

## Real-Life Stories: Using Smart Home Technology for Independence

March 3, 2022

**Wendy Davis:** It's actually 12:01, so we will get started. I want to thank you for joining us for Real-Life Stories: Using Smart Home Technology for Independence. I want to share with all of you that we have over 800 people who've registered for this event, and that's including people from all around the globe. We have representatives from the Philippines, Israel, Australia, Ireland, Mexico, Belize and Canada. Clearly, there is an interest to learn more about Smart Home Technology and how it can assist people with disabilities to live more independently, and we're glad to be able to share this information with all of you. The host of this webinar is Pennsylvania Assistive Technology Foundation, or PATF for short.

We are a nonprofit located in King of Prussia, Pennsylvania, which is about 20 miles west of Philadelphia, and 100 miles southwest of New York City. Philadelphia is the hometown of the Philadelphia Eagles, the Flyers Ice Hockey and Philadelphia Phillies. A little bit about us. Can we advance the next slide please, Mary Kate? A little information, housekeeping for the webinar. Today's program is being recorded. The recording slides and transcript will be made available next week, although the slides will be available actually today. Captions are available as well as sign language, American Sign Language Interpretation.

If you are having trouble enabling your closed captioning, I want you to hover your cursor via the bottom of your screen, and you should see a button to enable the closed captioning. Because we have such a large audience, we are going to rely on people posting their questions in the chat pane and in the Q&A window which we will be monitoring so we can address your questions. Each of our presenters has designed to put together their own presentation. We recommend that you disable your smart speakers, especially your Alexa speakers. You'll be hearing the word Alexa frequently throughout the presentation, so it may start to trigger your home device.

We've attempted to make this webinar as accessible as possible. If you have any recommendations, we would really like your feedback on how we can make it more accessible.

Before we get started, we had a short two-question poll to get to know all of you a little bit better. I'm going to launch that now. The first question is, how comfortable are you with smart home technology? This is just to get an idea of the experience, face of our participants in this webinar. It's really a mixed bag. We're getting answers in all three categories. We'll give a second for everyone to answer that question.

The second question is what types of smart home devices do you have? We'll give some time for everyone to answer those and I'll share the results of that poll.

[silence]

I think most everyone who's going to answer has answered. About 20% of our audience is very comfortable with smart home technology, 53% somewhat comfortable, and 27% not

very comfortable. With the type of devices that people have, 89% have smart speakers, 13% have smart door locks, 33% have smart lighting, and 9% have smart door openers. Excellent. I will close the poll. Mary Kate, is that still on the screen? Okay, all right, next screen please. Our first speaker is Susan Tachau. She is the CEO of Pennsylvania Assistive Technology Foundation.

She serves on several boards and advisory committees, including the National Disability Finance Coalition, Pennsylvania Statewide Independent Living Council, and the National Disability Institute. She is chair of the technology subcommittee of the National Council on Independent Living, and serves as a member of the Montgomery County Office of Senior Services Advisory Council. Susan, thank you so much for joining us today.

**Susan Tachau:** Well, thank you, and thanks for kicking us off, Wendy.

**Wendy:** Susan, I'm sorry, I accidentally muted.

**Susan:** Okay, thank you. I knew I unmuted myself, but thank you, Wendy, for kicking us off. I noticed that several people in the audience today don't have any smart home devices, and that wasn't an option on the poll. I hope after today you will be curious into starting that journey and maybe starting off with a smart speaker. This slide shows they real people that we've worked with who have smart home devices, from having a Ring doorbell and being able to see who's at the front door such as Josh on the left, to using an Echo Show in the middle, a Dot, all kinds of speakers, and including in a picture on the bottom, on the left hand side, a woman is sitting in a wheelchair on a ramp, and she has a Ring doorbell so that she can control who comes in and out, see who's at her door and control this.

When we're talking about smart home devices, we're talking about a whole host of devices. Next please. While we start off, I neglected to say that I'm a white woman with gray hair, dark glasses, a polka dotted shirt, sitting in an office, a home office. Very briefly to center you as to who we are, we are Pennsylvania Assistive Technology Foundation, a nonprofit organization that's statewide based here, as Wendy said, right outside of Philadelphia. We are similar to organizations that are Centers for Independent Living, in that the majority of our staff and board members are individuals with disabilities or immediate family members. We are also a Community Development Financial Institution, a CDFI.

