

Improving lives THROUGH  
supports and services  
THAT FOSTER self-determination.

## **Technology First**

The Missouri Division of Developmental  
Disabilities'

Assistive Technology Initiative



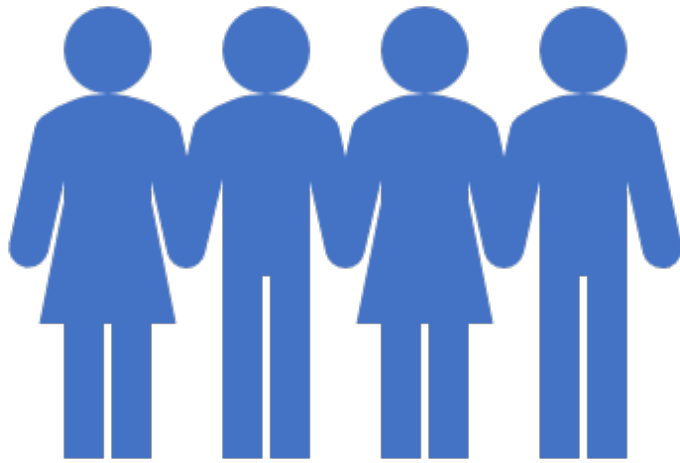
**Missouri Inclusive Housing Development Corporation**

| Lisa Turner, Housing Specialist



What Does Technology First Mean?

# Technology First



- The Division of Developmental Disabilities has developed an initiative to promote the use of Assistive Technology to increase the opportunities for individuals to achieve greater independence in their daily lives.
- The use of Assistive Technology will be considered **first** in the discussion of support options available to individuals.

# Benefits of Technology First



- Improves the quality of life for individuals who receive services
- Allows individuals to have more independence in their lives and gives them more privacy in their homes
- Provides tools that can increase safety and health for individuals
  - May be used to track adherence to medication schedules, sleep patterns, and the occurrence of health events
- Can be one of the solutions to the direct care staffing shortage
- Is often a less expensive option to providing direct staff support



What is Assistive Technology?

# Assistive Technology as defined by Missouri Statute

An assistive technology device is:

- Any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve functional capabilities of individuals with disabilities.

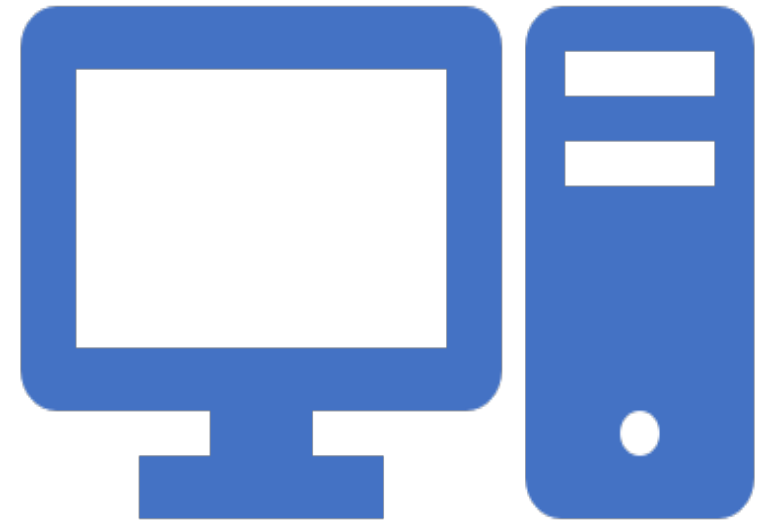
An assistive technology service is:

- Any service that directly assists an individual with a disability in the selection, acquisition, or use of an assistive device.



