



1706 E. Elm Street
 Jefferson City, MO 65101
<https://dmh.mo.gov/dd>

May 2019
 Volume 10, Issue 3

Technology First Logo Design Competition

The Division recently held a Technology First logo design competition. There were 28 entries received, with the winning entry submitted by Savannah Hampton, Staff Development Officer, at Southwest Community Services. Congratulations, Savannah!



Valerie Huhn and Savannah Hampton



*Special Extended Edition Intended to Share Provider Success Stories
 Inside this issue*

<i>Home Automation.....</i>	<i>2</i>
<i>Remote Supports</i>	<i>4</i>
<i>Greater Independence</i>	<i>5</i>
<i>Health and Wellness.....</i>	<i>6</i>
<i>National Core Indicators.....</i>	<i>7</i>

Universal Design and Home Automation Enhances Man's Independence

By Aaron Nelson

Recently, I was asked to share with you my passion for universal design and home automation. I have been blessed with parents who researched universal design and home automation before the information was readily available. We have used these technologies within our home to help me overcome the obstacles present in my life due to Cerebral Palsy. I was fortunate to learn from how my parents advocated for me, and now I use a lot of the same approaches as I advocate for myself and others while working at a Center for Independent Living in Missouri.

As you approach my home the first thing a visitor might notice is a motorized adaptive door. This feature is helpful in times when my hands are needed to drive my powerchair or occupied with things I need to carry inside. Also parked in my garage is a van that is equipped for a powerchair to enter it from the back and be



locked into place inside through a series of pieces of adaptive technology. In theory, my van could have been adapted with hand controls that operate the driving of the vehicle. However, visual impairments made those adaptations something I do not use. But many other people with disabilities do drive using this technology. My family and I very much enjoy the adaptive features in my vehicle when commuting to and from work.

Once inside my home, I would direct your eyes to the elevated kick-outs within the kitchen cabinetry. This feature makes it easier for wheelchairs to navigate underneath foot-level cabinets that would otherwise be damaged by wheelchair users attempting to reach over the cabinetry to use the counter space. A visitor would also see that each level of our home is completely flat. Even door thresholds have been reduced to a minimum. Although there are some stairs in our home, there are also lifts accompanying each staircase.

In my experience, the most pressing need for universal design for many people with disabilities is present in the restroom. This is true for me, as well. Within the restrooms in our home, a visitor would see a roll-under sink for optimal access from a seated position. Likewise, the shower units are completely “roll-in”, meaning that they have a zero gradient and no elevated threshold. Telephone style shower heads help make showering an independent activity, and grab bars are also present near each of our toilets.

My bedroom also has many pieces of adaptive technology present. A motorized bed makes it much easier to use the television and read in a seated position. The bed also has massage features that aid in my muscle and joint mobility. Sometimes adaptations are created through ingenuity and not technological advancement. This is true of the headboard on my bed. My father was able to take an existing headboard and modify it so that I can grab and pull on its bars to turn and reposition myself on the mattress. At the foot of my bed sits a desk where I do most of my written communication. My correspondence both professionally and privately is greatly improved by a Plantronics Headset and Dragon Naturally Speaking software. I prefer the professional version of that software. Writing is one of my favorite hobbies, so these pieces of adaptive technology get a lot of use.

Throughout our home, there are a series of Amazon Echo products. These products are more commonly known by the name of the artificial intelligence that powers them. Her name is Alexa. Using these products we were able to economically install an intercom-like system in our home, which I use to remain safe in emergencies. It is also very helpful to us to speak from one room of the home to another. The Amazon Echo adds more skills every day, and frequently sends me email updates as to the skills that are available for Alexa to learn. Many of the skills and features are helpful to people with disabilities. Some of my favorites are:

