# AT Update 2022

## [Introduction]

**TRACIE DeFREITAS:**

Hello, and thank you for joining us today for this JAN Accommodation and Compliance webcast titled "AT Update: What's New in 2022." My name is Tracie DeFreitas, and I am your moderator. Our expert training on assistive technology will be provided today by my JAN colleagues: Teresa Goddard, Lead Consultant, Assistive Technology Services, and sensory team lead; Matthew McCord, motor team Senior Consultant; and Christy McCune, sensory team Consultant. We're going to have a great presentation planned today. Thanks for sharing your expertise with everyone today.

Before we begin, of course, we have to go over a few housekeeping items, so let's get to that real quickly. First, if you experience technical difficulties during the webcast, please use the question-and-answer option located at the bottom of your screen to connect with our tech team. You may also contact JAN at 800-526-7264 or use the live chat at AskJAN.org. That's A-S-K J-A-N dot O-R-G. We do offer an FAQ that may answer some of your questions. See the login email that you received for the FAQ link. You can also find it on the AskJAN.org webcast registration page.

Questions for presenters may be submitted using the Q&A option that I mentioned. All questions will be gathered into a queue and, time permitting, will be answered at the end of the presentation.

The link to download the PowerPoint slides can be found in the webcast login email you received earlier today, so please do go back to that email. It has also been shared during this webcast here in the chat, and it can be found via the training page at AskJAN.org. So look for this event on the webcast registration page, and you can find all of the information about the event, including the PowerPoint slides.

To access live captioning, use the closed caption option at the bottom of the webcast window, or view captions in a separate browser by accessing the link shared in the webcast chat.

This presentation is being recorded and will be available at the AskJAN.org website and on our YouTube channel, probably in about a week or so.

And finally, at the end of this webcast, please complete the evaluation. The CEU approval code will be provided after the webcast evaluation is submitted. Now Teresa, please take the lead on this AT update.

**TERESA GODDARD:**

Thanks, Tracie. I just want to tell you a little bit about today's plan. Christy will begin our discussion today with a brief overview on JAN, just in case we have some newcomers, and then Matt and I will discuss some AT basics. We will then discuss some AT-centric situations and solutions. Along the way, we will review some interesting new assistive technology that is either fresh on the market or currently in development. Finally, the floor will be open to all of you to ask any questions that you might have about what we've discussed today. Because of this we would appreciate it if you could hold any questions that arise until the end of the presentation.

Next slide, please. Christy, the floor is yours.

## [About JAN]

**CHRISTY McCUNE:**

Thank you. Good afternoon. For those of you that are new to JAN, welcome. We are a free consultation service that helps people understand job accommodations, federal employment-related disability rights laws, resources a person with a disability can tap into to start a small business, and more. We have been around since 1983, so even longer than the ADA. We are one office located in West Virginia, but we provide our services to the entire US and the territories. If you ever have any questions, we will help how we can.

## [What is Assistive Technology (AT)?]

**TERESA GODDARD:**

We want to define what we mean when we say “AT” or “assistive technology.”

There is a little bit of debate in the disability and assistive technology communities on this, so I want to share with you the definition that we use here at the Job Accommodation Network. To us, AT means any sort of device or service that helps a person with a disability to achieve or maintain functioning. Some people prefer to limit the term to only mean things that are designed to help people with severe needs, but we feel that assistive technology can be simple and also the kind of ubiquitous things that occur in our environment could be used as assistive technology.

So on this slide we do have a couple of examples pictured. If you will look at the slide, you'll see an example of speech recognition software. We see Nuance Dragon Home. There is a picture of a compact material handling device and a picture of an alternate input device. This is a type of touchscreen keyboard that could be used by a person who can't use a typical mouse or keyboard or who just finds this type of interface quicker and easier to use.

Next slide, please.

Matt will discuss some typical traditional forms of assistive technology as well as some more mainstream devices.

**MATTHEW McCORD:**

Thanks, Teresa. Practically speaking there are some good reasons to separate more traditional forms of AT and more mainstream devices. For instance, traditional AT tends to be devices that are designed to complete a specific task for a person with a disability. So they tend to be more specialized pieces of equipment with one or two intended functions. Like for example, Microsoft's specially designed adaptive controller for Xbox users that we have pictured on the left of this slide.

Meanwhile, mainstream devices like computers, cell phones, or iPads are used by so many people that their functions are designed to be useful to a much wider audience. These mainstream devices can and are helpful to people with disabilities, but they're not designed specifically for their needs. I think the key here though is that accessibility in mainstream devices has become a much more prominent concern, and because of that we have built-in accessibility features for these devices that are available as soon as you open the box. Features like speech recognition, word prediction, color contrasting, and more are all standard features now, and because of this, the line that defines traditional AT and mainstream device gets more blurred as time goes on. In a sense, the goals of traditional AT are being incorporated into our everyday technologies, and because of that we see both as forms of AT.

