

- Great.

Well, welcome everyone.

And thanks for making time in your busy schedule to join us for a webinar, especially in the middle of December, it's a tough time, we're all very, very busy right now.

But we're gonna talk today about Mounting Speech-Generating Devices and Tablets to Wheelchairs, manual and power wheelchairs.

And I hope that this is helpful to you today and especially to the clients that you're working with.

Again, my name is Michelle.

I'm an occupational therapist in the Denver, Colorado area.

I work quite a bit with wheelchair seating and mobility as well as com.

And so, as a result, I'm often looking at mounting with clients.

All right, just gonna move our little chat box over here where I can see it.

So, we're gonna be discussing mounting in a couple different categories.

We're gonna talk about mounting those speech-generating devices, both the larger ones and the smaller ones.

Smaller meaning less than five pounds, which is most of them now.

We still do have some larger ones though, and the mount needs to be able to support that weight as well as position because most of our heavier mounts are eye gaze devices and so they're mounted higher, and that leverage really requires a more durable mount.

Then, we're also going to talk about how do we mount computers, both notebook computers as well as tablet.

So, whose job is this? If we have a client, they're using some type of mobility base, they need a mounting system for one of these devices, who makes the recommendation? Who goes through that process with the client? Well, some of it comes down to funding.

So, if a speech-language pathologist orders a mount with the device, then the speech-language pathologists might spec out that mount, they might determine exactly what is required.

If the wheelchair supplier orders the mount perhaps with a new wheelchair or to add on to a current wheelchair base, then they may spec this out.

Sometimes it's the occupational therapist.

The occupational therapist may determine the optimal speech-generating device access, placement, as well as the mounting system to hold that device in the targeted location.

What about ordering and funding? Well, if the mount is ordered with the speech-generating device, then funding may be for both.

So, there may be funding that's being acquired for both the device and the mount, and the speech-language pathologist will generally do this.

If the mount is ordered with the new wheelchair frame, then the wheelchair supplier may order the mount or at least a new frame clamp.

So, let's say this young man here, Miles, already has a mount, but he's getting a new wheelchair base.

He may just need a new frame clamp to attach onto the base itself and the current mount may be able to be used on this new base.

So, the mount may be ordered with that new base or just the frame clamp.

If the mount is ordered alone, then whoever's able to pursue that funding successfully may end up ordering it.

So, a lot of this is dictated by the funding source, like a lot of things, right? Whose job is this when it comes to actually attaching it to the wheelchair frame? Who holds those Allen wrenches? Well, in my world it's me because I'm kind of handy with Allen wrenches, but typically it's whoever ordered the mount.

So, the wheelchair supplier may know how to get the mount on the chair, but if they did not pursue funding, they haven't received any revenue for that mount and that won't cover their labor to put it on, so they will not typically put the mount on.

Mounting is usually too difficult for a client or caregiver to do.

Even if they manage to get on the chair, it may not be on the chair properly.

And if these aren't mounted correctly, especially a mount that's designed to swing out of the way for transfers, it could actually swing into the client, especially during tilt and the client could be injured.

So, we don't want that to occur, we don't want the client to be hurt, we don't want there to be the wrong forces on the wheelchair frame and have any frame damage occur, and we don't want that speech-generating device to collide with something and break.

So, whoever attaches that mounting system needs to be competent, they need to know how to do it, and they also assume liability.

You know, I hate talking about liability, but it's a real part of what we do.

And if I've placed a mount on a chair in such a way that someone's injured, I could ultimately be liable for that.

So, it's very important to make sure that whoever's putting that mount on knows what they're doing and knows that they're accepting that responsibility.

Matthew has asked.

Hi, Matthew.

How do you get national manufacturers of speech-generating devices to actually install the mount? You don't, as far as I know.

So, the manufacturers who sell the mounts and we'll be going through those manufacturers here throughout this course, do not actually put on the mount.

They might help you determine the appropriate mount for a client, but they're not going to attach it.

It's unlikely that a manufacturer of a mount will have representatives in an area.

If they do, perhaps they might help with the mounting job itself.

And oh, okay, sorry, that's a disturbing question.

Laura has said or a comment, "Our wheelchair vendor refuses to order mounts, he says only AT can order.

" That's frustrating.

Laura, if you wouldn't mind popping in there who your wheelchair supplier is, that would be great.

It might be interesting to see if other suppliers in your area might be more willing to order because if they can get reimbursement for a mount, that should cover their time to also put the mount on, that covers their labor, just like other things they order.

So, that's really too bad.

You could also find out if part of the problem is reimbursement.

I know in our Colorado area, Colorado Medicaid will approve a mount, but only at a certain reimbursement.

They've come up with a reimbursement, this is how much we pay for a mount, and unfortunately it's less than just about any a mount you can get on the market, that's a problem. And so, the suppliers were saying, "We won't order it even if it's approved because we're gonna lose money.

" So, I'd dig into that and see why they won't order it.

That's too bad.

And then Danielle has said, "What determines competence? How much training?" And also makes a comment, "Often this can fall to PT too.

" You're correct, it really depends who in the room is competent, who knows how to do this.

It could be an rehab engineer, it could be OT, PT, speech-language pathologist, but it needs to be someone who knows what they're doing and, again, realize that they're assuming some liability.

So, what determines competence? It's really my competence just came from seat of my pants, so it was just learning how to put these on and taking the time to practice putting it on correctly.

There's really not a lot of information out there.

Hopefully, information like today will be helpful.

So, let's talk some terminology here.

It's important to understand the various parts of a mount.

Now, some manufacturers use different names for some of these parts, but they're fairly consistent.

So, first we have the frame clamp.

