

Understanding Concussion and More Severe Brain Injury through Case Studies

Hello, I'm Jennifer Rayman. And I'm going to be talking with you today about understanding concussion and more severe brain injury through case studies. I hope that you all got a chance to enjoy a little peaceful video for a few minutes if you joined early.

And I just want to start out our time today by thanking you for taking the time out of your day that I'm sure is very busy.

To learn more about brain injury and hopefully to Learn.

Something that you'll be able to take away with you to be able to feel more prepared to help people with brain injury.

I am glad that you're here. And I'm just really appreciative that you want to learn more about this.

And I'll tell you, I've learned more about it as I've been getting this presentation ready for you all. So it's been my pleasure to get to learn more.

Today's part of... part one of a three-part webinar series that we're offering. So some of you may be longtime friends of Brain Links and we thank you for your support and for being here. And some of you may have just heard about this webinar and thought, oh, that sounds interesting and I'll go to it.

Know that today is part one. We're going to have two more that will follow and we hope that you can join us for all of those follow-up sessions. We're going to have one in March.

And we're going to have one in April. And the same page where you registered for today's session, you can go and register for both of those if you'd like. And keep in mind that even if your schedule doesn't allow for you to attend live, when you attend our webinars, we will send you a follow-up email.

That will have the link for the recorded presentation. So to tell you just a little bit about our program, we work with brain links.

I'm Jennifer Rayman. I'm in East Tennessee and Brain Links consists of three people across the state.

We are federally funded through the Administration for Community Living. And we also work in partnership with the Tennessee Department of Health Traumatic Brain Injury Program.

And Brain Links is an employee of Tennessee Disability Coalition.

Now, I told you there are only three of us. We're a tiny program We're a statewide team of brain injury specialists. That is my title, brain injury specialist.

We equip people to better serve people with traumatic brain injury with current research-based training and tools.

So we really like to really like share things that are family friendly We have a lot of materials about returning to school, returning to the work setting.

We have toolkits. We'll touch on those today. For healthcare providers, for school nurses.

For families and caregivers. And survivors all in one and service professionals.

And I'm guessing there might be a lot of service professionals on today's call.

So if you're joining today as a service professional or as a family member or survivor.

Or healthcare professional, we'd love to know that. If you'd like to put that in the chat or the Q&A.

Sorry, if you want to put that in the Q&A while we're meeting today. We'd love to hear from you what area you work in.

And we also have Tennessee Brighter Futures Collaborative, which we're extremely proud of. And I'll touch on that a little bit more as we go as well.

Just a few things to get us started and I'll try to repeat this again. It'll come up at the end of the presentation for you all. But if you have questions, please enter them. I put Chad in here, but I think we're going to be using Q&A.

So please enter any questions in the Q&A. At the end of the session, we're going to have a one-minute survey. It's very quick.

Very simple. If you want a certificate of attendance. You'll have to do that survey. If you just want to give us some feedback, we'd love to have your feedback about today.

And we will make sure that you have materials. So if you're like me and sometimes you attend a training session and there was something you loved.

And you're trying to screenshot it or you're taking out your phone and trying to take a picture of it and you miss the exact thing you wanted to click to the next slide exactly when you're about to get it.

We'll have all this on the website. So you can really just sit back and kind of relax and and take in the information today.

Will have the PowerPoint, the recording. It'll all be on the registration page and we will even send you a follow-up email to remind you of that and give you the link to it.

So what we're going to spend our time on today

We're not going to focus on is talking about a simple review of brain injury. We'll just get started with that. We're not doing a brain injury 101.

Getting the foundation of brain injury for very long, but I do want to kind of start us off with a little basic information about brain injury and some stats so that we're all on the same page.

Then we're going to get a snapshot of three individuals who've had a brain injury.

And we're going to talk about comparing what's happened to them And what could have been done to help them?

Today, I hope you leave with a better idea of what resources you can use.

I'm going to show you what they are And then hopefully how to use them.

So that you can access what's there for the people that you serve.

So what is a TBI? A traumatic brain injury is caused by a bump, blow, or jolt to the head or body.

That's an important piece of it. Or a penetrating head injury that disrupts normal function of the brain.

So a brain injury can be acquired, an acquired brain injury that happens Any time after the birth process.

So any traumatic brain injury is an acquired brain injury and it happens after someone's born. If it happens during or before the birth process, that's a congenital brain injury.

Other acquired brain injuries, brain tumor, stroke, infection, surgery, drug overdose.

So one of the most important things to pay attention to in this definition from the CDC is that you don't have to hit your head.

So when we hear a jolt to the head or body.

It's not always going to be that someone has a very clearly visible injury to their head.

Or they might tell you they didn't hit their head. So think about car crashes whiplash, someone who's jerked or shook very hard someone who's near an explosion You do not have to lose consciousness to have a traumatic brain injury.

Actually only one in 10 people do lose consciousness.

So when we think about brain injury. And who the people are that we're talking about.

Our group works directly to serve especially professionals who work with people with brain injury.

There are people who work directly face to face in providing services like physical therapists, occupational therapists, speech therapists, doctors.

Counselors. When we think about how many people have traumatic brain injury in the United States It's sometimes easy to think that that's a really small group.

That this is a low occurrence disability, maybe in the education world this is a a category served in education that's pretty small compared to other categories.

Let's look at the numbers. When we think about adults in the United States.

With each of these conditions. Now I'm going to read these to Spinal cord injury, multiple sclerosis, Parkinson's.

Developmental disorders. Epilepsy, all dementias.

Stroke. Heart disease.

So if you look at all of these over here to the right that I've just read off.

You'll see that the first eight of those listed, spinal cord all the way over here to heart disease.

They're each less than 5.5% of adults in the United States that have those conditions.

And when you think about common health problems in your family and your friends and the people that you serve, you're probably thinking of stroke and heart disease as being the most common.

But if you take all of these numbers. Spinal cord injury through heart disease.

And you add all of those together. There's still less than diabetes, which is 14.7%.

Brain injury in adults is outnumbered by mental illness and by substance use.

All of these numbers together, the one through eight over here, still are nowhere near traumatic brain injury.

It's brain injury is more common. If you might be thinking about cancer, cancer is approximately 10% of adults in the United States.

But... we're a really large group. It's a huge population to serve. And often with traumatic brain injury.

Someone has an invisible injury. So you're not necessarily going to see it.

You might ask about it. It might be something in their past.