# Assistive Technology Services available through DD Waivers

- Personal Emergency Response Systems
- Medication Reminder Systems
- Remote support systems utilizing discreet movement or weight sensors, video, web cameras or other technology
- Other technology that protects the health and safety of an individual
- Assessments to determine appropriateness of assistive technology devices for individuals and to justify the need for the device
- Training in the use of the assistive technology device





# Assessments for Assistive Technology

- A device that is medical in nature may require assessment by a licensed OT or PT.
- Otherwise the need for an assessment is determined by the team on a case by case basis.
- If needed, the assessment may be completed by:
  - A licensed professional including OT or PT
  - A Qualified AT Specialist
    - Individual with expertise on the type of assistive technology being requested
  - A vendor authorized to consult, install, and monitor electronic systems or devices designed to enhance a person's independence and protect his/her health

# Personal Emergency Response Systems (PERS)

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An electronic device that is programmed to signal a response center once the help button is activated

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Enables an individual to secure help in an emergency

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Is limited to individuals who live alone or are alone for significant portions of the day, have no regular caregiver for extended periods of time, or who live with others who are unable to summon help, and would otherwise require extensive routine supervision

# Medication Reminder Systems

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Electronic device programmed to provide a reminder to an individual when medications are to be taken

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May be a phone ring, automated recording, or other alarm

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Some electronic devices dispense controlled dosages of medication and message the center if a medication has not been removed from the dispenser

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For individuals who are able to self-administer medications

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Medications must be set up by an RN or qualified professional

# Examples of Medication Dispensing Devices

**Requires landline**



**Contains wireless internal cellular modem**



# Remote Support Systems

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May include sensors in the home that alert remote support staff and/or track wellness information

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May include use of video and web cameras for communication

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Type of equipment and placement of monitors depends on needs and wishes of the individual

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When video equipment is used, installation in the home is at direction of the individual and in such a manner as to not invade the privacy of others who live in the home

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The device is controlled by the individual and can be turned off as needed

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Requires internet and/or cell phone coverage, depending on which system is used

## Examples of Other Assistive Technology

One time purchase or lease/rental of devices such as:

- Electronic motion sensor devices
- Door alarms
- Webcams for communication
- Telephones with modifications such as large buttons, picture buttons or flashing lights
- Devices affixed to wheelchair or walker to send an alert if the individual falls
- Text-to-speech software
- Devices that enhance images for people with low vision
- Intercom systems
- Hand held computer devices

# Aaron

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“It’s a growing field. It grows every day.”

- Lives in a universal designed home with his family
- Uses a home automation system for greater independence
  - Lights
  - Intercom
  - Ordering groceries
  - Video doorbell
- Plans to buy the home in the future



## Waiver funding for Assistive Technology services

- Available in all four waivers operated by Division of Developmental Disabilities
- Cap of \$9000 per waiver year, per individual
- Regional Office Director must approve exceeding \$9000 per year waiver cap if necessary
- Authorized as Assistive Technology service A9999 whether a one-time purchase or ongoing service
- Requires submission of Assistive Technology Referral form and AT assessment, if needed, for Utilization Review
  - AT Referral Form is located in the [Division of DD Guideline 25](#)



# Considerations for use of Assistive Technology

- Can assistive technology help maintain the individual in his/her home and community or allow him/her to return home?
- Can assistive technology help the individual to perform a function where no other effective means is available?
- Can assistive technology increase endurance or the ability of the individual to persevere and complete tasks?
- Might assistive technology reduce or prevent additional Medicaid costs such as reducing or maintaining personal care hours or home health costs?

# Assistive Technology vs. Specialized Medical Equipment

There are similarities in the two definitions.

- Is it an electronic device?
- Does it help a person operate a household item?
- Does it monitor a person's health and safety?
- Does it help a person communicate with others?
  - If so, it may be assistive technology.
- Is it a medical device that is primarily used to serve a medical purpose?
- Does it assist a person's mobility?
  - If so, it may be specialized medical equipment.

# Additional funding sources for Assistive Technology

- MO HealthNet State Plan services
  - Medically necessary durable medical equipment
- Elementary and Secondary Education – IDEA
  - Educational related devices
- MO Division of Vocational Rehabilitation
  - Employment related devices
- Rehabilitation Services for the Blind
  - Employment related devices for individuals with vision impairments

# Assistive Technology Programs Offered by Missouri Assistive Technology

- Short-term loan program:
  - allows individuals to borrow devices to use at school, work or in the community.
- Device re-utilization program:
  - partners with agencies statewide to transfer unused assistive devices to new users - often at little to no cost.
- Telecommunications Access Program:
  - provides adapted telephones and computer adaptations.
- AT Reimbursement program:
  - helps school districts obtain assistive technology for students grade K-12.