Now Teresa will take us through some examples of high- and low-tech assistive devices. Next slide, please.

**TERESA GODDARD:**

Thanks, Matt. So again, when we think of assistive technology, a lot of us think of those really high-tech futuristic devices, things that maybe we saw in sci-fi movies when we were a kid, rather than just simple modifications. So sometimes assistive technology is like that.

On this slide we have a picture of a meeting where three people are communicating with a coworker through a robotic telepresence device. That's a newer technology that could be useful for someone who works remotely while still needing some type of physical presence on site. We're seeing this used not only in the workplace, but it's also being used in schools where students who have immune system issues that may prevent them from participating in classes with them being physically present. It allows them to have some of the benefits of physical presence while still having the protection of telepresence. So that is an example of a very, very high-tech type of assistive technology.

Some other examples include alternative input devices that let us use our computers without traditional keyboards and mice, specialized software options, things that read the screen aloud to us or that turn our voices into text, or alternative and augmentative communication devices. Sometimes we call those AAC or speech-generating devices. These allow people who need to do so to communicate using a synthetically produced voice and a device that lets them share their ideas with the world. But often, assistive technology is low-tech and can be implemented fairly easily.

Workplace modifications can often be made at little or no cost, and there are all sorts of inexpensive devices, such as the pencil-gripping aid pictured on this slide, a type of writing aid. AT might also be custom-designed or modified, and customization doesn't always translate into high cost. It can literally be as simple as wrapping a handle in duct tape to make it easier to grasp. Removing the legs of a computer desk can also be a very low-cost custom modification for an individual of short stature, for example.

Next slide, please. Christy's going to tell us about some upcoming events.

**CHRISTY McCUNE:**

Thank you. Now that we have a good foundation on what AT is, let's briefly discuss some of the ways of keeping abreast with all the newest toys in the AT world. Pictured on this slide are the logos of four prominent AT conferences that we wanted to mention.

First up is the Assistive Technology Industry Association, or ATIA. They strives to be the collective voice of the assistive technology industry to help ensure that the best products and services are delivered to persons with disabilities. They put on an annual conference, and their next one is happening January 31 to February 4.

Next is California State University Northridge, or CSUN. This university puts on an annual conference on assistive technologies to share knowledge and best practices to help ensure inclusion for everyone. CSUN's next conference will be coming up March 13-17.

The Assistive Technology Advocacy Center of New Jersey will be putting on their sixth annual New Jersey Assistive Technology and Community Living Summit from September 21-22. Their summit focuses on empowering people with disabilities to increase their independence by connecting state agencies and community living professionals with them.

Finally, Closing the Gap has a conference coming up October 19-21. They discuss AT but have a focus on special education and resources to help enhance the classroom experience for these teachers and their students.

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## [Situations and Solutions]

Now we're going to find our path and discuss a few scenarios.

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We will begin by discussing a typical vision problem. So a new hire just began working in a school cafeteria. She has low vision and had been working with a team of professionals to learn how to use strategies and assistive technologies for a variety of on-the-job tasks.

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Now on to a typical solution for this problem. The worker explained to her new supervisor how she could use assistive technology and strategies to perform tasks such as serving students, cleaning tables, navigating the kitchen and cafeteria, and putting away cleaning products. She had some initial difficulty navigating. Some typical solutions for navigating would include allowing an orientation and mobility specialist to come to the workplace to help learn navigation skills specific to the work environment is one possibility. Orientation and mobility tools such as canes and proximity detectors can be helpful for individuals who are trained in their appropriate use. Designating set paths of travel may also help. Service animals are typically not permitted in commercial kitchens but can be helpful in navigating other parts of the workplace.

Next Teresa is going to discuss a range of approaches for this situation. Next slide, please.

**TERESA GODDARD:**

Thanks, Christy. So when it comes to accommodating an individual with low vision, there are definitely many options. It can take a bit of trial and error to identify a set of solutions that will both meet an employee's needs and satisfy an employer's requirements and concerns. An assistive technology evaluation by a vision rehabilitation therapist or a CATIS -- C-A-T-I-S -- may be helpful. Other professionals such as occupational therapists or vocational rehabilitation therapists may also be able to assist and identify accommodation options as well. Asking the individual what they have used previously is a great strategy too.

So some potential options for a scenario like this could include the following: Sometimes there are concerns about the person's assistive technology and whether it might be damaged, especially in an environment that has lots of ways for things to get wet, like a commercial kitchen. Finding a secure and accessible location for AT storage can help alleviate this concern. Designating someone to assist as a qualified reader could provide a backup in case a person is having difficulty correctly identifying objects or packaging.

In this particular case there were a lot of concerns about the person's ability to reliably make sure she was picking the correct cleaning product and putting it back in the correct place. Because, especially in commercial kitchens, a lot of cleaning products are very necessary that are very strong, and there can be consequences if those are stored incorrectly or used incorrectly. So designating someone to double-check, it's not a bad idea. Even though it's not assistive technology, it can still be a great accommodation.