But it really makes it hard. When you have an invisible disability for others to understand it.

And I thank you for your time today to try to understand it a little bit more.

Another stat, in 2020, 6% of children under 18 had experience symptoms.

Of brain injury and concussion. So if you're thinking about serving kids as well.

So how many people do those numbers relate to in Tennessee?

In Tennessee, every year we have approximately close to 25,000 who have a TBI related emergency department visit or hospitalization, and unfortunately death.

That's the total number every year. Fall to the highest cause of injury. And that's especially in our oldest population and our youngest population. And then for motor vehicle crashes, that is second highest, and that's especially for anyone aged up to 45.

So from 2019 to 2023, around 8,000 people each year, 32%, are added to the TBI registry.

Now, when I talk about the T-Berry Registry, some of you may be familiar with this. Some of you might be joining from other states and don't have the same type of information that we collect.

But only people who stay in the hospital for 24 hours or longer are added to the traumatic brain injury registry and of those 8,000 that were on the registry.

88% survived. Half of those people were discharged home with rehab care for most of the rest.

And these numbers do not account for all TBIs. When we're talking about 25,000 people.

When we're talking about when we're talking about 8,000 of those staying 24 hours or longer in the hospital and being added to the registry.

We need to also consider those who never get added to the registry, those who don't go to a hospital.

And who might go to a walk-in clinic, who might see their primary care doctor, their pediatrician.

And those who do not seek treatment.

Last year. In July, the Centers for Medicare and Medicaid Services officially recognized brain injury as a chronic condition.

A chronic condition has different definitions. It could be longer lasting, so a year or more qualifies as a chronic condition.

That affects activities of daily living. Continuing or occurring over time.

So what does that mean? Why is traumatic brain injury a chronic condition?

Tbi can affect multiple body systems and domains of health and function.

Some effects of TBI can last for decades or even Even longer.

Tbi can disrupt a child's developmental trajectory, affecting their health, thinking, and behavior.

So why it wasn't considered a chronic health condition all along is more the question.

It's a big step in the brain injury world for brain injury to be recognized as a chronic health condition but when we think about all of the changes that it might involve.

I think it should have been a long time ago. So everyone that's here today.

That wants to understand a little more about TBI, a little bit more about working with people with brain injury.

This is why. And if you work in one of these areas You may already know the answer to this.

Just it may be something that you could explain better than I can.

But if you're not familiar with people with brain injury and you're not you're not experiencing what it's like to try to help someone who's had a brain injury and survived it And has the challenges and changes as a result of it.

It might be helpful for you to know. People with a history of brain injury are more likely to have Substance use.

Spinal cord injury, mental health challenges. To be homeless, to have a history of incarceration.

To be victims of domestic violence or perpetrators.

To have behavioral issues and cognitive issues. And when we talk about all of these.

Its history of TBI is something that might occur in these populations, but it's also A very complicated relationship and it also could be that substance use led to TBI.

That homelessness led to TBI. They're very convoluted and the problems one can be the root of the other.

Concussion is a type of brain injury and we're just going to talk for a minute about concussion. Our first case study is going to be about concuss What we're looking at here is... a series of images from a video from CDC. It's just a quick 30 second video if anyone wants to check it out.

What is a concussion? And when we think about concussion, it's more of a functional injury than a structural injury. So if you look at these pictures.

The head moves rapidly or with a lot of force the frontal lobe of the brain in this example hits the inside of the skull and is injured. And then with the movement it rocks back into the backside of the skull. And if you see that lit up area.

The back of the brain is injured So there's going to be less to visibly see like in a scan with other injuries that might show up quickly and easily.

It's really going to be more about the changes that that person experiences in their functions.

So it's much more invisible and it's more about what has changed as a result of that injury for the person.

So with concussion, there is this term chemical cascade. That cascade is a series of biochemical changes It happens at a cellular level. So this is something that's not going to be found on a scan.

You can't go to or maybe some brain scientist can or maybe the right kind of imaging possibly could find this but probably Most people with concussion are not going to have a scan.

Your basic CT scan is not going to find this type of change.

But just to get a little bit more of an idea of what chemicals we're talking about with the chemical cascade.

The brain's immune cells release inflammatory molecules. There's neuroinflammation.

There's a sudden influx of calcium. Ions into the cell.

And this energy crisis is the brain's energy balance being disrupted and then the brain has a harder time producing and delivering energy.

So the chemical cascades triggered When the calcium ions in the brain are released. It leads to disruption and it causes cell damage.

And then this causes the symptoms that people experience, headache, cognitive impairment, delayed recovery.

The injury might be invisible to others. And some of the symptoms are too.

So if you look at this slide here, we're talking about changes emotionally, being quick to anger.

Irritable. These are things that we can look at and we can see very easily.

Then there are changes that might not be so easy to see.

Headaches, sleep disturbance. Cognitive changes.

So with a concussion, headache and fatigue are the most common symptoms following shortly after the injury.

But it does not. That they are any less serious than those changes that we can see from the outside. Assume if you know someone's had a concussion that they are experiencing changes And that there might be more going on than what you see.

Some common problems after brain injury that might be less noticeable are things like changes in vision.

Feeling confused, depression. Physical changes are going to involve movement disorders, balance problems.

Cognitive changes like slurring, forgetting words. Problems with attention. Attention is its whole situation to itself that can be very complex.

There's a wonderful part of a presentation They'll probably come up in our next session about how attention there's so much more to it than just paying attention live on the spot and being able to Use your brain the way that you need to for attention.

Behavior changes, someone who's overly emotional, someone who's impulsive. Angry.

An executive functioning. So this is a complex set of skills. It's in the frontal lobe.

And it really does the most development in the young adult years.

An injury to this kind of development, your executive functioning. Can affect those higher level adult skills like initiation judgment and self-monitoring.

So when we think of someone who's had a frontal lobe injury.

They are more likely to have executive functioning changes and they're more likely to look like someone who cannot get things started.

Who doesn't make good decisions. So we're going to move on to our case studies.

And I just want to give you a quick heads up on our case studies.

They're based on real experiences. But we've changed names, we've changed details.

This may each be compilations of two or more individuals. And we're going to really focus on their symptoms and how to best serve them So that you walk away knowing what resources are available and how to use those.

You may not think about brain injury as something that's going to affect you personally.

Perhaps you work in this field Perhaps you work in another helping field and you've met one person with brain injury and that piqued your interest to come today.