It attaches to the frame of the wheelchair.

It's designed to fit a specific shape and diameter.

This is a little tricky because each chair may have its own unique diameter to the tubing.

There could be multiple tubing diameters on the frame, so you really need to know ahead of time, this is the area of the frame I'm going going to attach to.

And there may even be a unique shape, it may not be completely round, could have a different shape and there's frame clamps to match that.

We then have tubing and joints, and these are horizontal or vertical sections of tubing.

There is usually joints in between, and those allow us to choose the final position of the tubing.

So, in a way, it's kind of similar to our arm, we have a shoulder, an elbow, a wrist, and the joints may be similar in that, and the joints and tubes then determine the final position of the device.

And then finally, we have a mounting plate, and that connects the mount to whatever the assistive technology device is.

And there may be a device adapter that's required, and we'll look at that in a sec, but that attaches to the back of, say, the speech-generating device.

Now, the mounting plate is called the Universal Device Socket by Rehadapt, just so you know.

All right, speech-generating devices must have an adapter plate on the device.

Again, this is called the Mounting Plate by Rehadapt.

And it might already be present, depending on the device.

So, a lot of our speech-generating devices already have something like this on the back, or we need to order it from either the manufacturer of the speech-generating device or as a part of the mounting system.

So, you see here on the left, this is a device adapter called the Mounting Plate by Rehadapt, attached directly to the device.

And then, on the right we have the mounting plate, that is what the device adapter interfaces with and that attaches to a horizontal bar on the mounting system.

So, that's a little bit about terminology.

So, why do we need to mount this stuff? Well, first for access.

If someone's using direct, head mouse, or eye gaze access, we need to hold that speech-generating device in a very specific location.

Now, this is important for switch users too, but particularly for these access methods listed, we need a very precise location so that that person can reach each area of the display or visually regard each area of the display or use that head movement to move a highlight on each area of the display.

It's also important to mount for visual regard.

If I have the ability to look at my device, then I need it in front of me in an area where I can best see it.

And we know with some of our clients that can vary.

So, I might place it directly in front of someone to optimize their visual regard.

The drawback of that is now it's hard for the client to see other things like that whiteboard in front of them in a classroom or their communication partner.

So, sometimes we're looking at a compromise of where can I place this so that it's not blocking someone's visual field, but so that they can still see all of the device? And then finally, security.

We don't want a device falling.

This device could slip off a tray, for example, and they're very expensive and the displays are generally fairly fragile.

Also, unfortunately, we have to worry about theft.

These devices look expensive.

They are expensive.

I don't think you could sell them for very much at the flea market, but certainly people have had these stolen.

Now, they are removable from the mount, but I think that your average thief seems to be slowed down by this, and so it can help provide some security from theft as well.

And Laura, I see your answer about the supplier there.

I would perhaps, again, check with them again to see why they're unwilling to order a mount, what the obstacle is there, and see if you can come up with a solution or see if perhaps there's another supplier in your area that might be willing to work with you.

I know there's a couple great suppliers down in your area, nothing against the supplier you're working with, but hey, our main goal is to get the items that we need for our clients.

So, how do we get started with mounting? Well, we need to determine what device is being used, where that device needs to be placed, and then where does the mount need to be placed on the wheelchair frame? So, device type, what device is the client going to use? What

mounting plate will be required to attach this device to the mount? And then, will a device adaptor be required for the back of the device itself? Again, it might come with this or it might be something you need to order.

And then, we have to choose the appropriate mounting category, and that's determined by the device type.

Are we talking about a speech-generating device, tablet, a notebook? And is the speech-generating device a heavier option or lighter? Device placement.

Once we know this is the device, device A, this is what we're placing on, we're mounting to the wheelchair base.

We need to determine approximately where the device needs to be placed.

So, here in this picture, we are holding the device in the location that we have determined best works for this young man, Colton.

We have to keep in mind optimal visual regard.

I can see all of this if I have that ability.

Colton actually has quite a bit of cortical visual impairment as well.

We need to make sure the device is ideally within the boundaries of the wheelchair.

I don't want this sticking out further than the footprint of the wheelchair because otherwise that's gonna be the first thing that hits when this client goes through a doorway, and it can lead to damage of the device.

And we don't wanna block the client's view, as I mentioned earlier, of their communication partners or blackboards if they even still use those anymore in the classrooms where they are propelling a manual chair or a power wheelchair.

So, again, this can be a little tricky, how do I find that good compromise between optimal placement for access and visual regard, but not taking too much away from the client's visual field? That's particularly pertinent for people who use eye gaze.

Mount placement.

So, we've determined the device type, we've determined where the device needs to be in relation to the client, how do we know where to place it on the wheelchair? Where will a frame clamp be placed on that wheelchair frame based on the desired device placement? Well, if someone has a tilt on their chair, it's important to place this above the tilt.

If it is below the tilt, when the client starts tilting upward, they might run into the bottom of their device and/or mount.

We also want to avoid mounting to anything movable.

It's really easy to attach something to, say, a footrest hanger on a chair.

This particular power chair happens to have a center mount foot plate, but often we have those swing away footrest hangers.

It might feel really firm and a great place to mount at first, but there's a lot of leverage with these mounting systems and it will start finding that wiggle, and now we have a wiggly device placement instead.

So, we wanna avoid anything that moves that typically is gonna include footrest hangers, also armrest, the post or frame that's attached to a removable or flip-up armrest.

We need to ensure the mount can move out of the way for transfers, and that means it either needs to fold, swing away, or be removable.

Now, all these are removable in some way or shape or form except for one that we'll talk about.