- News, Weather and Podcast skills help people gain information from the outside world when it may be difficult to leave home.
- The Voice Activated Timer skill is used in order to set a timer that starts and stops at the sound of my voice. I often set it to time my workouts as I practice tasks assigned to me and physical therapy.
- The Shopping List skill allows me to verbally tell Alexa what I would like when I go to the grocery store. Because Alexa learns in cooperation with an app of the same name on my smartphone, I always have a written list of the things I have asked Alexa to write stored there. Alexa could also be used to order groceries to my doorstep through Amazon's Prime Pantry. It is especially helpful to know that even if I were unable to leave my home, I have access to a grocery service using just my voice and an Internet connection.
- The Ring Video Doorbell is another crucial component to delivering groceries and other products to my home. It is both a skill that Alexa learns and an additional product that must be installed in your home. Amazon recently purchased the company that furnished the video doorbell called Ring. The Ring Video Doorbell allows me to protect myself from burglary. With the use of this product, I can speak to anyone who may be trying to steal the products I have had delivered to my door, or I can simply capture video evidence of the theft taking place to help the police in the prosecution of the burglars.
- The Drop-In, Announcement and Call Features allow me to speak into one or more rooms of our home. The Drop-In feature does not require another person to accept the communication. Because of this feature, I can instantaneously speak into whatever room in our house I choose to. Using any one of these three features I am able to safely speak to those people who assist me in emergencies regardless of where they may be in our home.
- WeMo switches are a piece of technology I utilize in conjunction with Alexa to turn on and off lights, or other electronic devices that plug into a standard electrical outlet. These switches are relatively economical and turn any device that only needs to be turned on or off into something that is compatible with the Amazon Echo. A WeMo switch can be used with basic space heaters or fans that plug into a standard electrical outlet. They operate off of a Wi-Fi Internet connection, as does the rest of the Amazon Echo. Therefore, a Wi-Fi Internet connection must be present in your home for any of these pieces of home automation to operate.
- The Calendar Feature is very nice for people who may struggle to mobilize themselves in order to look at a calendar. Alexa tells me what appointments I have scheduled for a given day, and she will remind me when an appointment is coming up.
- The Dictionary Feature is nice for the same reasons the calendar feature is helpful. Now instead of having to look for my smartphone or find a dictionary when I cannot spell something, I can simply say out loud "Alexa, how do you spell..."
- The Amazon Music Feature is accessible to those customers who purchase an Amazon Echo and a subscription to Amazon Prime. The grocery and other product ordering features are only available to those people that purchase Amazon Prime. Therefore, I find the yearly subscription fee more than pays



for itself. However, because Amazon knows that many people with disabilities are Medicaid recipients, if you supply Amazon with documentation stating you are a Medicaid recipient they will cut your subscription fee to Amazon Prime significantly. You can find more information about that program on this website: <https://www.amazon.com/b?ie=UTF8&node=16256994011>.

Although there may be some headaches in receiving these products and making them work effectively, I have found that they greatly add to my independence. I believe that adaptive technology has and will continue to greatly improve the lives of people with disabilities. I look forward to what advancements are in the future.

Provider Helps Individuals Achieve Independence and Freedom Through Use of Remote Supports

Chariton Valley Association in Kirksville has been combining remote supports with both Independent Supported Living (ISL) and Independent Skills Development (ISD) services since June 2014. The agency became interested in remote supports after CEO Terry Combs attended a presentation by Rest Assured and had an opportunity to speak with the father of a young lady utilizing Rest Assured's services. Over the next year, Chariton Valley's leadership staff began researching additional providers of remote support services as well as identifying individuals supported by their agency who could benefit from remote supports to increase their independence.

Realizing that they supported several individuals who could potentially benefit from remote supports, Chariton Valley began reaching out to individuals and guardians to talk with them about the possibility of utilizing remote supports in conjunction with ISL or ISD services. Information on remote supports was presented to individuals and guardians by Night Owl, and they were given opportunities to ask questions and see examples of available remote support options.

According to Terry Combs, Chariton Valley found that "often the planning process takes months if not a year to occur" from the initial planning stage to having remote supports in place. Terry says "during this time, we begin the discussion with the planning team, including the individual and guardian. Concerns are identified, then a plan is developed addressing the concerns, including how we will overcome the concerns along with a timeline for testing and modifying the methods for success." Chariton Valley also found that initial concerns are often around safety, loneliness, disaster planning, elopement, etc.

Once individuals and guardians were on board and made a choice of provider, Chariton Valley worked with support coordinators to develop a process to implement remote support services. Chariton Valley began using remote support services in ISL settings that had overnight sleep staff. The slow transition process initially included providing remote support services without decreasing the physical presence of staff. Then, the direct staff hours were slowly decreased over time. On average it took about 2 months for individuals to fully transition to remote supports overnight, but some individuals were able to transition faster than others. Some individuals were initially a little anxious about not having staff present overnight. However, once they realized how quickly someone would respond if needed, individuals became more confident in the system itself. If the transition proved unsuccessful for an individual, the transition process was halted for that person.

Once the transition was complete, Chariton Valley found that the individuals using remote supports preferred to be alone in their homes rather than having a staff person sleeping overnight. Individuals also became more independent and experienced additional freedom in their homes.