Or maybe you know a lot about brain injury and it's your family, it's your friend, it's your spouse.

It's people you serve every single day.

When we talk about brain injury, we tend to think about the ways that someone's injury affects us.

Our program that I work with Brain Links has been around for, this is our 25th year in Tennessee.

We've been talking about brain injury and training people about brain injury for a very long time and it's changed a lot over the years.

But one thing that often I think it's helpful to point out is that it's really important to think about the person first.

A lot of us know people first language, person-centered planning We know the right thing to do and say, but sometimes we forget. So just a reminder.

Since it's an acquired injury. This is a totally unexpected.

And unwanted disability. This is a diagnosis nobody wants.

So it's Just to put it very simply, it's not fair to anyone when someone has a traumatic brain injury.

When you think about how your brain controls everything in your life, what you do, what you say, what you think, what you remember.

Everything you learn. It keeps your body working the whole time.

In the background. It's just easier to see that every single individual experience is unique to that person.

So if you know brain injury. You probably don't know this person's brain injury. You probably don't know that person's brain injury.

It's something that we're going to always keep learning. So just a quick little look. We're going to talk about three different injuries. I said we're going to start with concussion.

One at a very young age Another that's moderate to severe.

Every person in this set of case studies has other things going on.

People are complex. Their injuries are unique.

Ethan was injured at school twice and he has autism.

An injury like Jordan's at 18 months. If you look here, the second one, he fell down the stairs at 18 months that can affect his brain development from that moment in time forward. Imagine from 18 months.

Through to the HEs now. James, our third case study, had his injury as an adult so We can assume he had a healthy brain until then.

And he did get to have a normal brain development and learning, but we don't know.

All the details yet. These case studies are going to give you some details, but be assured we don't know everything about the people. We just know the information that we're given.

James is homeless, which puts him in a whole different world.

Compared to the other two for the amount of Support, love.

And healthcare that he's lacking.

So we'll start with Ethan.

Pardon me, I'm trying to not cough today. Let me take a little sip of my tea.

Ethan has already had two concussions. He was diagnosed as being on the autism spectrum when he was in first grade.

And then he's been served by a 504 plan with minimal accommodation since.

Ethan's intelligent. He makes good grades. He likes to learn.

He would like going to school if he didn't struggle socially he has no friends at school.

He's not an athlete. And he's really reluctant to draw attention to himself.

Ethan's mom describes him as previously not acknowledging or vocalizing when he's in pain.

He's had other instances when he's had dental issues that should be painful when he's had a surgery for something that was surgery very painful and very painful and felt the pain and he felt the pain probably at the height of his pain talked about it.

And he's very vocal. He's very capable of explaining what's going on in talks.

But he tends to not point out when he's in pain and not make as big of a deal of something as you or I would.

His mom describes that his teachers do not like him and don't want to help.

Okay, so that was Ethan. Getting started. Now we're going to talk about Ethan at 14 years old.

He served on a 504 plan. He's had concussions both at 12 And at 13. Both of those concussions occurred at school.

When he fell at school on the first injury, it was during PE class.

He was given an ice pack. It's possible that he may have lost consciousness just briefly But no one can confirm that.

He was sitting up, people were helping him within just a minute or two of the the fall.

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His head did hit the floor. And it was a wooden floor and it was a hard fall.

The school did not call his mom. She decided to get him checked at the hospital and after she picked him up, Ethan said.

When she picked him up at school, he said that he had fallen and hit his head.

After that first incident. Ethan's symptoms cleared.

Sadly, he's been bullied by other students and one of them hit him in the back of the head.

It was outside of school outside of the building in front of the school.

And other students saw it happen. But nobody wanted to speak up about what they saw. And it was just a couple of people.

He told his mom again when this happened And she took him to the hospital again. And at this point she's starting to worry about what the hospital thinks is happening to her son.

Because he keeps coming in with injuries. And later she followed up with his pediatrician.

This time there were more symptoms He was more susceptible to headaches. He was having some balance issues.

And with stairs at home. And stairs at school, lots of stairs This concerned his family. He wasn't able to play video games without having headaches.

He sometimes had some mood issues and some outbursts that might be related to his autism But those increased as well.

Well, now Ethan is about to start high school. And in high school, the kids are going to be bigger.

The building's going to be bigger. And he's still being picked on.

For his differences. Nothing happened to the student who hit him in the back of the head, just for the record.

Ethan needs friends and he needs confidence and he needs to go a year with no injuries

The school had a training for the staff about brain injury, so that was great.

And now they're going to get the tools that we're about to see. And his mom also has those, but it took a lot of work to get the school to accept the plan to have a training and to take the time

And to really give um give to address the serious nature of his injury. And it may be because they both happened at school.

And it might not be. It's not that uncommon. So Ethan's school in the training, received the signs and symptoms tool for recognizing symptoms And people that communicate without words.

Now, like I said, Ethan can talk. He can explain what's going on. He's a smart kid.

He has no trouble speaking. But sometimes, like when I gave that example of him not talking about when he's in pain.

Sometimes you really need to look a little closer. And in this case.

He didn't even tell an adult that he was injured. He waited until he saw his mom.

Ethan's school didn't tell his family about his injury. And it's it just it should have been handled better.

When she came to pick him up at school, she knew something was wrong.

She could see that he was in pain and she knew something wasn't quite right with Ethan.

If the school had just had this tool, they would have been able to see the more subtle changes.

Like a tense expression. Closing his eyes, changes in breathing.

And this is something that we added to Ethan's 504 plan.

And letting the school know that they may not have Ethan tell him verbally when he's in pain.

And it's something that's going to help with lots of other students as well, if you could imagine.

That's just one of our signs and symptoms tools. We have a lot of others. We'll look at a couple of others as we go.

But know that on our website, we have them for adults for youngest children up to age four and for school age children.

The one you were just looking at was for children or adults, anyone who might communicate without words.

So how it should have happened for Ethan. This is a glimpse, you can see the whole handout here in the We're just kind of zooming in on it here for this important part. I want to talk about what should have happened?

Immediately after the injury, the school should have contacted the family.

He should have been seen by a medical professional experienced in concussion. He did get that.

There should have been a letter return to the school there should have been a letter completed by a doctor, the return to school letter. We'll look at that in just a minute.

The school should have informed, and if you look over here this handout is Concussion and brain injury in students who needs to know?