Sometimes seeking assistance from a vocational rehabilitation office or from a scripting vendor can help to address concerns for computer access. Why does a person need computer access in a school kitchen? Well, people may need to maintain inventory, keep records on temperatures, or deal with taking lunch cards or lunch numbers and making sure all the billing is happening properly.

Some portable AT options that can be very useful if there are concerns about setting things down in the wrong spot include the Orcam, which is an optical character recognition device that is very small and is available in something that you can wear attached to your eyeglass temples. Aira IO is an app. Apps might be potentially used on a phone or another device in a waterproof case that could be easily sanitized. Portable digital magnifiers are also something that could be potentially carried on a lanyard to be used just sort of on the spot without having to be stored far away or accidentally set down on a countertop where it wouldn't be appropriate to set that. Another example of an app that might be used with a smartphone to assist with reading is Seeing AI. So those are just some basic examples of potential options that you might consider if you had a similar case.

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Speaking of that, in this particular case the employer had very specific concerns about the individual being able to correctly identify cleaning chemicals. This was something that was mentioned more than once. There were also concerns about being able to correctly enter lunch numbers and performing other record-keeping tasks using a computer. They also needed to be able to check ID cards and also access information on other materials and equipment. There was also concern about how the employee would appropriately use assistive technology in a kitchen setting without violating health codes or damaging the technology. This sounds like a lot, but these are typical concerns that I'm not surprised to see from an employer.

Next slide, please.

The JAN consultant discussed some common options including color-coded and tactile labels, also known as bump dots. We also discussed designating someone to double-check labels and provide reading assistance as needed and making any necessary software accessible. How would we do this again? Perhaps through scripting, writing computer scripts to make sure that that software can work well with things like screen reading software so that the screen can be read aloud. A person might also use screen magnification software to make things on the computer bigger and easier to see.

We also discussed small portable and wearable items that could be stored in a pouch or pocket or worn on the head. Again, an example is Orcam, an OCR product I believe that's pictured on the slide. This is available in a handheld or a headworn design, and it's used to read printed text out loud. It can some do other things too like some basic object identification and in some cases identify people.

A newer approach that could also be used, depending on the setting, would be virtual sighted assistance, where a person who is at a distance, not physically present in the work environment, can provide some sighted assistance and perhaps a bit of qualified reader assistance. You might be familiar with this option from the app Be My Eyes, but a newer version is available from Aira, and that used to be a set of glasses that you would wear, and using the glasses in your home you could access a call center, but the format has changed somewhat, and it's primarily software-based now so it is basically an app, not special glasses.

Next slide, please.

I want to tell you a little bit about an option currently in beta testing. There is an Aira desktop app that would allow for virtual sighted assistance for computer-based tasks as well. So this is an exciting development for individuals who are working virtually and cannot access community-based qualified readers, and I also anticipate it being helpful to individuals who need to work with systems that can't be easily modified to allow for traditional screenreader access. Again, this is the Aira IO desktop version.

Next Matt's going to discuss some typing-related scenarios. Take it away, Matt.

**MATTHEW McCORD:**

Thanks, Teresa. Okay. So for our next example, we have an individual working in the healthcare industry who only has use of one of their hands and is having trouble with using a computer. The employer reached out to us here at JAN to see if we could suggest some accommodation options that might benefit this individual. Up to that point the individual was just switching back and forth using the standard mouse and then using their standard keyboard with the one hand, and this was causing the individual to work at a much slower pace than their colleagues. So they were hoping we might have something that could help them work a little faster.

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Typical accommodations for an individual with the use of only one hand who is having issues with typing could include the acquisition of a specially designed one-handed keyboard like the model from Maltron that is pictured on this slide on the left. Unlike QWERTY keyboard models that are the standard keyboard layout in the US, options like this one shift the keys around so it is more ergonomic to type solely with one hand. However, options like this do require time to learn how to use it at a fast pace, and some of the least-used keys on a typical keyboard have been omitted from this specific model. So if the learning time or simply the new layout is not preferable, many people also find miniature-sized keyboards a good fit for one-handed use.

It can also be helpful to swap out the mouse to something that does not require handheld operation. So what does that mean? Well, for instance, there are mousing options that can be controlled with pedals and a trackball that's used with your feet under the desk. There is also cameras that monitor head movements and eye movements and interpret those into mousing actions on the screen too.

Finally, there is speech recognition software, which can be used to replace both a keyboard and a mouse entirely. Though keep in mind some programs like spreadsheets can be difficult to navigate with speech recognition alone, so a more dedicated mousing replacement option might be needed to be used alongside that too to make that specific type of software more accessible.

Next slide, please.

But what if the individual wants to go with speech recognition, but the work that they do is with information that needs to be kept confidential? Speech recognition would naturally require the individual to dictate the information aloud for it to be entered into the computer, so how can the employer ensure that the sensitive data is not overheard while using the speech recognition?