Chariton Valley now supports fourteen individuals who also receive remote supports from either Night Owl or Rest Assured. Nine of those individuals receive ISL services and five of them receive ISD services. As an agency committed to empowering individuals to achieve their highest level of independence, Chariton Valley finds remote supports to be a very successful option to help individuals reach the level of independence and freedom that they desire. Chariton Valley has also seen additional benefits to the agency including the ability to more effectively utilize staff resources, and fiscal incentives given to provider agencies through the Division of Developmental Disabilities.

Provider's Initiative Results in Greater Independence for Individuals

When staff from Rolling Hills Creative Living (RHCL) in Albany attended the 2017 Power Up Conference, they came away with an exciting new idea. After attending a presentation on remote support technology, RHCL staff became interested in utilizing remote supports in the ISL settings where they provide services. RHCL's initiative and willingness to try remote supports has given the individuals they support an opportunity to experience additional freedoms and gain independence.

RHCL currently supports fourteen individuals in five different ISL settings with the use of remote support technology provided by 2GetherTech. The remote supports, which are provided during night time hours, allow individuals to experience being alone without having staff physically present. Sensors placed in the individual's homes allow 2GetherTech staff at a remote location to monitor movement within the house, and to sense the presence of any other individual who might try to enter the home. If the remote staff senses a problem, they call the home. If there is no answer or if someone needs assistance, they contact back-up staff. Individuals living in the home can also contact 2GetherTech staff by pushing a button for assistance.

To implement the remote support service, RHCL started with a trial period for three ISL settings in April 2017. Initially, remote supports were provided for two hours at night. The physical presence of staff was then decreased, and remote supports were provided for four hours per night. Physical staff continued to fade out gradually until remote supports were fully provided during the night. The total length of remote supports provided each night is individualized based on the support needs of the individuals residing in each home.

Rhiannon Riley, Director of Services for RHCL, said that at first, individuals and their guardians were "a little hesitant" to try remote supports. An initial meeting was held at which RHCL and 2GetherTech provided information to individuals and guardians about how the system works, and how situations such as fire, intruders, or other emergency situations would be handled. According to Rhiannon, this meeting alleviated concerns about safety and gave individuals and guardians the confidence to try the remote support system. A second meeting was held with Support Coordinators who then helped develop extensive back up plans and implement due process requirements. Rhiannon reports that careful assessments of each situation and in-depth discussions were held to ensure that the remote support technology would provide the needed support for each individual. Once the remote support systems proved to work well in the initial three ISL settings, two additional homes began to use remote supports, bringing the total to five homes.

Individuals living in these ISL settings have been able to experience a sense of greater independence by being given opportunities to complete tasks and make daily decisions without relying on constant presence of staff. Dave and David share a home and receive ISL supports from RHCL and remote supports from 2GetherTech. Dave says that his 2GetherTech system has given him "more freedom and makes him feel

independent at night.” His housemate, David, feels more independent because he is expected to answer the phone and check the house if his remote staff calls. David reports, “One night we got a call that my housemate hadn’t gone back to bed and when I checked on him, he had fallen out of bed and hit his head on his night stand, so I had to see if he was okay, and I reported back to 2GetherTech. Then they let my Professional Manager (who provided follow up) know.” David says that the system “works wonderful. They take care of us.”

RHCL has seen several direct benefits to their agency attributed to the use of remote supports. The agency needs fewer staff to cover all shifts. Staff who were previously hired to sleep in these homes are now freed up for other shifts. Rhiannon also reports that remote support technology has other benefits such as eliminating concerns regarding potential late staff arrivals, documentation issues, etc.

But, Rhiannon reports that by far the most exciting outcome of utilizing remote supports has been to see the increased independence that it has given individuals. Rhiannon also noted that several individuals have shown a decrease in challenging behaviors, which she attributes to a greater sense of independence without constant presence of staff. Overall, the use of remote support technology has been a great benefit to the individuals supported by RHCL, and to the agency itself.

Dave points to a remote support sensor in the home he shares with David.