The school should have informed the principal The classroom teacher or teachers for Ethan. He's a middle school the school nurse, the school athletic staff.

And the teaching staff with the need to know. And Ethan should have been back to school with recommended accommodations.

With the feedback from school and community sports professionals and from educators and others all across the state.

Just to give you a little background for a second. Over two different years, brain links interviewed and did a focus group to get feedback for what asking what is the biggest problem? What's the missing link?

When a child has a concussion. And the big word that stood out, the thing that really was repeated over and over and over was communication.

So the people who are there in the school every day, spending sometimes the most time with our children.

Told us they need to know that the child had the injury in the first place, the school nurse has to be informed.

The people working with that student have to know. So that's why we created this handout.

Concussion and brain injury in students who needs to know. And we broke it down with who the family informs, who the school informs.

And this is a handout that's on our website.

Ethan's doctor that was at the hospital or even his pediatrician should have completed the return to school letter. So we're just taking a glance at it. It's over here on the left.

And we're going to get a little closer up. The return to school letter gives the school a list of exactly what symptoms are going on.

It's so simple and fast. If you think about asking a doctor to fill something out for you, it just takes a minute.

And they can check the symptoms that the person's having. So for Ethan, he's bothered by noise and lights.

He was having vestibular issues, dizziness and balance. He had changes in mood and he was having headaches So the doctor suggests that he go back to school But... he's giving these suggestions.

Temporarily. No PE, reduced homework. Postpone classroom test or standardized testing.

Give him a place for giving them a place quiet place for rest breaks.

And... less screen time and they can give him ibuprofen or acetaminophen with headache as needed.

This needs to be in Ethan's file as part of his health record.

The school can send this back to the doctor it wasn't filled out in the first place, but ideally, we want doctor's offices and emergency departments to have this on hand. It just takes a minute.

And it's a great way to communicate to the school exactly what a doctor recommends.

So what do we know? What do we know about concussion?

Research has shown that there's an increased likelihood for children with mild TBI before 16.

To use substances to commit violent offenses or property offenses in their young adult years if they're not monitored properly.

This is a newer model of treating concussion based on the symptoms that they have. And this is from the University of Pittsburgh Medical Center. It identifies the trajectory of symptoms for concussion in five types, migraine, cognitive, vestibular, ocular, and anxiety or mood.

And then there are these modifying factors that also play a part with any of those symptoms, sleep and neck related symptoms.

Sleep involves either getting more or less sleep following the injury.

Neck involves neck stiffness, pain, or difficulty moving the neck. So we're going to look a little more closely at this one and talk about what to do.

So knowing those different five trajectories And then those two modifying factors The research has shown that an active specialized treatment focusing on the specific symptoms is going to help the brain recover from injury quicker And a shorter rest time with gradual return to activity is going to mean a

Quicker recovery. So notice how with each of these types of treatments that work with each set of symptoms They all involve exercise.

So the main goal is to return to some level of normal activity sooner rather than later Of course, monitored by a medical professional who's experienced in concussion.

And get back into a more normal routine, even if it's only baby steps at the beginning

And these are for those modifiers of sleep changes. And neck changes.

We gave Ethan's family and his school BrainLink's infographic that breaks down the five clinical trajectories that we were just talking about with permission from UPMC.

And you can see here that the types of active treatment are briefly described, what kind of specialist can help, and examples of what the person might be experiencing in each of these symptom types.

So when we have this, it is much easier for people to see the injury.

We also gave his school this infographic. Concussions are treatable. It not only sums up what a concussion is and how to get help and where to go for that.

Information. It also tells them why he went to the hospital.

And the reason for him getting therapies for treatment For people that may not see the injury, may not recognize the serious nature of brain injury and concussion.

He looks fine. On the outside. This might be the piece that says, oh, wow.

I just wasn't looking at it that way before. He might be missing some school time for those treatment and therapies.

But they've worked now with his school psychologist to be sure that his strategies for working on his mood Things he can do to avoid headaches.

Are included in his school provided counseling lessons. So he's already seeing a counselor related to autism and some struggles he's having in school in general.

But now we've added in these extra pieces because the schools been trained in starting to use those things that are available to their staff.

The back of this that we're looking at includes concussion resources that the school needs for Ethan and for other students.

And there are links on there for easy access. And this is on our website. No problem for anybody to get to anytime.

Before this new research came about about the five clinical trajectories and about the modifying factors, this is an update for those of you who might be familiar with the previous version of this that was six types of concussion.

We would have. Maybe had Ethan in the hallway but way before class was over He might have been back to school and getting a lot of help in a more controlled environment But with these new findings, he's still back to school, but he's more actively participating in his recovery. So he might still have supports like walking

A busy crowd in middle school hallway between classes But this might be different now. We might instead have him get a little more exposure to that crowd and that noise.

And instead of being completely alone, now he has a buddy.

And that person being with him can assist him it's it's um a chance for him to a little bit push through some of those mild symptoms.

And work on using less adjustments. So it's giving him a chance to be a little bit more independent.

And not have so many needs when he goes back to school after concussion If we think about his main symptoms, headache.

Vestibular changes mood Now we can get him help sooner.

His mom, hopefully she's not going to ever need to, but she knows If he's ever injured again and has headaches.

They can begin to treat those quickly and not just with medicine, but learning healthy habits to avoid or lessen symptoms.

It might help for him to see a counselor. For cognitive behavioral therapy.

His mom and him might have not even heard of vestibular therapy before.

His concussions happened, but it might be a big game changer for his dizziness and balance issues.

His mood might be related to the injury. Or it may be related to changes that he's had since the injury.

Maybe he feels less. He already has some confidence issues at school. He's already getting picked on and maybe this changes that he knows he's been affected by the concussion are another reason.

To work with a therapist. That same therapist who could help him with preventing headaches and changing how he thinks about himself.

Can help him. As he's recovering from the concussion.

And then gradual exercise. It's always going to come up when we're talking about concussion recovery. Light exercise has been shown to be helpful even in the early part of recovery in the first week first even After two or three days of rest

Very beginning of recovery. And that might include something like walking, stationary bike.

Swimming, stretching, yoga. It's all about getting back into some activity.

The concussion alert form, we're looking at one filled out here.

When things are done right. We help Ethan by having this in his file.

It follows him year to year, school to school. So this would go with him to high school. And the school nurse is well aware by looking at this The Ethans had a concussion and he'll have two in his file.