But either the whole thing needs to be removed so the client can get in and out of the chair, or swing to the side, or fold close to the side of the chair, which helps the chair be less tippy.

We have to ensure the mobility base will not tip over from the weight of the mount of the device if it swings out to the side.

And we'll look at some examples of that in a moment as well.

What about ordering help? Let's say again you know what the device is, you know where you want to place it in relation to the client, you know pretty much where you want to attach it to the wheelchair frame, now what do you do? You have to spec out this mount? Well, one thing that's rather new in the last number of years in wheelchair mounting is that some of our manufacturers offer some additional help, which is fantastic.

So, you can take pictures from several different angles.

I'll have someone just as like we saw in the picture a moment ago, someone hold the device in the identified position.

I'll walk around and take pictures from several locations, making sure the entire wheelchair frame is in view and send those to the manufacturer.

The manufacturers who offer these services are Rehadapt, their virtual mounting system, and CJT Mounting.

So, you send them these pictures, they send you a quote saying this is what you need in order to support that device in the desired position in this placement on the chair.

And that way you know, "Yep, got the order right.

" And I just wanna let you know too, you do have a handout.

If you don't, you'll receive a link after this webinar.

A handout of this PowerPoint, but also of a wheelchair mounting systems comparison matrix, just compares a lot of this information.

Keep an eye on the date on the bottom of this, I do update this periodically, I think I updated it this year.

And we wanna make sure that you're not looking at info that's five-years-old.

Always refer to the manufacturer's websites however because they'll have the latest product info.

So, let's take a moment to answer a few questions here before we go on.

Bruce has.

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Hey, Bruce.

Has said, "Installation by these suppliers has to do with concerns of liability.

" So, yeah, I think whoever is mounting a device has to be concerned with liability.

So, it might be that some complex rehab technology suppliers may be concerned, or the manufacturers themselves.

Laura has asked, "What do you do with eye gaze devices that need to be 18 to 22 inches from the client's face?" We're going to talk about that in just a moment, we're gonna talk about some devices or mounts that are designed for devices that weigh more, and that includes our eye gaze devices.

It's more than just the weight, it's the height required and sometimes the distance from the clients that does require a certain type of mounts, so we'll get to those, thank you.

And then Tracy has said, "are there recommendations for location in mounting speech-generating devices with power chairs with power standing features?" Ooh, that's a tough one, that's a good question.

You know, when we have power stand, the client's seating angles change a lot and their access can change.

So, even if that person could access the device from a seated position, they may not be able to use the same access method from a standing position, so that's the first thing we need to look at.

And then the trick is, is there any way to mount this device so the person can still access it depending on their access method and still visually regard it in making such a huge change in their seated angles? You'd have to try it out.

I wish I could give you some more specific tips than that, those are just some things you'll have to keep in mind.

I have a client now that that's probably something I need to look at, but the client I'm working with now where I can think of offhand that this is an issue, we're waiting for his new standing chair and I think we're mounting it so that he can access it primarily when he is seated.

That's a drag, but a tough, tough situation.

Sean has asked, "Do you need to do a risk assessment for putting a mount to a wheelchair?" I think the biggest risk is making sure that if this client is moving over a bumpy terrain, if they're tilting, that there's no way the device could become loose and swing towards them.

And we'll get into a little more of that when we talk about specific products.

The other main risk is transportation.

And with transportation, we want to remove that device and mount from the chair during transport so the client can't come forward and collide with the device, and the mount and device can't come towards the client.

The trick with that is we don't wanna just throw it somewhere at the bottom of the van because now it becomes a projectile in an accident.

So, ideally, I don't think this happens very often, the device and mount need to be removed from the chair during transport but secured somewhere somehow.

Alessandra has asked, "Is there a case mounting system we prefer for mounting an iPad?" We will be talking about mounting iPads if I get that far, we'll try.

And then Laura has asked, "How to obtain a mount for both the manual and power chair.

Are there issues with funding?" The main justification I use to get a mount for a manual and a power chair is that it's very unlikely that that frame clamp where the mount attaches to the wheelchair will be in the same location on both frames because they're different frames.

So, because of that, the ultimate final position of, say, a communication device is in a very different alignment with the client in each base.

And so, a different mounting system is required.

We don't wanna just get a frame clamp usually on each wheelchair base and move the mounting system back and forth 'cause again that device will end up in a different location in relation to the client that can impact visual regard and access, and that's how I try to get funding for both.

And then, Anne-Marie has asked, "Any suggestions if students need access to multiple devices? For example, speech-generating device and school device for school work?" When you say school device, do you mean another speech-generating device or do you mean something like a tablet or a notebook? If you could let me know, that would be great.

And thanks, laptop or tablet.

Thanks for your comment, Michelle.

Yeah, you know, there are definitely times where we mount more than one item to a speech-generating device mount.

In that case, we need to make sure the mount is a heavier duty mount and that we have a long enough horizontal bar.

That's the main thing.

But yes, you can definitely do that, do that often times.

So, lots of great conversation.

This group always has a lot of conversations, so I'm gonna make sure we get through some of these product options quickly so we have enough time for ongoing discussion.

All of this information is on that handout, that comparison matrix.

So, when we're mounting a speech-generating device, we have larger devices and smaller.

Our larger devices, this is not an exhaustive list, include those eye gaze devices like the Tobii Dynavox I-series.

Smaller devices include Tobii Dynavox EM-12, et cetera, that you see listed here, the PRC Accent, PRC Saltillo, NovaChat series, Via Pro, et cetera.

In general, these smaller devices weigh five pounds or less.

The larger devices weigh more, but it's also the height that they need to be mounted at, and sometimes, as someone mentioned in a comment, the distance away from the client, that's gonna require a heavier duty mount.

