that quickly become factors that limit expansion, innovation, and customization of RS services and equipment.
- Clearly defined differences between RS service and RS equipment compared to other reimbursable technology service options such as AT, DME, AAE, etc.
- Identification of payment methods for broadband and connectivity for RS services.
- Establishment of a multi-disciplinary task force that creates regulations and rate structures.
- Establishment of stakeholder input in the development of rates and rules.
- Execution of in person "town hall" type meetings to explain why, how, when, who, etc. will be involved in RS implementation.
- Incentives for the use of RS services (when appropriate) by setting optimal regulatory and rate environments.
- Ongoing educational meetings around the state after the RS service rules, regulations, and rates have been established.
- Creation of online RS services resource center to outline the new service requirements and address FAQ's.
- Execution of annual conference where the new RS service is highlighted and discussed openly.
- Creation of communication and knowledge dissemination channels for stakeholders to interact, share best practices, and success stories.
- Identification of success stories through professional created videos.
- Creation of "start-up grants" to the stakeholder community to create pockets of local experts that drive communication and education.
- Creation and designation of an RS services expert within the states's DD Division
- Establishment of demo homes where people can see the technology in action.



COST SAVINGS ANALYSIS

CONTRIBUTION BY

DUSTIN WRIGHT

Founder and CEO
Disability Cocoon



On the surface the costs savings to a state's Medicaid program when RS services are used in lieu of more expensive services is a fairly simple calculation. The cost savings are the difference between the previous service rate and the new RS service rate. However, the state's reimbursement structure can have a significant impact on the amount of savings, and where those savings are realized.

A Purdue University study conducted in 2008, (Brewer, et al.) found that if RS services were implemented in 450 locations in IN, the state would recognize a \$13.4M cost savings. Unfortunately, due to the complexities of conducting a large-scale study of cost savings in a market that varies significantly from state to state, there is little other cost savings information available. An industry recognized average is between 40-50% cost reduction.

Indiana uses a per hour unit of reimbursement with a cost per unit of \$8.22 for remote monitoring.

Indiana is undergoing a waiver redesign where recommendations have been made to transition from remote monitoring to remote support service

A simple calculation to give you a sense of the potential cost savings to the Medicaid waiver system:

*Number of people enrolled in waiver x 20% (approximation of population appropriate for RS services = Number of people that use RS x average number of hours of residential services provided per day per person x 50% (number of hours of on-site residential supports replaced by RS service) = Number of hours of residential services replaced by RS services x *cost of residential services per hour - cost of RS services per hour) = Anticipated Cost Savings.*

STATE INVESTMENT

There are many data points in the above formula that are based upon underlying assumptions of utilization and success. A valuable case study is Ohio who demonstrated their commitment to increasing technology supports in 2012 through the funding of telepsychiatry for people with dual diagnosis. In 2013, Ohio implemented the remote support technology in their HCBS waiver and by 2018 the Governor signed the Technology First Executive order to expand access to technology for people with disabilities. Two payment rates were identified in the service: Remote support with unpaid backup support \$6.88 per hour and Remote support with paid backup support \$10.24 per hour. The order outlined the implementation of the Ohio Technology First Council to identify benchmarks for implementation success.

Ohio Benchmarks

1. 2,150 people with disabilities receiving Medicaid-funded supports will have supportive technology authorized in their annual plan by December 31 2019
2. All 88 counties will access Medicaid funding for at least one person for remote support and/or assistive technology
3. All county board strategic plans or progress reports will include strategies for increasing the use of supportive technology to meet assessed needs
4. Each person with a disability will have an opportunity during the person-centered planning process to consider how technology may meet assessed needs.
5. Increase the number of certified technology vendors from 6-10 and expand provider capacity.

AS OF MARCH 2020, OHIO INCREASED THEIR NUMBER OF REMOTE SUPPORT USERS TO 685 AND ASSISTIVE TECHNOLOGY USERS TO 1,100

MISSOURI COST ANALYSIS

Missouri began their remote support strategy focusing on reinvestment of cost savings realized through the utilization of remote supports in the night time hours. Remote supports in addition to 8 hours per night is \$5.32 per hour per person. Thus,

40 hours per month of a DSP at \$26.00 per hour	\$1040.00
40 hours per month of RS beyond 8 hours a day	\$212.80

Difference of \$827.20

STATE PERSONNEL CAPACITY

WHERE TO MAKE INVESTMENT.

Through the examination of initial state investments in remote support technologies, it is clear that success is dependent upon holistic systems change efforts from the macro to meso level. State DD Agencies can increase capacity through the following strategies:

1. Establish a statewide guiding entity with diverse stakeholders to establish benchmarks and measure progress
2. Establish a dedicated FTE in the state agency to oversee remote support implementation from policy development and vendor capacity to member outcome measurement
3. Establish dedicated FTE in the state agency to coordinate communication, training, and outreach for remote support technology implementation and culture change
 - Marketing support
 - Training development coordination
 - Public relations navigation
4. Establish regional "technology champions" to perform stakeholder engagement sessions, training, and outreach
5. Make available regional grants for local implementation and provider incentives

While there are never enough financial and human resources to dedicate to a single service, there are opportunities to partner with established entities for grassroots implementation and outcome measurement that will contribute to systemic success.



IMPLEMENTATION PROCESS PLAN

Elements for Implementation

Implementation science is the "scientific study of methods to promote the systematic uptake of research findings and evidence-based practices into routine practice to improve quality and effectiveness" of legacy systems (Eccles & Mittmann, 2006). To realize systems change within a legacy system of disability services in technology solutions, the University of Colorado has modified Fixen and colleagues model for implementation science from the National Implementation Research Network <https://nirn.fpg.unc.edu/learn-implmentation/systemic-change>. A recommended implementation process would address each of the elements in the below diagram. Initial steps would establish a statewide diverse planning council to guide statewide policy implementation and develop policies that enable practice. Regulatory structures and HCBS waiver definitions would be modified to enable active implementation frameworks. The inclusion of *remote supports* as a new service category across relevant HCBS waivers supports the implementation model. Other technology related waiver definitions could also be revised as described earlier in this report. The below implementation model follows the recommendations and promising practices identified in other states emerging as drivers of technology solutions for high-quality community living for people with disabilities and their families.