It serves as a record of his injuries. It includes the directions up on top It includes.

The school-wide concussion management plan And it's a really important way for his teachers in the future caseworker, counselor to all be on the same page about what's happened to him.

The school nurse completed when things are going right and what should have happened, the school nurse completed the concussion screening checklist.

She did it right after he was injured. He stayed in the school clinic. He wasn't outside by himself waiting on his mom to pick him up.

She filled out the checklist here on the left Here's a close-up of his symptoms.

He had dizziness, he had headache. He was a little more emotional and she checked these things at zero minutes or close to 15 minutes, 30 minutes.

And then here are some some specifics on she checked his pulse He's oriented. He didn't have nausea or vomiting.

But with this. This puts everybody on the same page that every concussion is treated the same.

Ethan felt safe with this. He felt seen by her acknowledging that he was hurt and checking him out.

And he gets the help that he needs. The way it should go.

The school nurse that was helping Ethan, she knew exactly where to find these helpful tools and they're in the TBI Toolkit for School Nurses.

That's one of the four toolkits that Brain Links offers on our website.

She keeps that book. She keeps that website bookmarked so she can go to it anytime she needs it.

And the toolkit includes other things like a 504 or IEP accommodations list from CBIRT, the Center for Brain Injury.

Research and training, as you can see here, this is something that could be helpful in the 504 plan.

For Ethan, we have different categories circled like his He might need more breaks, behavior. He needs to learn to recognize signs of stress.

These are all different areas that are all different areas someone might have problems with after they've had a concussion and being able to circle those and go to those To provide the accommodations he needs. He might need reminders for completing his work.

He might need an escort like we were saying that buddy between classes so that The symptoms are recognized easily and the short-term accommodations are put in place by the 504 team.

And then the symptom tracker tool. So this is something here we're looking at Ethan's.

And what he was experiencing was When he's waking up.

In the morning, he already feels bad. And this is just in the early few days following the concussion.

He puts the time, he says what happened, he had a headache.

His mom might have to fill this out for him. So what worked? He drank some water. He rested five minutes and he got a little better. He went from a four to a two.

Another problem he was having Interestingly enough, at the pickup from school.

So if you look on here, 330, he's irritable stirring his ride home. He had a quiet ride.

We didn't talk about school. It was just silent. Once he got in the car, he wasn't having to talk or explain anything.

He just took some deep breaths. And him and his mom kept it quiet and he improved.

So this is a quick way to keep up with what symptoms are happening.

What was done and did it make things better. So, so far for him, when he's at home after a long day recovering from concussion And already kind of sluggish and irritable.

Taking a nap is helping him a lot. A 90 minute nap.

Maybe in the beginning sounds like a lot, but he's a growing teenage boy and it's it's making a huge difference. He's waking up improved. He's waking up feeling better.

And he's beginning to take charge of his recovery. This symptom tracker can work for anyone.

So thank you for hanging in here. I'm going to give us a tiny little moment. We're not going to take like a five minute break or anything.

But I'm going to give you half a minute without me talking.

A little micro break for you to just rest your eyes take a deep breath.

And then we'll pick up for the second half. I'll be with you, but I'll be quiet for a minute.

Okay. Maybe you use that time to stretch a little Maybe you looked away from the screen.

We've been working as a group in brain links to spend more time thinking about being present And taking care of ourselves.

And I just want to give everybody in this webinar today a chance to take a breath, not listen to me talk you know, trying to get all this good information out to you and just have a tiny break.

It's a good practice for all of us. It's good practice for people with brain injury.

So we're going to go on to our next case. And this is Jordan.

Jordan was injured when he was 18 months old. He fell down a flight of steps.

At the time he was crying, there was no loss of consciousness. He got seen at the hospital.

But they told his mom probably no concussion. He went home with no recommendations.

There was no there was no Information filled out by a doctor.

His mom just went home and thought he'd be okay. He had bruising around his eye for weeks following the injury.

So when we think about someone's diagnosis of brain injury, it's worth taking a minute to figure out to picture, if you will.

Exactly happened to that person. Jordan is the small child, almost still a baby.

He fell and he hurt his head. Think about a child falling from a bed to the floor.

And hitting their head. That's already something as a parent that might be scary.

Especially when you see that his face has bruising And his eye area is swollen or bruised for weeks.

Jordan fell down a flight of stairs. At this age, he's maybe 20 pounds or 25 pounds.

About the weight of two bowling balls. And falling from the top of the stairs is a really serious injury.

We don't have all the details, how many stairs it was.

It's good news for his mom that he's conscious and that he's crying that's good news But in reality, what is the likelihood that this injury only caused a bruise on his face?

And what was the protocol for diagnosing concussion? 20 years ago.

So here's Jordan now, 24 years old. Currently in prison?

Uses drugs and alcohol. Described as he's tried everything he can't or maybe won't.

Don't know, hold a job. Jordan's very smart, but he struggled in school.

He has a few friends. And he has been diagnosed with borderline personality disorder.

And Jordan, his parents describe him that he won't get help It's just not that simple.

We know that brain injury changes your judgment. Planning, self-awareness, and so much more. And it does depend on the type of injury the site of the brain and a lot of other factors as to what kind of symptoms someone experiences.

But what do you really need to understand about Jordan? This is really a perfect example of why we need transitional services and medical care.

Jordan was injured as a toddler. The injury went undiagnosed.

And he got no follow-up care. His mom walked away with no information.

He's in prison now. He's using drugs. And has a history of using drugs.

And he's struggling with employment. With school, with relationships.

It's it's all been likely affected from that injury. And that's the only one that we're talking about now at 18 months.

We know that the numbers are higher for people who are incarcerated having brain injury.

So he may have had more injuries since he's been there.

Has Jordan always grown up? With the idea that he's lazy.

That he can't get things right. That he's not as good as everybody else.

And it's his fault. And is he using drugs and alcohol?

To treat those symptoms Or how he feels about himself.

Because he's never even known that he had that injury at 18 months.

So I just want to look a little deeper into the what we say to ourselves And what we say about someone else When we don't know the full story.

And when you think about the teachers. The counselors.

Law enforcement who've interacted with Jordan, they don't know all of this.

And... there was there's just so much more to it.

So what do we know? Research has shown that there's an increased likelihood for children with mild TBI at preschool age.

To be diagnosed with ADHD. Add, conduct disorder, oppositional defiance.

More likely to use substances. Or to have a mood disorder.