These are our mounts for larger devices.

So, larger devices are bigger in dimension and weight.

Usually, there's not a weight limit listed with these manufacturers, and it's because there's quite a variety of configurations and how these are used.

So, if this is higher up from the frame or further away from the client, that's going to cause more leverage and that's why these don't list necessarily a weight limit.

Devices accessed by eye gaze typically are gonna require that heavier capacity mount due to weight of the device, but also the height requirements.

So, these heavier duty mounts are made by BlueSky Designs, CJ Mounting, Daedalus, and Rehadapt.

So, BlueSky has the Mount n Mover.

This has been around for a while though they have some newer features.

This is definitely a heavier duty mount that can handle a device that weighs more, that needs to be higher up and/or further away from the client.

One thing that's very unique about BlueSky's options is that this allows the user as they're able motorically to independently move the mount to various positions for transfers, but also for access.

This can be really nice for people using eye gaze because sometimes no matter how good a job I try to do in their positioning, the client slips down during the day.

And instead of repositioning the client, even though that's certainly my preference, small changes in height can readily be made so that the client can continue using their eye gaze device and that's despite what their final position might be in their seating system.

This particular mount will work with a wide range of wheelchair frame sizes and a wide range of speech-generating devices.

It does have a weight limit, it will hold up to 15 pounds, which is really quite a bit when you look at the leverage involved.

They also have a new power version, so if the client can't reach out and grasp that loop and move it around, they can use a switch to move the mount.

This is a heavy and bulky mount with a rather large clamp on the frame and it doesn't fold, but it does a good job in terms of putting that device where you need to and holding it there.

Because it doesn't fold to the side, it needs to swing away to the side.

When a device only swings to the side, it can make the chair a little more tippy, especially if the device is still attached to the mount.

The size of the frame clamp's a big deal because a lot of these frames just don't have a lot of real estate on them, there's other things attached to the frame.

And if you're working in the pediatric population, you've got a really little frame with all sorts of things already on it, primarily components of the seating system.

So, it's important to determine where on the frame am I going to attach this mount? How much room is there? And can that manufacturer's frame clamp fit at that location? CJT Enterprises also has some heavy duty mounts, and these include their GT Enduro and GT Enduro Angular.

So, this is a picture of the Enduro.

You could see that the frame clamp on here tends to be a little on the large size as well, but you can see this is holding a larger device way out and way high up for this client, and does so very well.

And this is a picture of their Angular.

It has a ball joint partway through the mount to give a little more adjustment.

You can see again this is a mount that's very, very high up and it's actually attached to an adaptive stroller.

So, this fits most frames.

There are a lot of options for placement on the frame, and this is something unique about CJT. It will allow mounting in some less typical areas.

If you look closely at this picture, the frame clamp is smack in the middle of this lower bar on the stroller and then there's a small piece that allows it to come out to the side.

So, they have some unique mounting options to allow for these less typical placements that are hard to do with other mounts.

The reason for this mounting location is to keep some of the weight a little more central to the frame.

Supports a wide range of devices and they have both MAX and lite versions.

MAX are designed to be a little more heavy duty in terms of weight limits.

It is a heavier mount because it's a more heavy duty mount.

It is a bit bulky compared to some other mounts, and it does have a rather large frame clamp.

It does not fold, but it is removable, and I believe this one swings to the side as well.

And then we have the Daedalus Daessy series.

These have been around for a long time.

They're very durable mounts, you could probably do chin-ups on them.

And they have a number of options that we'll take a peek at here.

Now, they have a wide variety of frame clamps, which is important because our clients have a wide range of wheelchair frames that we're accommodating, including adaptive strollers at times.

They also have custom sizes and that's important.

So, if you have a client in a less than typical base and you really need to clamp onto it, they can customize something for you.

They have a locking clamp so that if someone is tilting back in their chair, the device will not, or the mount, sorry, will not break away, move away from the frame clamp and possibly swing towards the client.

They also have a side clamp, and that's pictured here.

And this is for placement on a seat rail.

And I actually use this quite a bit if I'm ordering a Daedalus mount.

You know, a lot of seating systems mount just above the seat rail, and so there's not enough room for a clamp that encircles a seat rail.

This allows the top of the seat rail to remain flush, and so it can be helpful when we don't have a lot of real estate on a frame.

They support a lot of different devices and there is a folding version of the Daedalus mount.

Their mounts are heavy, and they use a system typically that you can see to the left here where there's a pin that fits in a small hole.

The hole is on this black circular piece that fits onto the vertical portion of the mounting tubing.

So, if someone is tilting, it's possible for the small pin to slip out of the hole, and that could be a risk to the client.

And that's why if you're working with a client who's using a tilt or perhaps who goes over a lot of rough terrain where there could be any slippage, we can use the locking clamp, which is pictured to the right.

So, I order this a lot.

I recommend a lot of tilt and space chairs for my clients.

They have a rigid mount.

This is lighter than the others because there's not as many components on it, it's very simple, doesn't cost as much, but there's not as much adjustability.

Their folding mount allows the device to tuck in close to the frame, that means that the client can transfer in and out of the frame with less risk of tipping.

When you're dealing with a young child in a lightweight base and you swing a device off to the side and you transfer that child out, it will tip to the side, and that can be a problem, it can lead to damage of the device as well.

But when this is folded to the side, the device is usually left facing outward.

So, you don't want somebody driving this power chair in this picture while the device is in a folded position because it can collide with obstacles and be damaged.

They have a rear folding version of a mount that's very, very heavy.

It's non-removable, but it allows the device to remain on the chair out of the way even during transportation.