# Assistive Technology Programs Offered by Missouri Assistive Technology

- Kids Assistive Technology (KAT) Program:
  - funding source of last resort for families of children with disabilities.
- Show-Me Loans:
  - a financial loan program to help individuals finance assistive technology.
- Assistive technology training, as well as information and referral on devices and services.

[Missouri Assistive Technology](#)

816-655-6700

# Utilization of Assistive Technology Services

In the 4<sup>th</sup> quarter of fiscal year 2018:

- 29 individuals receiving developmental disability services received an assistive technology service other than remote supports such as an assistive technology device, personal emergency response system, or medication reminder system.
  - Less than 1% of all individuals participating in a DD Waiver program.
  - These services were provided by seven different providers of assistive technology services.
    - Many more providers of assistive technology services are available throughout the state.



# Utilization of Remote Supports

In fiscal year 2018:

- 115 individuals receiving developmental disability services were supported through the use of remote support systems:
  - Ages range from under 10 years old to over 60 years of age
  - Includes individuals experiencing mild to moderate intellectual disabilities, Autism, Cerebral Palsy, Alzheimer's Disease, Down Syndrome, Schizophrenia, Major Depression, Epilepsy, Intermittent Explosive Disorder, and other diagnoses
  - Less than 1% of all individuals participating in a DD Waiver.