So think about Jordan and all of these things that line up for him.

That he's experiencing the downstream problems can be lessened Or they can even be prevented in some situations if there is monitoring.

That's continuing and if people understand that he had this injury and that follows him just the communication of knowing it happened and knowing where to go for those resources to help him.

So when I talked about juvenile justice and brain injury. As high as 67% of detained youth have had a brain injury prior to a criminal offense.

And with brain injury, they are three times more likely to reoffend. So if there's a strong... connection between incarceration and brain injury and whether that's a child or an adult.

It's just a very huge intersection of the two.

So why is there a need for the ongoing monitoring? We also know that we also know people of all ages with brain injury are more likely to have another injury.

I will let you read these, but to be incarcerated or to use substances. And approximately half of people receiving substance abuse treatment have had at least one brain injury.

25% of people entering brain injury rehab are there as the result of drugs or alcohol.

And... After TBI, many are discharged with opioid prescriptions for pain, 70 to 80%.

So the best practice is screening for a prior history of brain injury.

Assessing cognitive and functional impairment, getting education And making sure that that person connects with services and resources that are out there for them.

One of the things that would help For Jordan is having a clear understanding when someone has a history of brain injury and you're looking at the HELPS screening tool.

It's the first screening tool to gather information and it's not meant to diagnose.

It's really easy to follow. It's just one page. If you look at HELPS, it stands for head injury, emergency room.

Loss of consciousness, problems in daily living, and sickness. So for Jordan, we would check head injury, emergency room, and problems in daily living.

This would help Jordan so much. It only takes a couple of minutes for the person who serves him to fill this out.

Parole officer, mental health counselor. If this information had been asked when he was younger.

What might be different now?

So problems that he is experiencing difficulty in job or work, relationships.

Depression. All of this could have gotten him started on seeking more services and getting more help.

In 2015, the Media Research Center reported that drug overdoses had surpassed motor vehicle accident fatalities.

Nationwide for the first time.

And toxic brain injury. Is a new term.

That has been identified. This type of brain injury occurs from prolonged substance youth and non-fatal overdose.

And it's really dependent on how long the brain goes without oxygen or without adequate oxygen.

But... never before until 2015 was before brain injury thought of as a result of substance use.

We always thought about people having a terrible fall, a car accident um and Things are changing.

We did a training for Jordan's treatment center staff. So next it's going to be all about what should have happened for Jordan.

They learned about the importance of screening for brain injury. This helps the staff learn what will and won't work in the treatment for him.

If they don't know he has a brain injury and things aren't going well with treatment.

They now have the insight that they need to say, oh.

These little reminders, these little changes are going to make a huge difference for him we weren't doing it right.

It'll help him see what happened to him instead of looking at it as if what's wrong with him.

And... we're going to give him some clarity. He's never had a chance to have so he can move forward.

So things that should have happened for Jordan First things first, the hospital checks him We're going back to when he was 18 months old.

They have a concussion management protocol. What's so different here compared to the real experience?

The doctor followed the protocol They gave his parents printed his parents or electronic checklist of what to look for later.

And because they have that information, his parents are empowered to get the help that he needs.

They tell his parents to come back in two to four weeks Maybe sooner if the symptoms get worse.

And they leave. Knowing what to look for and how to get help for their son.

If he needs more help.

They saved that information that came home from the hospital. And they stuck it up on the refrigerator for Jordan.

This is one of the things that they got. He's just 18 months old.

Brain Links provides this handout, Brain Injury in Young Children. It's one of many signs and symptoms tools that we have, but this is the one for the youngest children.

It's just a page and it's Spanish on the backside. So it's not a lot of information to keep up with, but it's very important for people being able to look for what symptoms might happen. So the doctor said, just take this home and hopefully you won't need it.

But keep it where you can see it and circle any changes that you see.

And for them, what they were noticing in Jordan was a change in his behavior and sleep He was frequently rubbing his eyes or his head.

And he had an increased sensitivity to light and sound. So they let his preschool And they let his school know when he started elementary school later.

In between that. They had reason to inquire about early intervention services for him when he was a toddler.

So this one piece could have made such a huge difference for him.

The concussion alert form is something that could been filled out for Jordan, things that are done right.

This gets filled out, it's kept in his file at school.

His parents get this other handout when concussion symptoms are not going away.

This could have been done from the school, from the hospital, maybe his pediatrician.

This lists what symptoms to look for. And what helped to get.

So not only things that might happen right after the injury or further down the road.

But who can help with those symptoms? What professionals are involved?

This would have given his parents the heads up that he's at a higher risk for substance use.

And this would have given them the chance to address his need for counseling for behavior changes and be able to take charge of those himself.

The psychologist used the brainstorming solutions tool. This is another handout that Brain Links offers. It's on our website. It goes hand in hand with another one, the strategies and accommodations tool.

When he was growing up. Jordan's people that were working with him knew that he was struggling socially and making poor choices

And they used this to come up with You don't have to fill this whole thing out when you use it. You just look at the different abilities that he's having trouble with And go to that and fill it out. But they could see that he was having

Starting projects with initiation He was saying inappropriate things to staff.

He had trouble with his temper. So this is just a glimpse at how it's used. You work on a challenge, you give the details about that ability.

Jordan wants to go to school for computer repair after high school.

So that's his goal. But he also has trouble with temper and needs to work on these things.

So the next steps are about the solutions that would fit. And that would be with the strategies and accommodations tool.

And when you come back for our second webinar in the series, Wendy's going to really get into that cognitive stuff.

So our last case study is going to be James

And I'm wondering as we're doing this today. If you'll take just a second.

To let us know if anyone is joining with multiple people.

From your location. Take a second and put in the Q&A. We'd love to hear from you if you're more than one in your group.

I just also would like for you to Take a moment as we're talking about this last case study.

And think about James as someone you might know. Because as we get into explaining what's going on with James.

You'll see that he's homeless. And it's sometimes easy, I think, for me to sort of put someone in a box in a category Not me, not ever something I'm going to do.

Or not something I can relate to or someone I know personally.

And I want you to think about someone who you know Maybe in your family, maybe friends.

Maybe somebody you serve every day in your job. Or someone you see.

When you're driving to work. Or to the grocery store.

And think about that person. So.

James injury is really complicated. We don't have all the details for him.

What we do know is that he was hit by a car And he was severely injured.

He has a long history. Of drug use, mental illness.