So, the device flips upward, folds behind the client, and then flips back down behind them.

So, the device could technically be used if the client is using something like switch access and can listen via auditory scanning.

They also have this locking swing away mount.

The client can pull down on this blue cable that the arrow is pointing to.

It releases that little pin from the hole and allows the client to push them out to the side, and that may allow independent transfers.

But a couple things to keep in mind, it can be difficult to operate.

I've had some of these over time that begin to jam and the client has to be able to push this off to the side and not have the chair tip during transfers.

And then, they offer the positioner mount.

It has different joints than the other Daessy mounts, it includes a ball joint in the center.

It's less bulky and has a little more adjustment at the joints than our other options, and these are all these heavy duty mounts.

Before we get to Rehadapt, we have a question here from Laura, "Is it possible to obtain a new device mount through insurance after a speech-generating device has been obtained in the past?" Absolutely, I do this all the time.

So, I will have a client who already has a frame, they already have a device, we need to order a new mount.

It might be because they're getting a new frame, but perhaps no one ordered a mount before, so this is something that usually we can justify.

And our justifications are those indicators of why we mount for position for access, position for visual regard, and security from fall and theft.

So, continuing to look at these heavy duty mounts for larger devices, we go to Rehadapt.

Rehadapt has the Monty 3D pictured here, and it's designed for larger devices.

It can support the required height and distance from the client as well.

So, this comes in a lot of different configurations.

Standard, it comes with three tubes, so you kind of have that shoulder, elbow, wrist sort of movement to the mount.

There is a Plus version where there's a longer arm that's available and a double tube option, and that gives more durability, more stability if we're supporting higher weights at a longer distance.

There's also a version with only two tubes if only that height is required, and there's a curved version with offset tubing.

Now, offset tubing is sometimes used to clear a tray.

So, if this client has a tray on their chair, sometimes that mount needs to go right through where that tray would be.

The offset allows it to go around that.

The challenge with offset is sometimes that increases the overall width of the chair, but it allows again clearance of the tray.

Another option is to cut out a portion of the tray, often of distal corner of the tray to allow the tray to be used while the mounting system is used.

Now, the Rehadapt mounts are lighter weight than other mounts in this category, and that's because they use a different material, they use aluminum instead of steel, and that certainly reduces the weight.

Aluminum, our newer aluminums are available to us are still quite durable.

Many manual wheelchairs are made out of those materials.

It fits most frames.

It has a smaller frame clamp similar to the Daedalus frame clamps in size.

The way this is designed provides limitless angles of adjustment, which is really great.

The tubes also flow through the joints.

So, when you loosen a joint, the tube can move through it so you can shorten or lengthen the tube while you change the angle, that gives a lot of adjustability as well.

Works with a wide variety of devices, swings out of the way for transfers, it does not fold, and it allows adjustment either by tool.

If you could see my arrow here, my cursor, you can see there's a tool adjustment in this center picture or in the lower-right there's a swivel joint, and this is sometimes called a quick shift.

Actually, the quick shift looks a little different, it's more like a lever and it tightens it rather than a tool.

So, if there's something that someone needs to adjust all the time or remove, you can use this lever or you can use tool for a more secure placement, and you don't have to worry so much about people moving or adjusting the mount once you have it in that perfect location.

This picture in the lower-right is a locking swivel joint.

So, again, if somebody is tilting their chair going over really rough terrain, the mount is less likely to slip because this does use a small pin and hole, similar again to Daedalus.

These are designed, they do have a weight limit listed for Rehadapt for about 6.

6 pounds, but they also have the M3D that Monte 3D, which is designed for up to 13 pounds if you get the Plus version, so heavier capacity.

You know, if you're not real familiar with mounting, it can really help to actually look at some of this stuff.

So, let's watch a quick video so you can get a better sense of mounts on wheelchairs.

This is an older video from Rehadapt, but it does show how those tubes can move through the joints and you can obviously change angles at each of the joints.

That angle adjustments available on most of these mounts.

And then, here we have the device in front of the client.

It can swing forward so that the client can transfer without the chair being quite as tippy, at least not tippy to the side.

And it can swing all the way around so that it's tucked in close to the chair, and this does help reduce tippiness to the side.

It can also be removed.

So, that's some of the options when you're mounting a heavier device, the device that needs to be placed higher up or further away from the client.

Let's take a look at mounts for smaller speech-generating devices.

These tend to be smaller, the devices, in dimension and weight.

Some of them are very lightweight, which is great.

But if the client tends to use a lot of force against the device or the mount, some of our clients hang onto the mount, stabilize against it, or they pull against it, or they push against their devices, or accessing it, then a heavier mount may be indicated just to keep that device in position.

Generally, these mounts for smaller communication devices will not have the same height that's available.

And so, even if you have a lighter weight device for eye gaze, you might still need a heavier duty mount just for the height.

So, these are available from CJT, Daedalus, and Rehadapt.

So, this is the CJT TBO.

And you can see in this picture there are knobs that allow for adjustment rather than Allen wrenches in this example, and we have a tablet that's mounted here.

So, we have a smaller device to provide enough adjustability and attach to the frame.

You can see here that because of some of the frame clamps on these lighter mounts, some of them use kind of a Super Clamp, same type of clamp that's on an AbleNet Universal Switch Mount for example.

Because it uses this type of frame clamp, it's not as secure in terms of holding the position of the device, but it does allow this to be attached to a wide variety of equipment.

And these are smaller and lighter than a more standard mount.

Now, this only does have the knob configuration.

You can really crank those down, but this does mean that the placement may not be as stable, as consistent as a more standard mount.