Health and Wellness



Healthy
Living

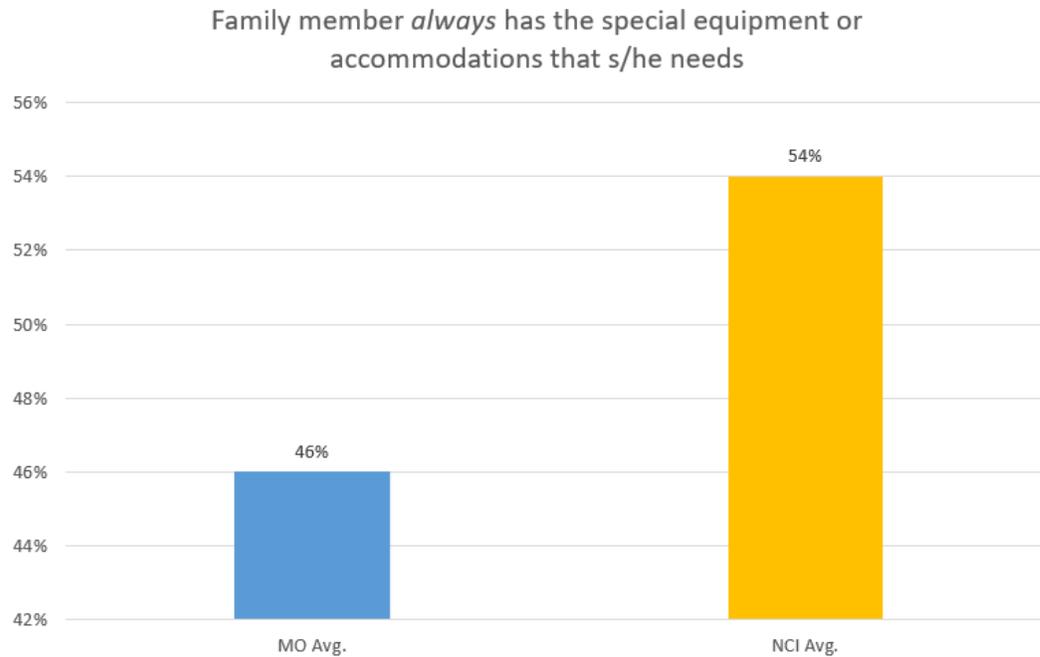
OBSERVE! DECIDE! ACT!

BURN PREVENTION & SAFETY

Burns—Defined by Mayo Clinic “Are tissue damage that results from heat, overexposure to the sun or other radiation, or chemical or electrical contact. They can be minor medical problems or life-threatening emergencies.” According to the American Burn Association (2017), “children, the elderly, and people with disabilities are especially vulnerable to burn injuries”.

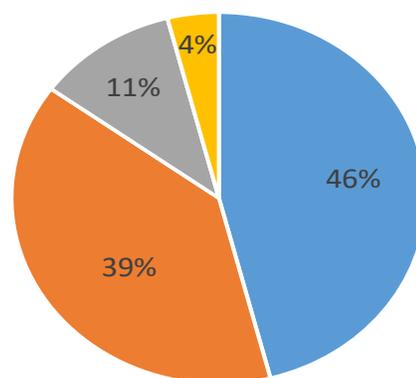
For more information – <https://dmh.mo.gov/dd/docs/burnsafetyprevention.pdf>

National Core Indicators Data



This data is from the 2017-2018 National Core Indicators (NCI) Adult Family Survey, which is a questionnaire mailed to the family of adults (age 18+) who receive services from the Division of Developmental Disabilities and live in the family home. This graph demonstrates the percentage of family members in Missouri that report that their family member has access to the special equipment or accommodations that s/he needs as compared to the NCI (nationwide) average for this measure. To review the full survey results, please visit <https://www.nationalcoreindicators.org/resources/reports>

Does your family member have the special equipment or accommodations that s/he needs?



■ Always ■ Usually ■ Sometimes ■ Seldom or Never

This data is from the 2017-2018 National Core Indicators (NCI) Adult Family Survey, which is a questionnaire mailed to the family of adults (age 18+) who receive services from the Division of Developmental Disabilities and live in the family home. This graph demonstrates the frequency of which family members report that their family member with a disability has the special equipment or accommodations s/he needs (such as a wheelchair ramp, communication technology, etc). To review the full survey results, please visit <https://www.nationalcoreindicators.org/resources/reports/>



Technology First

MISSOURI DIVISION OF
DEVELOPMENTAL
DISABILITIES



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

DIVISION OF DEVELOPMENTAL
DISABILITIES

1706 E. Elm Street
Jefferson City, MO 65101

Phone: 573-751-4054
Fax: 573-751-9207
Website: <https://dmh.mo.gov/dd/>



Fostering Self-determination



Supporting Families



Facilitating Individualized Services and Supports



Developing Accessible Housing



Promoting Employment First

www.dmh.mo.gov/dd

MISSOURI DEPARTMENT OF MENTAL HEALTH