And he's diagnosed with bipolar disorder.

If that's not enough, James has a second injury. And with that injury.

He was continuing to use drugs. He's not taking care of himself, to put it mildly.

He has altered cognitive abilities. And it's just a dangerous situation.

So a little more about what happened. When he was 36, he's 43 now.

James was hit by a car. The injury was a... serious brain injury. No brain injury is a good one to have. They're all serious.

But when you think about spectrum of mild brain injury, mild concussion that might heal in a few days or weeks.

He's on... for the pretty far end of this.

He had to have life-saving surgery at the time of the injury.

He's living with frontal lobe injury at least severe injury to the frontal lobe.

Right here behind your forehead. And this is really complicated by his mental illness and drug use.

He needs so much care and supports, but he's also not aware of his deficits.

So... At the time of the injury, he had a plate put into his forehead to protect his brain because his skull was fractured and broken bones and broken bones and The cause of his second injury is completely unknown.

He went to the hospital. He had another surgery. They had to first remove that plate.

To be able to help him. And then he left the hospital before he was recovered against medical advice.

James is still homeless.

Six years have passed and he has another injury And probably infection.

And... Literally, he's walking around as the walking wounded.

When we talk about frontal lobe injuries, the frontal lobe helps you govern your personality.

It controls your judgment. Your emotions that part of your brain that tells you right and wrong or do this or don't do that is all frontal lobe. It's like um the braking mechanism for your brain. And in the past, I call it the mom section of your brain

So it tells you before you say something you shouldn't Before you speak loudly in a library.

Before you make a joke in the wrong group of people.

Before you...

Act inappropriately with someone that you've just met. That part of your brain tells you this is wrong.

Hold back. Don't do that. And this is one of the areas that was severely injured for James.

So what services is he missing out on right now? He has so many needs.

He urgently needs medical care. He urgently needs treatment.

He needs people working with him that are trained in brain injury.

He might qualify for disability benefits He might... have in his future a good chance of being unemployed and having some control over his situation.

He urgently needs to be indoors and be safe. And get medical help.

And probably medication And he just needs his life to be stable.

He needs peace. So what's happening right now with him?

He's currently safe. He has an advocate working with him.

They're making a plan for what he's going to be able to do next. Some of those things like appointment are way down the road.

But he's beginning to work with someone that can help him access the services that are available to him.

And be there to see him through this long journey of being in a better place Literally and figuratively.

So when we're talking about mental health and brain injury, another really complicated relationship There's so much overlap changes that happen as a result of brain injury and mental health symptoms.

Mental health issues can make brain injury symptoms worse. The effects of the injury.

And mental illness can look really similar. And what we're looking at here is the Brain Injury Association A minute.

I'm sorry, Virginia. Mental health and brain injury

Fact sheet that explains how those two are different and how those two are really interconnected.

And what we look at here, if you see the back of this guide, that especially relates to James is all of these areas that overlap pretty much fit for him.

Fatigue, poor sleep, blurred vision, headaches, drowsiness, irritability. And then also across the board here, substance use, depression, anxiety.

He definitely didn't have a concussion. He had a much more severe injury.

So let's talk about what should have happened for James. Luckily.

The agency helping James to get the temporary housing, have people on staff who attended one of BrainLink's webinars.

And had made connections through the local TBI service coordinator. So when things are going right, this is what happens.

Now they're going to get more training about brain injury for more staff since it affects such a huge part of their population.

His housing counselor talked with the brain injury service coordinator James and his service coordinator get to meet in person.

That's huge for him to be able to see someone who's working with him And know that they're on his side and really with the cognitive deficits that he has To be able to communicate and get that feedback with that

A person in person is so important. They talked about what the next things for them to do and they're going to work on those urgent needs first. They're already planning a time to meet again And now James knows what to expect.

What's going to happen next for him? For James, it's really hard to know where to start.

He also, like Jordan, has trouble with initiation and sort of seeing the long term plan but it's plan it's best to be able to just start small.

You've looked at our symptom tracker. We did that one for Ethan.

Brain health is another really great way to help James with help taking charge of maybe a small change, something that he can do to support his brain being healthier.

And for him to begin to feel better. And take charge of his recovery.

It might be better nutrition. It might be finding purpose, doing something for someone else.

Exercise, socialization. One thing that might be really great for him is to attend a virtual brain injury support group meeting.

That's something that his service coordinator can help him connect to.

It meets twice a month. It's one hour long, and it's a chance to meet other people with brain injury and They have, I think every other meeting once a month is an art therapy session.

So even if James isn't able to meet in person for support groups This gives him a chance. Maybe he goes and works with his counselor, maybe the person who's helped him with housing.

And it could just be done on a phone and he gets a chance to interact with others.

Excuse me just a moment.

Okay. So James has people who can help.

And sometimes all it is is just knowing where to start.

James's social worker knew about our toolkit for service professionals and the one for survivors and families. You're looking at those here.

They're on our website. They're free for anyone to use. Many of the resources that we've been talking about today are included in those toolkits.

So if you kind of, if you prefer to go to one place where it's all in there and all laid out for you, you can look at our toolkits.

A lot of our handouts resources we've been talking about today are available in different sections of our website as well individually.

Know that all of this is going to be on the website after we're done with today's webinar. So it'll all be there for you.

So you can go to a section in the toolkit like essential resources for a quick start Or you can go to a single fact sheet like those signs and symptoms or the symptom tracker we were talking about.

And his social worker is keeping this bookmarked So that she can use these for James and for anyone else that she works with.

James also has people who can be there. Somebody that really understands brain injury and can stay in touch with him as long as he needs.

That's the TBI service coordinator. This program is totally free.

It provides a local person who can help someone access services after a brain injury.

We already talked about the CERT, the support group They do offer some in-person support groups in different parts of Tennessee, and that virtual support group meeting is twice a month You might not know about the Family Support Program here on the bottom.

But there's funding in Tennessee to help people with disabilities. Including traumatic brain injury and service coordinators can help James, fill out the application for this.

Pardon me again. I'm sorry i'm having a a little bit of cough, just a sec.

Okay, thank you. Pardon me because this would have whirled along much more smoothly had I been able to say this.

Together. James also knows Who?

People who know who people who know where to find the key information And that leads us to tend to see brighter futures.

So I just want you to be aware of this. We could do a whole presentation on Tennessee Brighter Futures.

But I just want you to be able to get a glimpse.