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In this situation it might be helpful to look into a steno mask. These are essentially specially designed microphones that have an attachment that the user presses their face into to help dampen their voice from being overheard by others. You might be familiar with them due to seeing courtroom stenographers use them to dictate the proceedings of the court verbatim. Many users in courtrooms have models that are worn as a mask, hence the name, for ease of use, but you can find models like this pictured on the slide that are simply attached on the specific microphone instead. Keep in mind that many of these models are sold with USB plugs already attached to them to make them easy to use with the computer, but several are not. So a USB adapter might be needed to make it work with the computer depending upon which model you actually purchase.

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In addition to the steno mask/speech recognition combo, there are still alternative options that can be provided here. First, allowing the individual to work from home might be a simple solution. If the individual can work out of a private room in their home or if they happen to live alone, then there should be no real concern about the sensitive data being overheard.

If teleworking is not an option, though, we could try moving the individual's workstation to a more private area on-site. A private office would naturally be great here, but even if they're just a more remote location on-site with less traffic would be helpful if that's not possible. There's also the possibility of installing soundproof panels, like shown on the right of this slide, onto the walls around the workstation to help dampen the sound from being heard by others. And if there are no walls around the workstation, then we could create some by purchasing and installing some cubicle walls to encapsulate the workstation. So that way there's more barriers being used to dampen that sound.

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On the topic of typing concerns, I wanted to showcase the Cala Trio. It is a wrist-worn stimulator that can help with writing or typing tasks for people who have issues with tremors. When wearing it on the wrist, it will monitor for tremors and, if it detects them, it will send electrical signals out to help dampen the effects of the tremor. So how it works is that the electrical signals that the device puts out are picked up by the nerves in your wrist and are then sent to the brain, which disrupts the mechanism in the brain that causes the tremors in the first place. It has only been on the market since 2019, but it was cleared by the FDA for treating tremors in October of last year, so I wanted to be sure to include it now that it has been given FDA approval. The manufacturer also has studies available on their site for those interested in learning more about it. Though simply as a word of caution, since this device is sending electrical signals through the body to the brain, if you are considering it for yourself you should speak with your doctor first, especially if you have a pacemaker implanted or you have a history of seizures.

With that out of the way, I will turn things back over to Christy and Teresa so that they can take you through a hearing-related example.

Next slide, please.

**CHRISTY McCUNE:**

Thanks, Matt. So the next scenario that we're going to discuss is a hearing problem. So a newly hired roofer was deaf and used ASL, or American Sign Language. He needed to receive instructions at the worksite as well as training.

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A typical solution for this would be to provide interpreting services as needed. ASL can be especially important to ensure effective communication in important meetings and to provide equal access to benefits and privileges of employment such as training. Some employees may be able to effectively use other communication support such as automated captioning or alternative communication methods such as texting, instant messaging, typing, and handwritten notes.

Next Teresa is going to talk about some basic tips and communicating with a sign language interpreter.

**TERESA GODDARD:**

Thanks, Christy. Before we go on I just want to share some basic tips for communicating with an individual who is deaf or uses sign language for another reason through an ASL or sign language interpreter. The most important thing you can do is to choose an effective interpreter for your situation. Sometimes specialized vocabulary may be needed.

Another thing you can do is to prepare the setting. Make sure that there's a good line of sight between the individual who is deaf or hard of hearing and the individual who is serving as the interpreter and also good lines of sight between other participants as well. You want to make sure you have good lighting. We've had questions before where people were asking about what type of lighting we should use with an interpreter in a theater setting where a person might be in a room that's -- or on a stage that's rather dark, but the interpreter needs to be illuminated.

You can prepare the participants by telling them about good meeting etiquette, good turn-taking, and to communicate and address their comments and questions directly to the individual who is deaf rather than the interpreter.

One thing you might consider is notetaking assistance, because it can be challenging for someone to consistently watch the interpreter and watch any slides you might be presenting and also take notes at the same time.

In general, though, just relax, use your normal tone and speed, show respect for the interpreter's professional judgment and ethics. Don't ask them not to interpret something. They're supposed to interpret everything that's said. You might also consider using a captioning option along with an interpreter during video calls. Why? Because your video is more likely to drop or lag than audio or captioning. So if there is a brief interruption of signing, by using a captioning option in addition you can allow the person who requires accommodation to continue receiving information during that meeting. So that's just a little optional thing that you may want to consider.

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So as Christy was discussing in the scenario, sometimes the typical accommodations simply aren't a good fit for the situation. This is particularly common when the nature of the work and the work setting make it really hard to implement somebody's preferred solution. For someone who uses ASL, they may want to use an interpreter as much as possible. Makes sense. A lot of individuals who are deaf and work in trades tend to prefer using texting as a way to communicate with a supervisor or a coworker, but that might not always be practical either on a rooftop or also in places with little to no data connectivity, so like in a rural area.