We receive grant monies from the US Treasury so that we can lend to low income communities. Our base is that we are a program under the Federal Assistive Technology Act, and we are a alternative financing program. I noticed that several other of my colleagues, other alternative financing programs are also on this call. There are about 42 across the country, one in every state or territory. At the end of this presentation, if you want to be in touch with your financing program in your state, we'll be happy to give you that contact information. As part of the Assistive Technology Act, we have other partners.

We have our state AT program called TechOWL and we work closely with Disability Rights Pennsylvania. Next slide please. We do three things. We provide information and assistance about assistive technology, funding resources and possible vendors, we provide financial loans for assistive technology which you will hear about later, and we also provide and have

created financial education opportunities for people with disabilities, seniors and their families.

Next please. Like all alternative financing programs, we help Pennsylvanians of all ages, all income levels, all disabilities and health communities and conditions, all communities and all cultural backgrounds. All is all. We are here to help all the residents of Pennsylvania whether you consider yourself a person with a disability or a health condition or just that you're older, and you can benefit from assistive technology. Next, please. I'm rushing through this because I want you to be able to hear from our speakers.

Our agenda today is you will learn a little bit about our Smart Homes Made Simple project and how you can continue to stay in touch with us, what is assistive technology, and why smart home devices fall in that category. You will learn about our Smart Homes Made Simple Guide and our new website, [smarthomesmadesimple.org](http://smarthomesmadesimple.org). You will hear from a professional, Laura, who's an occupational therapist and an assistive technology professional, how she provides support to people with disabilities so that they can successfully integrate smart home devices into their lives.

You'll hear stories from George, Alexa, and Michael about why they have included Smart Home in their lives, what a difference it makes for them. Then, we'll talk about a few of the funding resources because what is assistive technology if you can't, in fact, get it for yourself. Next, please. Smart Homes Made Simple, we started this project about three years ago from a grant from the Pennsylvania Developmental Disabilities Council. They received their money from the United States Department of Health & Human Services, the Administration for Community Living. They provide us with the grant money so that we can develop information around smart home.

This does not mean that they endorse everything that we have learned or are doing. Next, please. To ground us, smart home technology, we believe, is part of assistive technology. That can help drive the strategy that you can put together to get funding for it. In the top picture on the left-hand side, Alicia has an intellectual disability. She has a smartwatch. She uses this to stay in touch with family members, to help her as a medication reminder, check for the bus schedule. To her right, is DeeJay. DeeJay's a wheelchair user. She lives in the Pittsburgh, Pennsylvania area, where there is a lot more snow than where we live.

She has both a wheelchair, but also a nice shovel that's on wheels. Below DeeJay is a woman, Laura, who has a spinal cord injury and MS. She's a Paralympian, so let's get ready for this year's Paralympics. She's on the Schuylkill River right here in Philadelphia with an adapted skull. Next to her is one of our farmers. She's sitting on a specialized seat that allows her to do weeding going row-by-row. She has arthritis. The constant bending over wreaks havoc on her body. Next to her is a gentleman, Matt, who has a spinal cord injury. He uses an adapted vehicle and hand controls to travel all over the place. Next to him on the far left-hand side is a woman who is using hearing aids.

She has hearing aids, which happens to be our number one loan. These are examples of assistive technology. You can see it's a wide variety. It's any device that helps a person with a disability or an older adult do the things they want to do. Next, please. It was Smart Home. What we want to do and tell you, what we're going to talk about today is we're talking only

about off-the-shelf smart home devices. Our key advice is keep it simple, using, of course, those devices that you can get from general stores or online. Remember that like assistive technology, support comes with Smart Home, and you may need it. Keep your circle informed, your circle of supports, so that you will be able to plug it in, learn how to use it, and practice it.

We start off with Smart Home and in a minute, we'll show you our book, and we'll put the link in the chat for you. Instead of approaching Smart Home as, "I've heard about it. I guess I need to get an Alexa," or, "I need to get a Google Home," the first thing we recommend is you think about your goal. What is it that you're trying to do? Are you trying to control your temperature? Are you trying to see who's at your front door? Are you trying to lock your door? Are you trying just to listen to books on tape or hear the joke of the day? Are you trying, especially in this pandemic, to be able to communicate with your doctor? Whatever it is, that's where your focus should begin, not on the device, but on your goal.