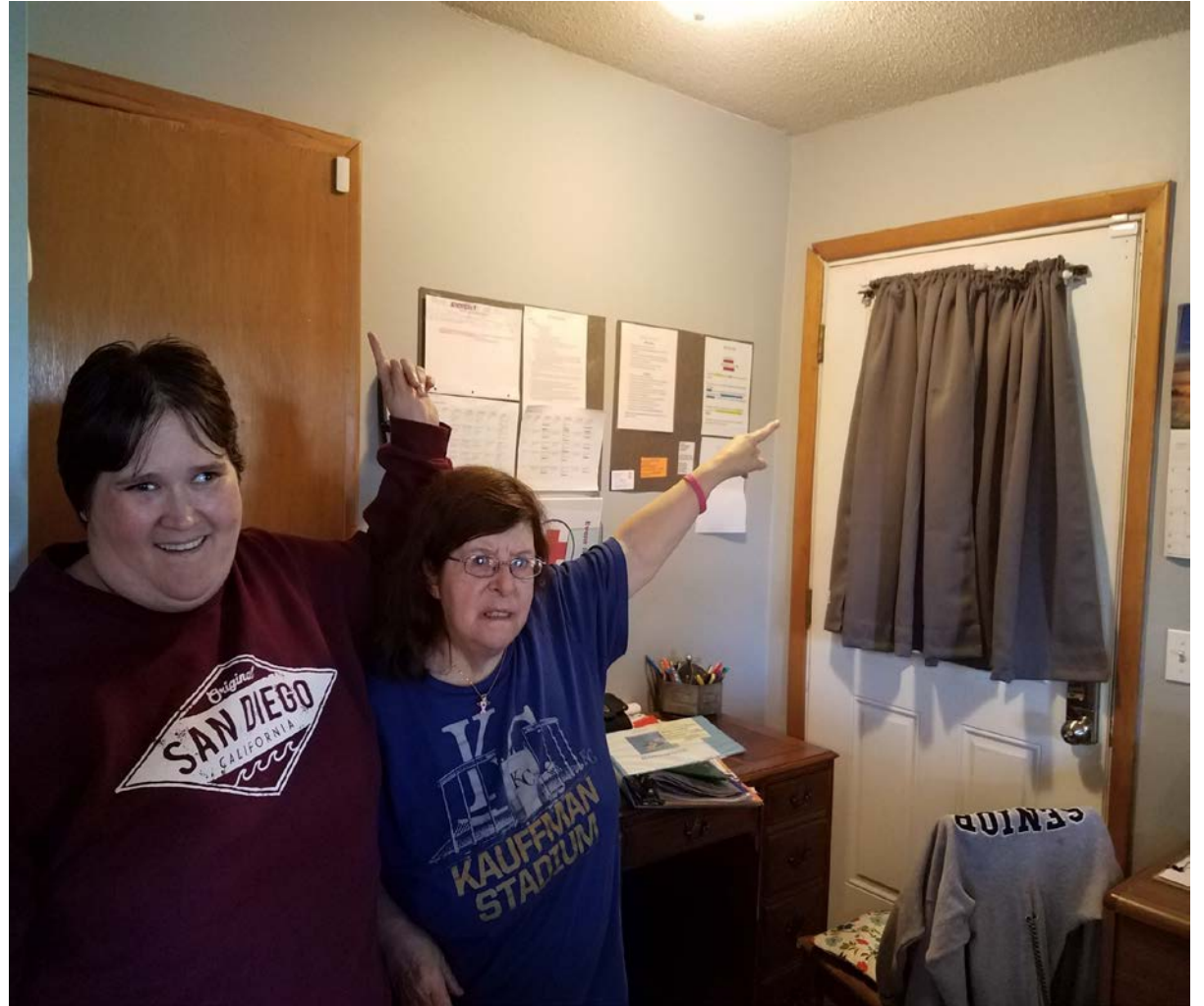
# Remote Supports



# Melissa and Terri

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- Live in rural area outside a small town
- Utilize ISL supports
- Sensors in the home detect movement inside the house
- Sensors detect if another person enters the home
- Can contact remote staff by pushing a button
- Are more independent in their night time and morning routines without staff present
- Believe that using remote supports will help them reach additional goals toward greater independence





# Jeremiah

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- Lives in his own apartment in a small city
  - Has Prader-Willi Syndrome
  - Experienced significant behavioral issues in traditional 24-hour staffed setting leading to hospitalization
  - Now utilizes part-time ISL supports in conjunction with video remote supports
  - Has had no hospitalizations since beginning remote supports
  - LOVES not having to share his apartment with housemates
- 
- <https://www.youtube.com/watch?v=gGBUya6tQDQ>

# REMOTE SUPPORT SYSTEMS

- Provider must have a backup system such as a battery or generator for electronic devices in place at the monitoring base and the individual's home in event of electrical outages.
- Provider must have backup procedures for system failure such as a prolonged power outage, fire or weather emergency, or individual medical issue or personal emergency.
- In emergency situations, monitoring staff will call 911.



# REMOTE SUPPORT SYSTEMS

- Remote supports systems are designed to provide the right level of support for the individual.
- Individuals interested in remote support systems must have a risk assessment completed following the Division of Developmental Disabilities risk assessment guidelines.
- The planning team must assess for risk to determine if remote supports are sufficient to meet the health and safety needs of the individual.
  - Safety/Security exploratory questions are located in the [ISP Guide](#).



# REMOTE SUPPORT SYSTEMS

The ISP must include a backup plan which specifies who is to be contacted by monitoring base staff to respond to situations requiring onsite intervention.

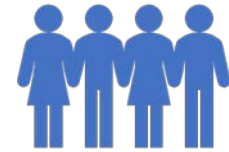
- The backup plan can include natural or paid supports.
- The backup plan must be at least two-person deep.

In situations requiring a person to respond to the individual's residence, the response time should not exceed 20 minutes.



# Remote Supports CAN be Used

- In conjunction with Individualized Supported Living (ISL supports) or other waiver services such as Personal Assistance, Self-Directed Services, or Individual Skills Development
- To decrease the need to have staff physically present
- In natural home settings where individuals reside with families or in their own homes





# Angela

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- Uses remote supports in conjunction with self-directed supports
- Mom and dad provide back-up
- Has sensors on doors and windows
- Wears a bracelet at night that detects if she has a seizure
- Loves the “freedom” that she has living in her own home



# Remote Supports CAN be Used

- To help individuals increase their independence and control over their own homes
- To decrease the need for individuals to share their living environments with others
- In urban or rural areas where cell phone and/or internet capability is available







# Buddy

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- Lives in a house in a remote rural area
- Uses remote supports provided through a web camera
- Has severe diabetes and receives medical personal assistance
- Has a hearing impairment
- Personal assistants and remote staff communicate with him using sign language
- Staff have the option to leave when Buddy's actions indicate that he prefers to be alone



Buddy's remote staff can turn on the lamp to get his attention if needed.