Daedalus, the Daessy mounts, has these M series mounts, and they're called the Mini Adjustable Mount, the Mini Folding, and Mini Rigid.

These are smaller and lighter than standard mounts from Daedalus.

They're still a little on the heavy side compared to our other lightweight mounting systems.

They hold up to 10 pounds.

And again, there's three versions of this.

They are heavier than other mounts in this category.

The main difference between these and their standard mounts is they just don't go as high.

Rehadapt has the Hybrid 3D that holds up to four pounds, and the L3D, which I think stands for Light 3D, which holds up to 2.

6 pounds.

These are available in a couple different configurations.

You can get these levers that you see pictured here, they're quick shift levers for easy adjustment, but you can also get an Allen bolt in there as well for a more secure, consistent placement if that's an issue.

These are smaller and lighter than standard mounts.

The diameter of the tubing is smaller, it just doesn't have to be as large to hold this weight, and that means that the entire mount weighs less.

It's also not as bulky on the frame.

Again, you can choose whether you want levers or a tool adjustment at each joint, so you can combine these in a way that you would like.

They have frame clamps for most size frames.

You can get that Super Clamp for unusual sizes, let's say you're putting it on that gait trainer. There's device adapters, mounting plates for most lightweight speech-generating devices and that includes tablet-based devices.

And there is a two tube version pictured here in addition to three tubes.

So, the quick shift lever configuration if you choose this may compromise consistent placement.

So, if this is a problem, you can use the tool adjustment instead.

And this can be a problem just in terms of weight and use.

You might find that the placement of your device is changing a little bit.

It might be that someone's changing it for you and if you do not want that to occur, then the tool adjustment may work better for you.

Okay, I'm back on time, yay.

Any questions at this point before we go through our last section where we'll talk about mounting tablets and notebook computers? I'll give people a chance to type.

Maybe you asked all your questions earlier, we've had some great questions, so thank you for that.

Okay, if you're still typing, keep going, and we'll have time for questions at the end as well.

Oh, there we go, I knew we'd have one.

Wilmer has said, "Any good types of frame clamps to use so they are better at staying put on the frame without moving around when the client is using the device?" So, if a mount is moving, it's important to figure out where the movement is occurring 'cause it could occur at so many different places, you've got a lot of different joints.

So, first you wanna make sure it's really happening at the frame clamp.

If it is happening at the frame clamp and there is a tremendous amount of leverage on that little clamp, there's a couple things you can do.

You wanna make sure that it's tightened down enough, you really have to crank down on these things.

I'm stronger than I look, I tell you.

When you are adjusting Allen wrenches all day long, you get really strong hands.

So, important to really crank down on that.

It's also important to make sure the frame clamp is the right one for that frame.

So, it's critical to know what's the diameter of that frame, and is that the exact diameter of the frame clamp I got? You don't wanna just try to make it work, it will not work, it will lose its position.

Again, some of these companies allow you to just send a picture.

You tell them, "Hey, this is the make and model of the wheelchair my client has, this is where we want the device.

" And they will tell you what frame clamp you need so you don't have to worry about if you're getting the right one.

Lindsay has asked, "Do you know of any companies that allow you to trial a variety of mount types prior to selecting one for a student?" Not too much.

There are some companies that sell an evaluation kit, but you have to buy the whole thing to try it.

Typically, if you know this is where I want the device on my frame in relation to the client, where I want the device, where it's gonna attach the frame, you can use a variety of these mounts and they will hold the device in that location.

What you need to keep in mind from there are specific product parameters like does this have a small enough frame clamp? Is there a frame clamp available for the frame that I wanna attach this to? Can I achieve the required height for that individual client's needs, et cetera? Anne-Marie says, "I also will have a student with both a lap tray as well as a standing power wheelchair.

" Oh wow, you've got a tough situation here.

"We'll be looking into options for replacement, uses direct select with hand, any suggestions on how to start?" Oh boy.

So, if you have a lap tray, of course, you have to make sure the lap tray can be cleared when the client's in a seated position, that the mount will clear the lap tray.

The lap tray is less likely to be used when the client goes to a standing position because the arm rests end up typically, depending on the frame, in a very high position.

I would recommend contacting a company like Rehadapt.

They sell a lot of mounts for unusual situations and I would ask them, "Have you used one of your mounts on a power stand before?" And they might have some good suggestions for you.

You could also literally take pictures of the client in a seated position holding the device where you want it, and then in the standing position and ask them what their suggestions are.

It might be that you need a mount where some of those joints allow for that lever adjustment so that you can readily raise the device when the person's in a staying position and lower it again when they're in a seated position.

That means the client would require some assistance during that time however.

So, hope that helps.

Tough situations.

So, we can also mount computers, laptop computers and tablets.

So, some mounting manufacturers can support a notebook computer.

Typically, there's some type of tray that attaches to the mount itself that supports the notebook.

So, this is an example of a notebook tray that's available from Mount n Mover.

It's possible to mount tablets and phones from lots of different manufacturers, and some of them include Rehadapt, Stealth, and Therafin.

Now, I list these because they're specifically designed to attach a tablet or a phone to a wheelchair and to do so in such a way that maintains its position despite the bumps of the road and a lot of usage by our clients.

Can you get other things? Absolutely, you can get lots of these mounts off of Amazon from a wide variety of manufacturers, RAM, et cetera.

But when we stray away from some of these manufacturers, funding can be more difficult.

Complex rehab supplier can't order, they can't get funding through say a state Medicaid program if they're ordering something off Amazon, they need to order it from a manufacturer in order to get that funding, and so funding sometimes dictates this.

It can be difficult, I think I deal with this in another slide, but it could be difficult to get funding for a mount for a phone or tablet because it may be seen as more recreational.