Choose your goals and go from there. Remember, that's the important key so that your device will work for you and help you solve the issue you're trying to address. Next, please. Controlling your front door. For example, here are just some ideas if that's what you're hearing, is you can have a camera so you can figure out who's at your front door. Do you have a smart doorbell, which would include the Ring, an auditory announcement that someone's at your door, but also a camera? Do you want a smart display? We are hearing more and more that people want smart deadbolt locks. Not just smart locks, but a deadbolt and, of course, the automatic door opener.

These are general prices, but the prices keep going down and down and down. This is just to give you an example that if you are using off-the-shelf mainstream devices, the package together may not be as expensive as you may imagine. Certainly, it's a lot less expensive than the environmental control units of 5 and 10 years ago. Next, please. Controlling your living space. Looking for entertainment. Do you need a Fire box? Do you want a smart light bulb, a thermostat? What's the difference between a smart switch and a plug, so you can turn on and off your lights? You can see here are examples of pictures that they look like normal everyday devices.

Whether it's a Fire Cube or a thermostat that all of us have in our homes or a smart light bulb, or whether it's a switch or a plug, it fits easily into your home environment. Next, please. I'm about to hand this off to Laura. Please remember that along with our United States federal definition of assistive technology, services, as I mentioned before, are also a key component. The evaluation or the assessment, the selection of which device will work for you, the installation, and, of course, the training so that you know how to use it. Sometimes, the training involves training your voice or having the machine learn your voice. Here are two pictures.

The picture on the left is Andrew, who is showing an occupational therapist, Sandy, how to use a 3D printer. The picture on the right is another one of our colleagues, Madeline, from JEVS Human Services, who is showing someone she's working with on how to use the device on the iPad, how downloading an application can help him see and monitor what's going on at his home. Next, please. This is our new book. You can download it for free from our website. It's called *Smart Homes Made Simple. Your Guide to Smart Home Technology*.

It is written for an individual with a disability and their family and older people. It's accessible in English and in Spanish. It is 508-compliant PDF. You can download it for free. It has several sections, but one of the most important sections in here is as a hard copy or as a PDF, it has the self-assessment form. That is for, as you will hear from our speakers, what are you trying to do? What are your goals? It asks you questions so that you in fact can start figuring out what are you trying to do. If, for example, what you would like to do is connect with the world, so communicate, it asks you certain questions and those questions can help lead you to an appropriate device. Next, please.

Here is the first page of the self-assessment tool. You will see, and, of course, it's downloadable. It's also a PDF on the website, so you can fill it out yourself and you can share it with others. This book and the self-assessment tool, they are free. It's also in English and in Spanish. Next, please. Laura, as you kick-off, I guess I should go back real quickly. I thought there was a slide to show our smarthomesmadesimple.org website.

Smarthomesmadesimple.org is the companion website. It goes into more detail than the book. You will have access to the self-assessment tool. You will be able to go through the different goal sections and have ideas about the types of device, learn more about those devices. There are links to resources, additional resources, where you can get more information. Of course, there's a whole section about funding resources. I highly, highly recommend you go to smarthomesmadesimple.org. It's fully accessible. Anyway, Laura, I take it to you. Next slide.

**Laura Slotkoff:** Hi, everyone. My name's Laura Slotkoff. I am a white woman with brown hair and glasses and a Zoom background that says Easterseals of Southeastern Pennsylvania. I'm an occupational therapist and RESNA-Certified ATP working for Easterseals of Southeastern Pennsylvania. RESNA stands for Rehabilitation Engineering and Assistive Technology Society of North America. ATP is an Assistive Technology Professional, for anybody who may not know. I am part of an interdisciplinary assistive technology team.

This team includes two speech language pathologists, a RESNA-Certified ATP with a background in special education, and our AT assistant George, who you'll hear from later in this webinar. We do assistive technology evaluations, consults, and training with preschool-age students, as well as with adults, as contractors with the Pennsylvania Office of Vocational Rehab, a publicly funded organization that provides vocational rehabilitation services to help persons with disabilities prepare for, obtain or maintain employment. There is a great quote that I really love by the former American OT Association, president Jimmy Stoffel that says, "Occupational therapy practitioners ask what matters to you, not what's the matter with you."

I believe this sums up our perspective well. We start our evaluation by listening and asking questions with our client to identify what tasks they feel is important for them to be able to do, and work together to identify barriers to them being able to complete these tasks as safely and independently as possible. Next slide, please. Then we find in trial potential solutions. I can tell you over the past few years, Smart Home equipment has become more and more of an important tool in our AT toolbox for meeting a variety of needs to improve independence and quality of life for people with disabilities.