Buddy also uses a bed shaker which is connected to his smoke alarm and alerts him in case of a fire while he is sleeping.

# Remote Supports are NOT

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Remote support services respect an individual's right to privacy and promote their independence.

Remote support services are NOT a system to provide surveillance. They are a system designed to use technology in place of on-site staff.

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Remote supports are not for use in group homes or shared living situations.





# Rose

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- Uses an infrared camera that detects when she is having a seizure and alerts a remote staff person
- Feels “safe” and “relaxed” using her camera and likes not having to have her personal assistant on site 24 hours a day

Provider Name	Services Provided	Hours of Service	Technology Required	Who “Mans” the Remote System	Rates
Rest Assured	Video & Audio communication, motion sensors, door/window sensors, environmental sensors	24 hours per day	Internet service	Rest Assured	<ul style="list-style-type: none"> <li>1x installation of \$350</li> <li>System rental \$125-250 per month</li> <li>A9999</li> <li>PA Group authorized at \$5.24 per hour per person</li> </ul>
Night Owl	Audio communication, motion sensors, door/window sensors, environmental sensors	24 hours per day Live remote supports from 8 pm – 7 am with 24 hour alerts available	Cellular coverage (included in the Night Owl platform. Customer does not need to purchase.)  Landline suggested	Night Owl	<ul style="list-style-type: none"> <li>1x installation of \$200</li> <li>\$500 per mo. per site of service</li> <li>A9999</li> </ul>
2GetherTech	Audio communication, motion sensors, door/window sensors, environmental sensors, still cameras	24 hours per day	Cell phone service	2Gether Tech  Remote monitoring staff are located in Springfield, MO	<ul style="list-style-type: none"> <li>30 day free trial</li> <li>\$1750 first mo.</li> <li>\$750 per mo. per site of service</li> <li>A9999</li> </ul>
SmartCare	Alert system, sensors focusing on activities of daily living, provides daily wellness reports, activity trending patterns and comparisons.	24 hours per day	Cell phone service (included in the SmartCare platform. Customer does not need to purchase.)	Family/natural supports OR Community Based Provider of Individual’s Choice	<ul style="list-style-type: none"> <li>Installation and Monthly Fee are in Development to encompass long term and short term needs.</li> <li>A9999</li> </ul>

Installation and systems rental fees may fluctuate based on equipment utilized

## Remote Support Provider Contact Information

### 2GetherTech

Jeff Grosvenor: 573-301-1075

[Jgrosvenor@2gethertech.com](mailto:Jgrosvenor@2gethertech.com)

[www.2gethertech.com](http://www.2gethertech.com)

### Night Owl

877-559-1642

[info@nosllc.com](mailto:info@nosllc.com)

### Rest Assured

Dustin Wright: 877-338-9193 x 348

[dwright@restassuredsystem.com](mailto:dwright@restassuredsystem.com)

[www.restassuredsystem.com](http://www.restassuredsystem.com)

### SmartCare

Scott Mosher 636.485.8365

[scott@smartcaresystem.com](mailto:scott@smartcaresystem.com)

[www.smartcareconsultants.com](http://www.smartcareconsultants.com)



# Planning for Remote Supports



# Planning and Evaluating With the Individual

- Planning team identifies that remote supports may be an option for the individual
- Options are discussed/evaluated as to which type of remote supports would work best
- A remote support entity is selected
- Risk assessment is completed

## ISP is amended to include

- Statement to justify rationale for remote supports:
  - Benefits to the person
  - Assures person's health and safety
  - Promotes independence, etc.
- Verification that the risk assessment was completed and reviewed by the planning team to determine if remote supports are sufficient to meet health and safety needs.