It is important to explain our documentation if this tablet's being used for communication at all, then that can justify this mount.

I will often approach this from a safety standpoint that if this client is out and about in the community and has a problem, they need to use that phone to call for assistance, and so it is something that's required. That does not always work, so funding is a little more difficult for mounting in these situations.

I had a couple other comments in the chat box here.

Danielle said, "Do any of these companies provide trials?" So, it's another question about trials. Since funding may be an issue and people are wary of choosing the wrong system.

Lisa has said, "Some states have assistive tech loaner libraries, which may loan out mounts for trials.

" So, that's a great suggestion, Lisa.

If your state program, state tech ACT has any mounts in their library that you could try, that would be great.

So, there are quite a bit of tablet mounts that are available.

Some do not hold their position well or offer adequate positioning.

So, I don't list them here, but I am aware there's a lot of them on the market, and you're certainly welcome to play with those.

Some mounting manufacturers can support a tablet, but the mount tends to be large, bulky, heavy, or a lot more costly than other options, so we have to kind of weigh this out.

Do we get something that's a little more off the shelf, so to speak, that we could just order online that may not hold this position as well or offer enough positioning? Or do we go with something that will sure hold its position, but might be rather bulky and expensive for what you get? So, Rehadapt has a tablet mount, they also have a phone mount that you see pictured on the lower-left.

And their versions include, again, those levers or tool adjustment depending on what best meets your and your client's needs.

Their frame clamp, like for their other mounts, fits most size frames.

They do have a Super Clamp option for unusual sizes or perhaps other alternative equipment.

And they have various tablets and phone mounting plates available, including some universal ones.

This is tricky, right? Because I have a phone, but that with with my beautiful granddaughter on it, but that phone I might upgrade, right? So, at any time I might go from this size phone to something else, so I either have to get a different mounting plate or get one that is a little more on the universal side.

Stealth Products also has tablet and phone mounts.

They have various links that can be added to or even removed to get the right height so that you can get to the desired position of the device.

They have adjustable mounting plates to hold that variety of size phones or tablets, so those more universal amounts.

They have a Gatlin style or a Standard style.

These do tend to be heavy, especially the Gatlin style.

There is a swing away option, which is important for transfers.

And they have a version pending with their new UniLink hardware, which will probably give us a little more flexibility in terms of final placement and in terms of holding its position.

Therafin, who makes a wheelchair seating and some other adaptive technologies, has a communication mount, even though this is called a communication mount, it's designed for tablets and phones.

And they have a number of different options to attach this mount, these have expanded over the years.

You can attach this to the wheelchair frame itself, the armrest, which again is a movable part and that can mean it gets wiggly.

A tray, a seat cushion, this slides underneath the seat cushion and relies on the weight of the client, or a channel mount.

Some of our seat rails have a channel in them and they have a mount for this as well, so you might wanna check out Therafin's options.

So, again, can you get funding for a tablet mount? Well, yes and no.

Yes, if the tablet is being used for communication, but most of the time if it's just being used for other features on the tablet, the mount is not something that is funded by most agencies.

All right, wanna make sure we have some time for questions here at the end.

So, Jennifer said, "Have you explored any of the RAM's newer wheelchair mounting where they have mounting hardware to affix to wheelchair?" Again, RAM has a lot of great options.

I really don't use them, so I'm not overly familiar with all of the current options because I don't use them.

A lot of the families I work with use them if they are self-paying, but if we're trying to get funding, we simply can't because, again, the suppliers cannot order from RAM, they have to order from someone who works with that funding source.

So, that's the limitation there.

RAM in general is great.

Not always quite as durable or providing quite a variety of positions and does not always hold its position as well.

So, that hopefully answers your question too about quality, and stability, and durability.

And Anne-Marie has said, "Question about the tray mount.

Can that go on any lap tray or is that tray specific to that mount?" You know, Therafin, let me go back here.

Therafin does have their own tray, but I believe this will work on a variety of them.

If you look closely here in the center piece, it's almost like a suction cup sort of a connection.

So, obviously not designed to hold a lot of weight, but it is a newer version of suction cup that can hold its position well, it's important that the surface of the tray be very smooth and very clean, otherwise it won't work.

And then Catherine has said, "I was told by Convaid that we could not mount a device to the Convaid Rodeo stroller because of frame integrity.

Is that the Convaid stroller that was pictured earlier in the presentation?" It was, there was a Convaid stroller, but it's not the Rodeo, it's the.

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Oh, I'm totally blanking on it, it's their newer one.

Ugh, if you remember what it's called, feel free to type it in someone.

They, oh, what's that? Oh, Trucker, Trucker.

So, the picture does show it on a Trucker.

The reason that Convoid will say that they don't want you to use it is some of these frame clamps when you really crank them down will actually deform the frame of adaptive strollers.

Adaptive strollers are very lightweight, which is great, but because of that, the strength of the frame itself is just not there and it's possible to actually crush it with the frame clamp, so that's the challenge.

Probably the most I would put on one of those would be a Super Clamp.

You really can't tighten those down enough to injure the frame.

I wanna make sure too, as we're getting to the top of the hour here, that you have my contact information.

If you have questions, feel free to email me or you can check out resources including that mounting comparison on my website under Resources.

So, thanks Matthew, appreciate that.

And if you have any more questions, I am happy to hang out here for another moment.

So, if you need to go, thank you for attending this webinar, and I encourage you to look at more webinars on AbleNet University.

I have quite a bit of on-demand ones on there now, and we are updating some of those.

And in just two days we're going to have another webinar, so if you wanna come back on Thursday, feel free.