The fact that it's affordable and mainstream makes it even more accessible. These areas listed on the slide are just some of the important areas smart home devices can impact. One really wonderful aspect of smart home devices is that they can recognize the voice from a speech-generating augmentative and alternative communication system. This empowers an individual who uses a speech-generating communication device using eye gaze or touch access to be able to control smart home equipment in their environment.

I know several of the big-name companies that are making smart home devices have accessibility teams who are working on making devices better at learning how a specific user speaks and understanding mild to moderate speech impairments. This is likely to continue to improve as time goes on. This means a person with a motor impairment could have independent control over opening and closing blinds, open and closing a door and locking it, changing temperature on a thermostat, controlling fans, lights, and a variety of other electronic items.

Some simple tips that we found through experience programming, these high tech communication systems for use with smart home equipment is making sure there isn't too long or short of a pause between the wait word such as Alexa or Amazon and the command given because we have found that smart speakers can be a little tricky and particular about that. Also, sometimes smart speaker will ask for clarification from the command of the user, such as, "Did you mean to say that you want to call mom?" It's important for the user to be able to quickly say no, or yes, on their communication device's smart home page.

Another consideration is the positioning of where devices are in the environment. For example, if a person uses voice to activate a smart speaker to turn on the TV, you want to be sure it's going to be positioned where it can hear the user over the sound of the TV, if they want to change a channel, turn it off or give any other commands. It's a small thing that can make a big difference. Another way we've seen smart home speakers provide greater independence is the ability to hang up a phone call. When someone is making a hands free call using voice commands directly to their smartphone, they have no way to hang up the phone call at the end of the call.

I've been told by customer service for some popular smart home brands that this is due to security concerns and that they don't have any chance to change it, which can be problematic if the person on the other end of the phone call forgets to hang up, or if the call goes straight to voicemail. However, having their phone connected to a smart speaker is a great and easy workaround for this issue.

Another way access to smart home devices can improve quality of life is access to leisure and entertainment. While I've primarily done smart home training with adults, for example, I've consulted with a preschool student who had a motor and speech impairment who was learning to use a communication system access with eye gaze and her face completely lit up with joy when she realized she could use smart home commands her speech therapist had programmed into her device to control the family smart speaker and tell it to play her favorite song *Baby Shark* over and over and over again.

**Susan:** Hey, Laura, this is Susan. We have a couple of people who are really listening hard. Can you slow down just a little bit-

**Laura:** Sure. I'm sorry.

**Susan:** -for all the interpreting? Thank you. Go ahead.

**Laura:** Smart home devices can also be used to help with organization and productivity. For someone who works from home, which has become more common in recent years, especially, smart home speakers and displays can provide reminders for meetings, to-do lists, calendar access, all hands-free, and just by voice, either their own or device-generated. It can provide easy access to the news and important information like knowing the weather before going outside, which can be extremely important for someone who uses an electric wheelchair, for example. There's also a number of ways it can improve safety and security.

An individual with a disability can now have a way to easily make sure the door is locked and monitor who is at the door with a smart doorbell camera. A smartwatch can be used for health monitoring and can automatically call for help when it senses a fall. Just a few days ago, I read that Amazon is going to start partnering with a telehealth organization so that if someone tells their smart speaker they want to speak to a doctor for a non-emergency situation, it will be able to connect them with one anytime day or night.

Empowering an individual with a disability to be so much more independent in their home, as well as ease of communication and ability to alert a caregiver in an emergency, can make a huge impact. In some cases, it may even help to reduce the need for and high cost of in-home care. One caveat to that I will say is initial setup of devices does require use of one's hand. Many people may need assistance with initial setup. A lot of these devices are reliant on the internet to work, and if there is an outage, they need to be set up by hand again, which is a big concern if someone is relying on it working by voice for all these important functions, including communication with caregivers and others outside the home.

This is something that is starting to be more addressed with options such as ZigBee that forms a connection not reliant on Wi-Fi since that can be so easily interrupted. There is further explanation about this and some of the other options in the Smart Homes Made Simple Guide. With that, I'm going to turn it over to George so you can hear how he is using smart home equipment in his home.