Tennessee Barter Futures is a group, a collaborative across Tennessee that's been meeting since the beginning of 2023.

To look at systems of support that intersect with brain injury so that we can all learn from each other.

This is just one of the resources that we have, brain injury and homelessness.

This is from one of our previous meetings i think I think in 2024.

We put together these beautiful infographics that are just a page front and back.

They cover each of these systems. So that people can have a quick way to go and get the most important pieces the nuggets about working with someone with brain injury and their area of expertise.

And... As many as 92%.

Of people experience their first TBI before they're homeless? Over 50% of people who are homeless or in an insecure living situation have a brain injury.

And of that 25% were moderate to severe, like James. And this is 10 times higher than the general population.

So you get some quick facts and stats and you also get some some great insight as to working with people with brain injury and homelessness.

So I hate that I'm sharing this, but When we're talking about case studies, we're going to talk about reality.

James is now refusing. Help and he's let that half-boy house that he was living in With what you know about brain injury and substance use and mental illness.

You probably know that any of these problems and especially combination are likely to be the cause of this.

What I want you to think about is, does James not want help Or is he unable to see the long-term implications of not accepting help?

And it's really frustrating. But did his urgency for medical intervention and did his need for safety change?

I'm going to read this little quote. After a brain injury, patience is not just a virtue, it's a necessity.

The journey to recovery is not a race, but a steady climb.

So embrace each step. No matter how small.

So just to tell you a tiny bit more about Tennessee Brighter Futures.

If you've been thinking about someone that you have in mind, someone you serve.

If you're thinking about something totally different than a person with brain injury.

Maybe it's domestic violence. Maybe it's child abuse. There are all of these different areas that intersect with brain injury. And with Tennessee Brighter Futures, we're making Systems change as people are learning more about the need to screen for brain injury

How their systems overlap with brain injury.

How knowing about these sources? Of information and these people who are expertise experts with expertise in each of these areas.

Can be your go-to. You don't have to have a specialty in every area to serve everyone. It can be so overwhelming to feel like.

James has a brain injury. I know brain injury, but I don't know substance use.

Or... He has a brain injury and also this mental health diagnosis. I really don't know how much is one or the other.

But knowing where to go for that person who does know what to do And who can help you figure it out is what Tennessee Brighter Futures is all about.

There's a go-to place for the resource pages for those infographics.

We're continuing to have those meetings and it is all on our website. And here's just a glimpse of those for brain injury, mental health and substance use.

And we have many more. So last few minutes of our time, I'm going to ask if there are any questions in the chat.

And I'm going to remind you that if you'd like a certificate of attendance.

Please stay with us. We're almost at the end here and the survey is coming up in just a very few minutes.

Hi, Jen. It's Wendy. There has been a lot of activity in the Q&A.

Hey. Hey.

Good.

Lots of comments. People really appreciating everything that you've shared And lots of requests for the different materials.

So that's all on the website where I could. I responded with a link.

Yay. Bye.

Wonderful.

It looks like I can't respond to everybody. At once, I can only respond to that that answer.

So Jen, did you say that you are doing a sheet with electronic links or no?

No.

Okay.

Well, funny you say that. I'm going to. When we did a session last fall, we had so many resources that we talked about. We put it all on one page.

So that there would be a PDF that everybody could have and just go to. And I tried to put little images next to it in case it helped to be familiar with what it had looked like.

In the presentation, this will be more than a page. It'll be a bunch of pages, but I'm happy to put that together so that we can have it on the website. We'll have the PowerPoint there already.

And then this can be something added. But we'll get it in there quickly and get the recording for you all. It'll all come in that follow-up email.

Great.

Great. And it will be there on the registration page, like Jen said, the PowerPoint is there now.

And if you go there and then scroll down, so if you go to brain links go to webinars.

Click on that button. It'll take you to where go to the webinars and you'll see the registration kind of flyer there, scroll down right above the blue bars and you'll see so it's it's down there.

And then let's see. There was a question about why there aren't other options to incarceration, like monitoring and and The big answer to that, I would say, Jen, is that because people aren't screening.

Mm-hmm.

For people in any of these other systems. And that's what we're trying to really do is get that that word out.

About screening and all of these systems. Jen, there was a question.

About whether MCOs support people in Tennessee see with TBI with choices or ECF choices?

Hmm.

I can tell you my answer was yes. That I'm pretty sure because we've worked with with them And I know that there's someone on here who at least one person who would really know the answer to that question if they're willing to

To talk about it anymore unless you had any more to say about that, Jen.

I really don't. If we do have someone else who'd like to speak up and that works in that area, I'd love to hear from you.

Yeah, we...

Yeah, if you raise your hand If anybody wants to address that directly. We don't deal directly in that way.

I will say this is a good time to just mention that our training that we do lots of different types. This one was a new one and a kind of different one than what we've offered sometimes.

We do training and we have done training in the past for MCOs.

Yes.

And people who work in lots of different specialties with them.

So that they are getting information. To learn more about serving people with brain injury.

And like you

I'm going to... Pardon me, I'm going to scoot on to the next couple of slides so we can just have the survey up.

And go ahead, Wendy.

I'm just looking scanning to see if there are any hands up okay there are not

Yeah.

One other thing. There were questions about screening.

And about neuropsych testing. And I said that um I will get into the screenings are on our website and I'll get into more in depth about neuropsychology and different options when you can't access neuropsychology next.

Training.

Very good. Yes, the help screening tools, just a quick and easy one. It's only to get things started, to get the conversation started.

But that's on our website. That's free for anyone to use. You can Google helps brain injury screening tool.

Just a final thought or two to take away from today. Maybe you want to answer this in the Q&A. I'd love for anyone in our last minute or two here to Give us your thoughts. What did they really needed the most?

What did Ethan need? Maybe longer healing time, better supports in school.

Jordan. He needs to break the cycle of of what's going on in his life and not getting the help he needs. He needs stability.

And some positive experiences. And then with James, short-term housing He just needs to become medically stable more than anything.

And I wanted to ask you what you might use from today.

What will help the people that you know And what maybe one item stayed with you from today. And you can answer that in the Q&A Or you can tell us in the survey.

We'd love to hear from you. In a little greater detail in the survey.

So just to give you a heads up. We're having two more.

Webinars, March 13th case studies of brain injury with co-occurring challenges, a framework for Addressing Cognitive Changes like Wendy just said.

You can still sign up for that now and April 3rd as well.