This roofer needed to receive instructions from a supervisor while on-site. Not necessarily on the roof itself, but definitely at the worksite. Due to changing locations and safety concerns, they had a hard time finding an interpreter who could meet the need, and there were also some safety concerns and practical concerns about line of sight and working at heights. I think some interpreters might have been a little nervous to accept a job like this even though they could probably work some of this stuff out.

And additionally, the fact that we were probably talking about a lot of frequent-but-brief communication, probably raise the employer's concerns about costs, like, “Do we really need full-time interpretation for this level of communication?”

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So I want to talk about some typical approaches. So some typical approaches when someone is deaf or hard of hearing and needs to communicate in the workplace include providing CART and interpreting services as needed. If an employee has a hearing aid, maybe make sure they have everything that they need to benefit from that hearing aid. Perhaps a person might benefit from a compatible assistive listening device. It might be possible to address background noise by installing some noise abatement materials. It might be possible to use microphones to make the speaker's voices louder. Encouraging effective meeting habits like appropriate turn-taking can make a big difference as well.

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In this particular case, the JAN consultant discussed a range of low-tech and high-tech communication supports that did not require connectivity. Why? They weren't going to have reliable connectivity at all the worksites. Some of the options we discussed included old favorites like pen and paper or a whiteboard. Sometimes a supervisor is willing to learn some basic signing, and that can be extremely helpful and supportive. The other option that we discussed is something called Signtel.

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Signtel is one of the older, almost a legacy-type products to assist someone who is deaf or hard of hearing as a communication support when an interpreter might not be available. It's basically a computer program that will turn spoken English into text or a very basic rudimentary form of sign language. It's not ASL, but it's something that is potentially understandable. It's not the right fit for everyone. But what made it a good possibility for this situation is the fact that it doesn't require connectivity.

An additional concern with this scenario was that the individual wasn't totally secure in their command of written English, so they preferred signing when possible. That's something that really moved the Signtel to the front of the line in the consultant's mind when thinking through this scenario. This really illustrates how an older product might fill a bit of a niche-type need.

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Now Matt's going to talk with us a little about back problems. Take it away, Matt.

**MATTHEW McCORD:**

Thanks, Teresa. For our next example, we have an employee who has recently injured their back due to being in a car accident. They work for the IRS, and their job requires them to do a lot of working on a computer. Unfortunately, the injury makes it painful for them to sit for prolonged periods of time. The employer reached out to us looking for some accommodation options that might help in this situation.

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A typical way that a need like this can be addressed would be with the use of an adjustable workstation that allows for alternating between sitting and standing. For example, there are fully electric desks can be raised to different preset heights simply via the push of a button. I provided a picture to one such model from the company Varidesk here on this slide on the right.

Beyond this, though, there is also the possibility of a new monitor stand to achieve similar results. There are adjustable monitor stands that can be raised or lowered that also come with an attached keyboard and mouse tray. Sometimes these can be a cheaper alternative to an adjustable desk, and of course, there is also the old-school approach, two separate workstations. One ergonomically designed for the individual to sit and work at, and the other that's ergonomically designed for the individual to stand and work at. Though not necessarily an ideal solution when there is limited space involved, it is still a highly effective option that should be considered if it's possible.

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But what if alternating between sitting and standing does not help to alleviate the individual's pain? What if they only get relief when they lie down prone? In this call that this example was based upon, the employer already considered a sit/stand desk option, and the individual knew immediately that it would not help them. Naturally, as this accommodation need is due to an injury, there is the possibility that the needs may lessen with additional time to heal, so leave is a possibility here. But is there anything else that would enable the individual to return to work now?

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There is the possibility of a zero gravity chair. These reclining chairs allow the user to alternate between an upright sitting posture and a horizontal supine posture. You might need to review some modifications to the existing workstation to make a reclining chair work with it, but once that hurdle is overcome, this might be a good option for this individual. Many zero gravity chairs are or can be outfitted with motors to enable switching positions to be done with the push of a button too. The model pictured on the slide on the right, the Novus Zero Gravity Recliner, is one such model that can be outfitted with a motor for an additional cost.

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In addition to zero gravity chairs, there are also supine workstations. As you can see from the picture of the Altwork Flex Station on the left of this slide, these are an entire workstation bundled into one, and all of it can recline back together. The chair, the monitor, the keyboard tray, the mouse tray, everything. All of it reclines back at once. This can be a preferable option if modifying the workstation to accommodate a zero gravity chair gets too expensive. Sometimes buying one of these can be cheaper depending upon what would be need to be modified to make a zero gravity chair work. So I wanted to include these as a possibility too.

Next slide, please.

Speaking of back injuries, the Esko EVO is a newer product that is designed to help reduce the chances of those happening for someone working in a physical labor job. As you can see from the picture on the right of the slide, this exoskeleton vest helps to reduce worker fatigue by providing support whenever they're doing tasks like lifting. Testimonials on their website state that users needed to use less force to do tasks like lifting and carrying due to the support that the vest provided them.