**George Russo:** Good afternoon, ladies and gentlemen. I'm George Russo. I want to thank the Pennsylvania Assistive Technology Foundation for inviting me to talk about smart home technology that I've incorporated into my apartment. I've been working as an assistive technology assistant at Easterseals since 2006. Easterseals has been a part of my adult life since 1996 as a client, a volunteer, an ambassador for PRC, and now as an employee.

I have an associate degree in computer science from Miami Dade Community College. Next slide, please. The current device I am using is the Accent, which is the fourth communication device I have used made by the Prentke Romich Company. It's a Windows-based computer and I can do all of my computer work on here. The Accent allows me to independently control my environment in my apartment using smart plugs.

**Speaker:** The next slide.

**George:** Yes. I've created activity row on the communication device for one-hit Alexa commands. Good afternoon, ladies and gentlemen. I'm George Russo. I want to thank the Pennsylvania Assistive Techno-- For example, Alexa, turn on the light; Alexa, turn off light, and so on. Next slide, please. I was able to set up Alexa to access the lights and fan by purchasing smart plugs from Amazon. Next slide, please. This is a demonstration of me using my communication device with Alexa using smart plugs.

**Video playing:**

**George:** My name is George Russo, I'm a member of the Smart Home Committee. I am going to demonstrate how I turn on the light using Alexa with my communication device. Alexa, turn on the light.

**Alexa:** Okay.

**George:** Alexa, turn off light.

**Alexa:** Okay.

**George:** Alexa, turn on fan.

**Alexa:** Okay.

**George:** Alexa, turn off fan.

**Alexa:** Okay.

**George:** Alexa, play Sinatra.

**Alexa:** Here's some music by Frank Sinatra on Amazon Music.

[music]

**George:** Alexa, turn the volume up. Alexa, turn the volume up.

**End of video.**

Next slide, please. These are the rest of the one-hit Alexa commands that I've created in the activity row. Alexa, play WPHT radio. Alexa, what's the weather forecast? Alexa, turn on fan. Alexa, turn off fan. Alexa, turn off the music. Alexa, what is the notification? If you have any questions, you may contact me at [grusso@easterseals-sepa.org](mailto:grusso@easterseals-sepa.org), or submit your questions in the chat box in Zoom. Thank you.

**Susan:** Thank you, George. Alexa, you're up.

**Alexa Brill:** Hi guys, Alexa Brill. I live in Camp Hill, PA in this smart house and I've lived here for seven years now. And growing up my family taught me to be very independent, so when it was time for me to move into my house, my dad is into technology so he called a local electrician and they found a device named a URC that I could use to control my devices through my phone, but it was very complex and not very reliable. Then one of my co-

workers convinced me to get an Alexa because she was worried about me being stuck inside without being able to get someone because once I'm out of my chair I am totally dependent on someone else. But I didn't think it was going to understand me.

**Wendy:** Alexa, you're saying a lot of really great things. I want to make sure everyone can hear you. Can I summarize for just a quick second?

**Alexa:** Yes.

**Wendy:** Good. Alexa, who has cerebral palsy and she works, and what's really wonderful is lives in her own home by herself. She's really lucky, I think, because she's got several family members who are very techy. To begin with when she moved into her own home, her father, who's techy, connected with an electrician and set up some devices that she could control with her phone. If I heard you correctly, Alexa, you said some of your coworkers were a little worried and wanted you to get some smart home devices just to make sure you had alternative ways to get in touch with people if you needed them.

**Alexa:** Yes, because that old unit only worked through my phone and once I'm out of my chair I'm completely dependent on other people so everybody – when I got it, my dad thought it was a toy until I started showing him how I could turn on and off the lights, and raise the blinds, and lock the doors. It's made me pretty independent, especially with this pandemic because without this technology I would honestly have to move back in with my parents.

**Susan:** Well, as a family member, as a mother of someone with a disability, things could be worse than having to move back with your parents, but I understand. What you were saying is that you've been able to control your environment-- your temperature, your lights, your front door, and I think you're one of the first people that we met that has smart blinds so that you're actually able to control your shades, the privacy from your neighbors, be able to, at night, have a dark house and not have everybody be able to see in your windows.

I think it's very impressive what you're able to do with your device on your phone, and given that your name is Alexa, I think you have a different wake-up word.

**Alexa:** Yes. I renamed it. Otherwise, it wouldn't be good, just constantly cause that's my name. Then I also have a dog, so the ability to open the doors, it allows me to take him out in the backyard without any help.