And you think I'd know what that's on, it's on.

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Oh, it's on switch assessment, but with a certain population and I can't remember right now 'cause right now my head's in the mounting game.

Thank you very much for all your thank yous.

And for those of you who can stay, again, I'll go ahead and answer more questions.

So, Andrea has said, "I am working with a family that will be paying out-of-pocket for a mount. However, they ordered the iPad and a child's foamy case first before they considered the mount.

Which company would be easiest and most affordable to work with to fit a amount to this iPad case, or will they have to get a new case?" So, you have a couple options.

Lots of people use those large, very padded cases so that if a child or adult drops it, it's less likely to be hurt.

Some of the universal tablet mounts that are out there will actually encompass that entire case, but not always.

The other option is to slip the iPad out of the case when it's being mounted and then slip it back into the foam case when it's not on the mount.

Not always convenient, but that is one way of doing it.

Great, any other questions or comments? Feel free to type those in.

And again, thank you very much for the thank yous.

I always hope this is helpful for everybody and helpful to the clients that you're working with as well.

All right, someone has asked, "Have you ever attached a mount to a frame behind the backrest? Could it be a possibility for a standing power wheelchair?" You know, that's a great idea.

You know, it would depend on the seating a little bit.

One of the main standing wheelchairs out there, of course, is Permobil.

If they have the Corpus seating, yikes, it's so hard to mount to the Corpus seating, there's just not good frame back there.

But if you order a Permobil with back cans, which you can do, then you have somewhere to mount to.

And one of the mounts that works best for those unusual placements is CJT.

So, I would look into them if you're going to use a very atypical mounting area, they have the ability to come around with a lot of tubing from the side.

Another option perhaps.

No, no it wouldn't, I take it back.

I was thinking of the rear mounting Daedalus, but I don't think it would work with a standing chair.

But that's a fantastic idea for standing.

And then, Sean has said, "RAM is no good for tablets, although works good for mobile phones.

" So, in his or her experience, Sean could be either way, so thank you.

Thanks for that input.

Kelly has said, "Suggestions for mounting an iPad to a power wheelchair for student to use a camera for an AV tech class.

A student has very deep custom-molded seat, so the clamp is from seat rail, but the arm is just is not quite long enough for him to reach, need iPad in upright position.

" So, if you can, it's important if you need that iPad to be in a certain location where it's far enough out from the seating system, then you might simply need a different mount or more tubing on a mount to achieve that placement with that iPad.

Again, companies like CJT and Rehadapt, you could simply take a picture and say, "Here's this client in their molded seat in this chair.

This is where I need this tablet, what is required?" And they can tell you, and you can let them know, I wanna come off of the seat rail.

And you should definitely be able to do that.

What's great about using that for AV stuff is if the students in a power chair, they can move themselves around, line themselves up with, "This is where I wanna take that picture.

" If by some chance they have a seat elevate on that chair, awesome, they can change the height and then snap that picture.

Really great, great use of technology.

Any other questions or comments? I'm just scrolling through to make sure I'm not missing anything here.

Oh, someone said, "If you wanna learn more about mounting, what would you suggest?" You know, really the best way is just getting in there and practicing.

Some of the manufacturers have some videos on how to do the mounting itself with their kit.

You could also contact the manufacturers to see if any of them by chance have any representatives in your area that can help you with that.

You could also contact your local supplier to see if they're familiar with mounting and if they would be willing to spend some time with you and teach you how to adjust and put on these mounts.

Patricia said, "I ordered a Super Clamp, an iPad cradle, and I did not open the box yet.

Do I need a clamp to mount to his chair?" That Super Clamp will be what mounts to the chair, so you should be good there.

And Kelly has said, "Yes, he's trying to use all those seat functions, just having trouble finding a long enough mount.

" So, yeah, just contact those companies, make sure that you know where you need the device to be and how long that tubing needs to be.

And again, that's what's so great about these companies that are now helping.

It started with Rehadapt and CJT joined in and maybe some of these other companies will also.

It's really in their best interest to make sure you get an accurate quote so you're not calling them up afterwards saying, "This isn't working.

" They want it to work for you the first time.

Great, well, I'm not seeing any other.

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Oh, sorry, I spoke too soon.

One more question here, "Another suggestion of mounting company to explore is Ideas for Independent Living that's in Ontario.

" I don't know if Ideas for Independent Living is available in the United States, but thank you for bringing that up because I get way too much concentrated on the United States and I realize we have people attending from outside of the United States as well.

Rehadapt actually is based in Germany, I believe.

So, it's available, I know in a variety of other countries.

And Daedalus is also based in Canada, but definitely available in the United States.

So, thank you.

Laura, I see you raised your hand.

If you have a question, if you could type that in or comment, that would be great.

Well, Jim, why don't we give it about another minute, see if.

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Oh, it didn't mean to raise your hand.

Okay, no problem.

Let's wait another minute, make sure nobody else has any questions or comments, and then I'll let you go ahead and wrap us up.

It's always exciting to see that many people interested in topic like mounting, but it sure is important, it's one of those areas that really links two different technologies, the seating and mobility device and what this client needs to use in terms of assistive technology.

It's super important.

Sometimes it's hard to find someone that will work in these intersecting areas of assistive technology.

Great, well, I'm not seeing any more questions or comments, so, Jim, can you go ahead and wrap us on up?

- [Jim] Yeah, I just wanna say thank you for the wonderful presentation today, all the information.

As Michelle mentioned, anyone who's interested in learning more, she'll be back on Thursday for determining the best switch type and location for clients with muscle weakness.

- Thank you.

- Same time.

Thank you, everyone, for attending.