So how this works is the bottom part is strapped around your waist, and the two parts that are at the top help to support your arms and shoulders. It doesn't provide any electrical support, so it's not motorized at all but the resistance that the supports give can make it so you have to use less effort to do the lifting and the carrying, so it takes less effort to do the work. It was originally released onto the market in August 2020, so it is only about two years old now, so still pretty new, but I wanted to include it as well.

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Now I'll turn things over to Teresa so she can discuss some new solutions and trends with you all, and I'm sure we'll all be chiming in here.

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## [Accommodation Trends]

**TERESA GODDARD:**

Thanks, Matt. We wanted to take a few moments to talk about some of the trends that we've been seeing in terms of JAN calls here in 2022. So some big things that I've seen this year have been questions about data security. I've seen an uptick in questions about whether or not a particular piece of assistive technology, especially a piece of software, can be used without violating an employer's data security standards. Some employers are changing their data security standards and taking a look at technologies for the first time. So that's kind of a hot topic lately, seeing concerns about software that has been used for a long time, just because someone's taking a new look at it from a data security perspective. So I think that's ultimately a good thing, but it can be disruptive to someone's accommodation, so I think it's good to handle that in a sensitive manner.

Hybrid work continues to be a popular topic, but I'm seeing an increase in questions about employees who are returning to the workplace following a period of telework. Or in some cases they may be asked to return to the physical workplace even though telework has been a very successful option for them.

Matt, Christy, would either of you like to weigh in, or are you hearing the same types of things that I'm hearing?

**MATTHEW McCORD:**

Oh, definitely. I am definitely hearing this on the motor team. One thing that's become pretty apparent is just, due to how COVID-19 forced so many employers to kind of sink or swim whenever it came to remote work, now that COVID is sort of dying down and just kind of becoming in the background, kind of becoming part of our day-to-day lives, they're really trying to make an effort to stop doing those things, because they're -- a lot of jobs weren't designed to be done remotely. So they're kind of trying to return back to the workplace, go back to the on-site model more, and that's obviously causing disruption because, as we here at JAN often preach quite often, telework can be a very effective accommodation for people with disabilities, and it's really one of those things where I feel like we're going to have to make a compromise, where I think that COVID really showed that a lot more people could telework and probably needed to be able to telework all along.

**TERESA GODDARD:**

Yes, I absolutely agree, Matt. And I think we're seeing a convergence of employer goals. Some employers just seem to want to have things go back to normal, whatever that looks like now. I am hearing from a lot of people who prefer to be on telework in order to avoid germs, not just COVID but other gems too. But the employers are wanting to bring people back while also doing away with things like mask mandates at the same time, and in some cases, there may be a third goal of reducing the real estate footprint so that employees are forced to fit into a smaller space. So that's obviously going to bring about some challenges for those who need to physically be farther away from others, either because of background noise is a problem or because of an immune concern or an allergy-related concern.

**MATTHEW McCORD:**

As an aside, one thing to keep in mind is that even though COVID is kind of becoming part of our day-to-day lives now, and it's just become a fact of life, you know, it's not the only possible pandemic. We all are aware, I'm sure, of the fact that monkeypox is becoming something that's coming on a lot of people's radars, and that's probably going to require some specific accommodation considerations too. Obviously it's different from COVID, it is not airborne, but, you know, it might require additional cleanings in the worksite. Or it might require some differences whenever it comes to things like handshake policies or things like that, you know, to help limit the touching involved.

So these are all things that I think that, if nothing else, I hope that a lot of employers take away from COVID is that, you know, pandemics and other things like these public health crises are going to necessitate some flexibility whenever it comes to how we normally do business or the way we normally think about doing business. We might need to change those things and challenge that concrete default thinking.

**TERESA GODDARD:**

Absolutely. And I think one thing that COVID really highlighted for us all was that there are some people who had never considered asking for telework for their non-COVID-related condition and found it to be very helpful. So this could include people with photosensitivity, migraines associated with that, fragrance sensitivity. There are a lot of conditions that lend themselves to telework as an accommodation that people really got to try out for the first time during COVID.

**MATTHEW McCORD:**

That's very true.

**TERESA GODDARD:**

Well, I don't want us to miss out on all of the exciting new products, so thanks for that little back-and-forth, Matt.

## [Products in Development]

Next let's move on to some of the exciting new products that are in development or just new to the market. So this is something I have been waiting for for such a long time. I am so excited to tell you about it I really am hardly able to breathe right now. The Cognixion ONE is a wearable AAC device. It's difficult to tell from this picture, but yeah, it actually goes up on the head and face, and it's designed so that it has an AR display. The person wearing it can in a sense see through it while also using either a switch or head pointing or, most excitingly, a brain-computer interface to select the letters, words, phrases, sentences that they would like to say. So it's got kind of a heads-up display to it as well as a way to use your head or even your brain waves to select what you would like to say to your conversation partner. So this is still in beta testing. If you're interested you can go to their website and sign up for an opportunity to be a beta tester. But it's a very exciting development. Something we've been waiting for for a long time.