**Susan:** I think it's an incredibly important story that you have, being able to live in your own home, be able to go in and out of your home, including in your backyard so that you're really enjoying your space. As you do say, in the pandemic, it's been incredibly important to be able to do that. I guess the other question I had for you is, I know your father helped you set it up, your sister, now, is an Assistive Technology Professional, right?

**Alexa:** Yes. She moved to DC. Right now, she works as a wheelchair tech so fixing people's chairs which she usually likes because she's been helping me do that my entire life and problem solving with things, and she loves to tinker with things, so it's perfect for her.

**Susan:** I think that is incredibly great because I think that's what is important for all therapists, ATP, and your circle of support, is to be creative, to listen to you, what you're trying to do, and come up with solutions. My last question for you is, do you know the funding resources? How did you get your devices?

**Alexa:** Through my waiver.

**Susan:** In Pennsylvania, like all states, there are many home and community-based waiver programs to support people living in their own home and not in an institution, in a nursing home. In Pennsylvania, assistive technology is a covered service, and within assistive technology, smart home devices are included. That's why, at the beginning of the presentation, it was so important to link smart home to assistive technology. That means that many of your devices were free to you, and you were able to incorporate them in your home.

**Alexa:** Yes.

**Susan:** Thank you.

**Alexa:** You're welcome.

**Susan:** We should move on because we have another story. I think, Michael, you're next.

**Michael Anderson:** Hello. My name is Michael Anderson and I'm the Legislative Advocate for the ARC of Philadelphia. I'm wearing a yellow shirt and khaki pants, and I sit in a wheelchair. I'm in a wheelchair right now.

**Susan:** Michael, how did you start with smart home devices?

**Michael:** I got started with the smart home devices from my therapist that used to-- She was named Sandy Masayko. She listened to my ideas and she gave me some advice. My first idea was to turn on and off the TV channels so I'd be able to control the TV channels by myself without using my attendant. I have a Fire Cube on my TV.

**Susan:** Let me make sure I understand what you're saying so everyone also hears you. You were talking to your occupational therapist who knows you well, Sandy from Easterseals. I think she's retired now, but Sandy Masayko, and she was listening to your goals. Again, that goes back to you don't have to have the answers, you just want to outline what it is you're trying to do. You were trying to control your television, turn it on and off, and switch channels, and she connected you, also, to somebody else. Kirby, right?

**Michael:** Yes, but I was going to talk about Kirby after.

**Susan:** Anyway, that's how you have your Fire Cube. What else do you have, Michael?

**Michael:** My favorite device is my Amazon Echo Show because I can listen to books, I can listen to the joke of the day, and I can listen to talk about my favorite 76er James Harden, and I can listen to music and read books. My favorite book right now is a book about Kobe Bryant.

**Susan:** Oh, another sportsperson. Well, Michael, so what's next, do you think, for you and smart home devices?

**Michael:** What is next for me in smart home devices is a Ring where I could see who's coming in and out my house during the pandemic because it has a camera which I can access through my smartphone, and also to see who's dropping packages off during the pandemic.

**Susan:** Well, that sounds great.

**Michael:** Anybody who has questions can feel free to email me or you could see my video that I have, that I made by myself that explains how this stuff works, like what books that [crosstalk].

**Susan:** That's a great plug, Michael. If people would like to see Michael showing his devices, you can go onto the [smarthomesmadesimple.org](http://smarthomesmadesimple.org) website, and within the blog, you will see Michael in a video talking about how he is able to turn on and off his lights and his television, and how he relates to his Echo Show.

Michael, I wanted to, real quickly, summarize that your next adventure is getting a Ring doorbell, your front, your back so that you will have a camera and a doorbell to see who's coming and going or wanting to come and go from your house, and the deliveries and anything else that's in that front or back area of your house. Do you happen to know how you paid for your smart home devices?

**Michael:** I was going to mention that at the end, but I guess it's the end. I paid for most of my devices, like Alexa said, through my waiver, through my outstanding waiver, through my independence waiver. Can you explain about the waiver for them a little bit?

**Susan:** Sure. Similar to Alexa, Michael has a home and community-based waiver program, is enrolled in one, and they paid for it. Also, you've got some-- if I remember correctly, you've had some training through the Office of Vocational Rehabilitation because being able to use some of your smart devices helps you with your job. All states have a Department of Vocational Rehabilitation. I

t's, again, that partnership of cobbling together funding resources, and OVR is a-- I think they were one of the first funders of smart home technology in Pennsylvania. Then I think, Alexa and Michael, if I remember correctly-- for sure Michael, you paid out of pocket through your ABLÉ account, right?