## ISP is amended to include

- Description of the remote supports equipment function and purpose, features, general location of equipment, individual and family knowledge of and how to use the equipment (how to turn on and off; how to set sensors, etc.)
- Detailed back-up plan in the event of system failure
- Ratio of staff who will be remotely monitoring the individual
- Description of emergency back-up responder plan in the event the individual needs a person to respond to their residence

## Detailed emergency back-up responder plan must include

- Two-deep supports (natural supports and/or staff):
  - Paid support responder may be funded through Community Specialist or Direct Care hours on ISL budget.
  - Personal Assistant or Community Specialist may be authorized if the remote supports are occurring in the natural home.
- In situations requiring a person to respond to the individual's residence, the response time should not exceed 20 minutes.
- Response type includes face-to-face and/or telephone, depending on how to optimally respond to the individual's need at the time and to ensure health and safety.
- Times the remote support technology can be turned on and off by the individual in a given day.
- In emergency situations, monitoring staff should call 911.
- Documentation of the event must be included.

## Next steps

- Written consent of the individual and his/her guardian is obtained.
- ISP is submitted to Due Process committee for review to ensure due process has occurred if the individual's rights are limited by the use of remote supports.
- ISP and AT referral form are submitted to UR requesting Remote Supports and Back Up service response.
  - AT Referral Form is located in Division Guideline #25 at: <https://dmh.mo.gov/docs/dd/guideline25.pdf>
- The support coordinator drafts authorizations for remote support service and other services provided.



# Providing Remote Supports in Conjunction with ISL Services

# IN FISCAL YEAR 2018

- 12 providers of ISL services were providing ISL supports in conjunction with a remote support system
- 19 providers of personal assistance/individual skills development services were providing PA/ISD services in conjunction with a remote support system
- 24 unduplicated providers



# Planning remote supports with an ISL service provider for the first time

ISL provider must submit to Provider Relations:

- Outline of plan to use remote supports including hours of the day, etc.
- Outline of the implementation procedures including length of time to transition of each step to decrease staffing.
- Back-up system outline:
  - Back-up service authorized through Community Specialist or Direct Care Professional Hourly rate.
  - Policies regarding use of 911 for remote support provider and ISL provider.
  - Practice providing response when needed, at least two-person deep.
  - Plan for retention of available funds.



## Process for retention of available funds

- Redirecting ISL hours to remote supports must be cost-neutral.
- Cost savings can be redirected into the direct staff professional hourly rate.
- Available funds are first distributed to the individual(s) authorized for remote supports.
- Funds may be distributed to other individuals within the agency to prevent the impacted individual(s) rate from exceeding the lower bound rate associated with their Rate Allocation Score (RAS).
- Distribution of funds may not exceed any individual's RAS lower bound rate.

## Process for retention of available funds

- After remote support provider is chosen, the cost for the remote supports is calculated.
- Total of current ISL budget less remote supports leaves funds available to redirect into ISL direct care professional hourly rate.
- If remote supports are unsuccessful, the direct care hourly rate returns to the original rate (adjusted by applicable COLAs or rate decreases.)
- Process is outlined in Division Directive 4.400:

<https://dmh.mo.gov/dd/directives/docs/directive4400remotesupports.pdf>

# Example of cost savings

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	Agency A	Agency B
<b>Annual cost of night shift</b>	\$70,080.00	\$70,080.00
<b>Annual cost for Remote Support Agency</b>	\$54,902.40	\$9,000.00
<b>Amount remaining to route into hourly rates or to pay agency staff to monitor</b>	\$15,177.60	\$61,080.00



# Ronnie

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“My dream has finally come true.”

- Lives in his own apartment in a small city
- Resided in a Habilitation Center before moving to the community
- Experienced significant behavioral challenges in traditional 24-hour staffed setting
- Now successfully utilizes part-time ISL supports in conjunction with remote support sensor system
- LOVES not having to share his home with housemates

- <https://www.youtube.com/watch?v=QjI08ROzd-s>



Questions?

# For assistance or more information about Assistive Technology Services

- Individuals and families: Contact your Support Coordinator.
- Providers and Support Coordinators: Contact the Provider Relations Vendor Service Coordinator at your local Regional Office.

<https://dmh.mo.gov/dd/facilities/>

For individual  
consultations  
where use of  
Remote  
Supports is  
being  
considered

**Contact:**

**Missouri Inclusive Housing Development Corporation  
(MOHousing) at 855-444-5100**

**Wayne Crawford, Executive Director**

[waynecrawford@mohousing.com](mailto:waynecrawford@mohousing.com)

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