And what I am hearing from the developers is that they are seeing messaging speeds far beyond what they anticipated using these new methods of access. In other words, that means that people who maybe used to use a switch and an AAC device to formulate their sentences can do so much faster using this new type of interface. So thanks for giving me some time to talk about that.

Let's look at the next slide.

We were just talking about fragrances and telework. Of course a lot of people with fragrance sensitivity are coming back from telework now, particularly in schools. I want to highlight a mask that is designed to help people with allergens, fragrances and things that might be strong smells that could activate problems with their respiratory system. So the Honeycomb Pollution Mask with Coconut Filter from I Can Breathe! is a mask and filter combo. On the screen you can see a picture not only of the mask but also of the coconut-based insert. So it's made of a -- it's made using a coconut-based charcoal. So the shell is reusable and washable; the filter is replaceable and contains activated carbon. This is designed to reduce exposure to smoke; air, especially a sort of acrid air; dust; pollution; fragrances; molds; any type of particulate matter that a person may have a sensitivity or an allergy to is something that this could potentially catch and deal with. It also comes in a sport edition, which I believe has an exhalation valve, so that's going to be suitable in some settings, not in others. We're getting a lot of interesting feedback on masks of this type. We're also seeing more requests for air filters that contain activated carbon. So as we're returning to our physical workplaces, I think we're going to see more demand for this sort of thing.

Next slide, please.

And here's another exciting development. Of course you know for years I've been collecting information on different types of automated captioning devices and apps and software programs. Speaksee AutoCaption is an option for captioning virtual meetings. It works with multiple platforms similarly to some of the other options we've looked at in the past, and it displays those captions on computers and tablets. What is different about this is the Speaksee microphone system, which is an add-on that you can use with their existing software. So in the picture you can see a cradle that contains some color-coded microphones, and you also see a smartphone with conversation bubbles that are also color-coded. The idea is the person who has the yellow microphone in front of them, their text will be displayed in the yellow. Whatever they say is going to be transcribed and appear on the screen in yellow, so you can keep track without pre-programming in anyone's individual names, and this also eliminates the need to ask people to utilize their own smartphones or tablets in a meeting.

That was a great development especially when Ava first came out, Ava the captioning app. People were able to use their own microphones to participate in a conversation. This replaces that so that people don't have to bring their own devices to the meeting. So it's designed for in-person meetings, and the Speaksee microphones will capture the audio at close range for captioning and stream them to hearing aids or display them in a color-coded fashion in the app. An interesting new microphone product.

Next slide, please.

And, Matt, I believe you have something to share.

MATTHEW MCCORD:

Yes, I do. I found this, and I was very excited about it. I think it's something that really shows just how we're thinking and how we're trying to innovate something that we all kind of take for granted. And I think that one of those things that the disability community really kind of just accepts as part of the process is prostheses.

So in this example I wanted to share the Power Knee that's recently been released by Ossur. This is in essence a motorized prosthetic leg. It was released in February of this year, and how it works is that the knee of the prosthesis has a motor in it. The motor provides resistance to increase stability when you happening to be descending, like when you're going down a flight of stairs or walking down a slope. The motor also provides increased power when walking or climbing up stairs or slopes or when you are standing up from a seated position. I think that this concept is very exciting because of how it's dynamic. How it shifts between providing resistance when you need it and providing power when you need it. People who use a prosthetic leg will oftentimes be able to very easily tell you how difficult it can be to do something simple like standing up from a seated position, because the prosthetic has no support to really help with that really. But with this motor included, now they do. And I think that that's going to provide a whole new world of uses that could really make things much easier for people with these sorts of needs. So I definitely wanted to include it, especially since it was just released this year. I was very excited.

Next slide, please.

And that concludes the content of our presentation today. Do you have any questions for us, Tracie?

## [Q&A]

**TRACIE DeFREITAS:**

We do have a few questions. Let me go ahead and get those prepared for you. Excellent job. Lots of really cool things to consider, new equipment. All right. Let's jump right into it. Let's see here.

A question around weak voice. So what devices might be available for employees with a very weak voice, someone who might be whispering, that is working in a call center answering phones using headsets? Any ideas for accommodation around that type of situation?

**TERESA GODDARD:**

Well, to an extent it depends on the type of phone. So what I mean by that is there are products that are designed to do this really well, really intuitively, but they're meant to work with a landline phone. One of the ones we have talked about for years, the speech magnifier. I don't know why it is called the speech magnifier instead of the speech amplifier, but it is. It is from S5 electronics. It's recently become more difficult to find; it looks like S5 is perhaps going out of business, and we are seeing only third-party retailers carrying their products now. But it's a very simple, intuitive amplifier just for outgoing voice on a landline phone. If you can still get your hands on one, it's a great option. But if you look on the JAN website, you'll see other options for outgoing telephone amplification as well. And again, most of these are designed with a landline phone in mind. However, if you are having the option to use a VoIP, Voice over Internet Protocol phone, then fixing this issue could be as simple as adjusting your audio settings and using a good microphone. Something with noise cancellation. So I'd say it really depends on the type of phone moreso than whether it's a call center or not, if that makes sense.