**Michael:** Yes. I was going to explain more about the ABLÉ account, but we don't have time to do the ABLÉ account, but you can explain about that way, Mom. That's a great resource.

**Susan:** All right, sounds great. Thank you, Michael. Thank you, Alexa. We have just a few minutes left, so let's go to the next slide, and then we'll have time for questions. Funding is important. An order-- whether you're getting a smart switch or a plug, you need funding. Having an electrician come in is going to be probably \$150, but a smart plug is maybe \$30, \$35. As you put together your funding strategy of the devices you want and be able to get the installation and training, we recommend putting together a funding strategy. We have a

book that's good for everybody. It does have some Pennsylvania-specific resources, but also national resources, and a general strategy of how to think this through.

It's called *Funding Your Assistive Technology, A Guide to Funding Resources in Pennsylvania*. It's available in English and in Spanish. You can download it from our website, and it's 508-compliant. We have also about 65 funding resources that we know of, as of two months ago, were good resources. Those organizations still exist through the pandemic. Next, please.

I wanted to bring up, very quickly, five resources that we know will help fund smart home devices. We will, through Pennsylvania Assistive Technology Foundation, through our mini-loan program, at 0% interest and zero fees, \$100 to \$7,000. There are, as I mentioned, other programs on the call that provide loans in their states through the Alternative Financing Program, and they have similar programs.

I know that Massachusetts and Nebraska also offer a 0%-loan program. Home and community-based waiver programs. Both Michael and Alexa got some of their technology through their waiver program. The Office of Vocational Rehabilitation. If you can tie smart home devices into employment, getting ready for a job, getting you out the door for a job, helping you work from home, which, certainly, many of us now are working in a hybrid situation, the Vocational Rehabilitation Department is a valuable resource. Then there are lots of grants.

In Pennsylvania, Achieva Family Trust is just one example that you'll learn from our book. Fred's Footsteps, the Kelly Anne Dolan Fund. Really, what you need to do is identify what you're looking for, provide a justification, like why it would be important, why it would make a difference in your life, and then you have a really good shot at getting a grant or a partial grant.

Then, lastly, the ABLÉ program, "Achieving a Better Life Experience." If you live in the United States, you have a disability that occurred prior to the age of 26, you can save safely in an ABLÉ account. Those monies don't count as an asset and you can use them-- it's a savings account, you can use them for your goals. I know that Michael used some of his savings from an ABLÉ program to help pay for his smart home devices. Next, please.

Here's Calvin, and really quickly, Calvin has spina bifida, he is also blind. He lives in his own home and he loves staying in touch with his father, who's 91, and he has an Echo Dot. In this picture, you can see just the Echo Dot.

Calvin has a phone-- a smartphone and a Dot, that's all he has, but it gives him more independence. It says, "Since I've lost my vision, I use my Dot to listen to podcasts and music, and call my dad, check the weather, check the time, or what the weather is." See, with one small device that costs \$35 plus his phone, and he has internet access, he is able to have a much greater, improved quality of life and independence.

He is able to live, and if he falls out of his wheelchair, he's able to call somebody. He's able to check in with his dad. Next, please. Here are some more quotes from people who've used smart home devices. I think our point with this is, often people with disabilities lag behind

others in getting technology, and here are devices that make a huge impact on people's life. They're mainstream, over-the-counter devices, and they make a difference to people.

As all of us learn about these devices, if we talk to our friends and family members, I think it will be quite helpful. Next slide, please. Here's our contact information. Please sign up for our newsletter, you will get more information. Also, all of you who registered and are participating today will get a survey at the end of this and we will also send you out the link so you will have access to this webinar, to the slides.

I think our staff at PATF have been trying to answer questions and help give you links to Easterseals where Laura is from, where George works from, Alexa works. In addition to helping coordinate self-advocates, Alexa works at the ARC of Pennsylvania, Michael works at the ARC of Philadelphia as well as being a self-advocate. I guess I would want to see if there are any questions. Maybe, Wendy, you're able to join me, or Mary Kate, in answering questions?

**Wendy:** Susan, can you hear me?

**Susan:** Yes.

**Wendy:** Sorry. I had some technical difficulties on my laptop, so I don't have my video off. I've been sending some of the questions from our Q&A into the chat, so you can look there or I can read them to you.

**Susan:** Well, I think some of this. Kim Elliot asked, "Were you able to get the evaluation and set-up funded through the waiver?" Yes. The answer to that is yes. Pennsylvania has a new waiver program and they are in the midst of restarting that and setting up codes so that the providers, such as Easterseals, will be able to bill, but it was able to happen in the past, and right now, you can get an evaluation, an assessment, the purchase of the device, and the training through the Office of Vocational Rehabilitation here, in Pennsylvania.

When I say, "In Pennsylvania," I just want to make sure people are clear that every state has their own programs, so that means that providers need to enroll in that state, but if it's done in Pennsylvania, I can tell you it's possible to do in all 50 of our states and 56 states and territories. Thank you.

**Wendy:** Susan, Kim Elliot had a question. Do you primarily have to use Z-Wave with communication devices?

**Susan:** I don't think you do. However, I'm not the expert on that. We can follow up-- We are working with a woman, Dr. Hill, out at the University of Pittsburgh, who works with several different manufacturers of augmentative communication devices. They are having a demonstration of augmentative communication devices and smart homes the very end of March, beginning of April. If you send your email, I will hook you up with Dr. Hill who will, I am sure, know the answer.

**Wendy:** Susan, Kim also shared, and I'm quoting, "We are exploring smart home control for people who use SGDs without having to rely solely on voice commands since it can be problematic."

**Susan:** Well, yes. I think that is important, and that's what Dr. Hill's looking at. Looking at different speech-generating devices and I think what George did so perfectly was to show how he is able to program in for him and have the devices work for him.

**Wendy:** Donald Clark asked, "I'm curious to know if anyone has started utilizing smart cooking devices-" He has Hestan Cue, Suvie, June as examples, "-that will enable people to prepare meals independently and safely."

**Susan:** On the very first slide and when we were showing the service slide, David was there. David Miller lives in his own apartment and gets support from his occupational therapist through JEVS Human Services, and they have helped set up, both the Echo Show so that he can get the recipes, and it can also speak out loud to him.

He has a smart stove so that he won't-- well, he has a great stove so he won't get burned, but I'm not sure of other devices that he uses. I know that some people have been trying to use smart microwaves, which are kind of magical.

The issue we had with one person who was using a smart microwave was that it was breaking down and then they didn't have a microwave at all. That's not to say not to go in that direction. I know some of the smart refrigerators, if you scan-in things as they go into the refrigerator, they will tell you about expiration dates and come up with menus given the food that's in your refrigerator right then.

If you go to our website, [smarthomesmadesimple.org](http://smarthomesmadesimple.org), and you can also access it through PATF's website, [patf.us](http://patf.us), and go on our blog, we've got several stories on there, and you can also suggest stories. We've got several consultants who love to write for us and tell us what we need to know and what their experience is, and we would be delighted to entertain all of those ideas.

**Wendy:** Susan, Liz Hellwarth asks-- and this is also for you, George, she writes, "Thanks, George, for the demo of how you use your voice output on your AAC device to control your smart home kit. I was wondering, Alexa and Michael, whether you use your smart home equipment through your own voice or touch screen app, or both?"

**Michael:** I use mine through my own voice because my voice is well understood and I have a loud voice.

**Wendy:** Right, and Alexa?

**Alexa:** I use my voice, too, and it learns your voice over time. Once I'm at my parents' house, they don't understand me very well because I don't use the device, but the ones in my house understand me very well by now. It learns your voice over time.

**Susan:** Yes, and I think that's a really great way to end this webinar, of thinking about how the training piece is incredibly important so that the device starts to learn you and what you need. It's so much simpler than devices 10 years ago where you have to go through a whole schedule on how to do corrections. That you can access smart home, yes, by touchscreens, but you can also use your voice, and you can have access. I have, sometimes, a Kentucky accent, and it understands me.

It can understand the softness of people who may have ALS or MS, as well as people from different nationalities where English is not their first language. Certainly, I know it does very well understanding Alexa and Michael. I thank all of you for joining us today. A survey, again, as I mentioned, will go out to you. If you have questions or other ideas for future webinars, please let us know. We're delighted you were able to come, and thank you very much.

We will leave the chat open for just a minute if you would like to ask a question. Have a wonderful rest of your day. Thank you to our presenters Laura, George, Alexa, and Michael, and the PATF staff, of course.

**[01:04:46] [END OF AUDIO]**