**TRACIE DeFREITAS:**

That's very helpful, Teresa. Thank you.

**TERESA GODDARD:**

As a final thought, gaming headsets can often be excellent for use with a VoIP phone.

**MATTHEW McCORD:**

It makes sense, yeah. Since a lot of gaming headsets are meant to be used with things like Discord and other sorts of streaming services, basically is the same thing in a lot of ways, so that makes sense that they would be good with that.

**TERESA GODDARD:**

They often have high microphone sensitivity as well as really nice noise cancellation built in.

**TRACIE DeFREITAS:**

Okay. Very helpful. Here's a question related to the accommodation process. So when an employee requests assistive technology as an accommodation, are there resources that can help an employer explore this type of accommodation as a solution?

**MATTHEW McCORD:**

Well, one thing that immediately comes to mind would be your state's assistive technology project. They're a very good resource. They have -- they do a lot of things, they do multiple different things -- But the main thing that's pertinent here would be the fact that they have libraries of various forms of assistive technologies that people can try out. They also allow you to loan them for a time to get some practical use on them in the house or in the workplace. So if there is a specific piece of assistive technology that you're wanting to try before you buy it, state AT projects are a great resource to help with that.

**TERESA GODDARD:**

I would agree with that. Many employers don't realize that your state assistive technology professionals can actually come to the worksite and do demonstrations in addition to just lending things out. Most of them also have a searchable database on their websites where you can see exactly what is available for loan in your area. It's a great resource. Of course you can always call us to get a feel for the types of things that are out there and start your exploration process.

**TRACIE DeFREITAS:**

That's very helpful. I think it is good to know that people are not alone in this process. There are resources that can help externally. Here's a follow-up to that. If you are working internally within your own agency or organization, who might be on your team as far as trying to implement AT-related accommodations? Are there people within your own organization that might be able to be part of the process?

**TERESA GODDARD:**

I'd say make friends with the IT department, first thing. They can be your best friend in this process, or they could be the ones that are raising things like data security concerns that you're going to have to navigate. So make friends right away with one or more people in IT. And of course your ADA coordinator, if you have one, or someone in your HR department may possibly have some knowledge of assistive technology. We are seeing more HR-type professionals attending the big assistive technology conferences. That's becoming more common than it was in the past. You may have somebody in the HR or personnel department that has some familiarity with the broad range of what might be possible, but you're going to want someone from IT to help with the nitty-gritty pieces of the implementation.

**MATTHEW McCORD:**

Another department that might be helpful too would be maintenance or facilities. Like, if you have an accommodation that's like, you know, an adjustable desk or an ergonomic chair, most likely people that are working in that department will probably know how to do basic troubleshooting, will probably be able to help you with installing it, setting it up, you know. Because those are all things that have to be done too. You know, an ergonomic desk is great, but, like, you know, it comes as a box that it has to be taken to the office and has to be set up. Having people that, you know, you can reach out to in facilities, it is probably something they can really help you with.

**TERESA GODDARD:**

If you are fortunate enough to have electricians in your facilities department, they can be absolutely invaluable, especially if you're doing something customized.

**TRACIE DeFREITAS:**

Those are great suggestions. I'm sorry, Teresa. Did you have another?

**TERESA GODDARD:**

Oh yeah, a final thought. If you're in an educational setting, there's a chance that you may have assistive technology professionals in your workplace, and they may be able to help.

**TRACIE DeFREITAS:**

Good. Absolutely. I think it's important to make sure that you are establishing what I would call an "A Team," or accommodation team, ensuring that you have the right people on that team. Absolutely. Okay.

## [Wrap-up]

This has been great. I think that we have only about another minute left, and so we will go ahead and close things up for today. We sure learned a lot today, that's for sure. Teresa and Matt and Christie, thanks so much for this informative training, for sharing your time and your expertise with us today. We do appreciate you.

To our attendees, thank you for attending this Accommodation and Compliance webcast, this "AT Update." It's something now we have done two years in a row, and I hope that we can continue to do this, because we learn something new every year.

We encourage you to register for the next JAN Accommodation and Compliance Series webcast, "Accommodations for Sleep Disorders." This is planned for Thursday, September 22, at 2 PM. You can register today by going to the training page at AskJAN.org.

We hope you'll share your feedback about today's webcast by completing the evaluation. Please keep the webcast window open when the webcast ends, and the evaluation will pop up right there in a new window.

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Finally, if you have any questions about today's topic or any guidance on ADA and accommodation issues, please do contact us. Go to AskJAN.org for contact details.

We will go ahead and send out the links that were provided in the chat when we send out the archived webcast to those who've attended today so you can have access to those links.

Once again, thanks for attending this webcast series event, and this concludes today's training.