PRESENTER:
You are listening to the AOTA podcast. Here is your host, Matt Brandenburg.

MATT BRANDENBURG:
Our presenting sponsor for the AOTA podcast is New York University Steinhardt's Department of Occupational Therapy. Alright. Today we are joined by Alexandra Bruce. Alexandra, I wanna thank you so much for sharing your knowledge and expertise and time being on the show with us today.

ALEXANDRA BRUCE:
For sure. I'm so happy to be here.

MATT BRANDENBURG:
Yeah, I'm happy you're here too. I've been looking forward to our conversation and to learn a little bit about your own specialty, because you are an occupational therapist specializing in accessible air travel. Can you fill us in on what motivated you to focus your practice and scholarship on this area of practice, that is air travel.

ALEXANDRA BRUCE:
Well, I think it sort of started for me even before I became an OT is, you know, just advocating and seeing things that I thought were wrong and sort of working towards a solution. And so, when I started an OT school in 2020, actually, I sort of had this idea of sort of starting out as to what I wanted to do with my capstone, because there was a lot of stuff being put online related to wheelchairs being damaged and people with disabilities sort of talking about their experiences. And me being a new student was like, oh, this is something I can solve. Like, why isn't someone solved this already? This looks pretty, pretty tame, right? And so, as I sort of got into it, I realized how complex, accessible air travel is, but also how much it impacts the lives of the people that we serve. In regards to not only like them traveling for vacation or traveling to see loved ones, but also job opportunities and like opportunities to seek health services in other areas of the country as well as like their families.

And so, a lot of times when they're traveling, they're traveling with their families. But, you know, if you have a kid with a disability or you have a family member, that sort of limits where you're able to go with that person. And so, I just realized how, I think we all sort of realized how impactful travel was to us during 2020, because we weren't able to travel as much, at least on planes. Right? People weren't traveling as much as they used to be. And I think that sort of gave me that insight as to what people with disabilities were experiencing and like the fear that they had when it came to whether or not their different devices were going to be damaged in the process.

MATT BRANDENBURG:
Thank you so much for giving us that background. I think your motivation is such a great example of applying the occupational therapy lens and perspective to real world problems that make life more difficult than it has to be, or it should be for people around us that we share the community with. Could you give us a little more detail? You mentioned that people using wheelchairs, their wheelchairs, are often damaged. What are some other gaps, I guess, in the accessibility of air travel for people with disabilities, and how do you think occupational therapy can play a role in kind of addressing those gaps?

ALEXANDRA BRUCE:
So there there's a ton of gaps. I think one of the main things that was so shocking to me is when we're in school, we learn about the ADA, and the ADA is sort of helps protect people with disabilities in public spaces. And while the ADA applies when you're in the airport, it doesn't apply on the plane. And that was very shocking to me. Now there is something called the ACR which is applicable on the plane, which is the Air Carrier Access Act, but that still within itself is very limited into how it helps and provides supports for people with disabilities. I think some of the main things that are gaps is one, the lack of training. So, there's a substantial lack of training for security for any person who's interacting with someone with a disability in the air travel space. So, they're not getting enough training. I think there's also issues with the just access itself when you're on the plane. Right. So, you have these chairs, and everybody knows about the seat pitch, right where planes are making the leg space smaller and smaller and smaller.

And while that's uncomfortable for us just flying in general, that also impacts somebody's ability to pressure relief, to give themselves pressure relief or to be able to move around or to be able to do a safe transfer onto the plane. And so those kinds of things are definitely gaps. There's also definitely gaps related to people with neurodivergence. And so those people, you know, there's a lot of sensory overload on a plane and going on the plane and what that looks like. And so I think targeting those groups of people is really important in order to allow for us to have more equitable air travel.

MATT BRANDENBURG:
Absolutely. Thank you for catching us up to speed. I think this is an occupation, air travel that many practitioners, myself included, aren't very informed on what the guidelines for best practice are, what the evidence is related to accessibility and equity for people with disabilities traveling by air. Why do you feel it's important for OT professionals to study and apply some of the evidence related to accessible air travel into their own day to day?

ALEXANDRA BRUCE:
I think one of the main reasons is it's about participation, right? And so, I think as OTS, a lot of times, at least for me, when you start out, you're focused on their home and their work and all this kind of stuff. But sometimes we forget about transportation, right? We forget about how they're getting to those things. And we also just think about like we think about vacation, and we think about once they get to vacation and, you know, how are they going to be? How are they going to get on the beach and, you know, use the wheelchair to get to the beach, etc., right? But we forget sometimes about that transportation part. So that's one part. I think the other part is we have a rapidly aging population in this country, and there's definitely an aging population that as well needs more supports when we're in air travel. And there's a lot of stuff related to that, especially when you're looking at evacuations, um, for both people with disabilities and just people who are aging, people with children as well.

And then I think the other thing when it comes to OTs is that modification and adaptation and our ability to advocate for the people that we serve and what they need. So, the individuals with disabilities and their families and how to teach them to advocate for themselves and the air travel industry, but also for us to advocate for what those people need. And the same way that we would when it comes to ADA in a school or ADA for work related modifications and adaptations, and we want to make sure that we're doing that as well in this. And, you know, it's definitely in our scope of practice. You know, when you're looking at community mobility, social participation, work participation, health management, all of those areas are potentially situations in which air travel might be involved. And I think we need to do a better job of making sure that the clients that we serve are able to participate in air travel.

MATT BRANDENBURG:
Absolutely. And I think you, Alexandra, are a wonderful example of this. You serve as a board member, the medical advisory board chair, and the advocacy committee chair for the nonprofit Non-profit organization, All Wheels Up. Can you introduce us to this organization and kind of how you became involved?

ALEXANDRA BRUCE:
Yes. For sure. All Wheels Up is a nonprofit, grassroots organization that. So that means everybody who is working for All Wheels Up right now is doing it on a volunteer basis only. Our mission is to raise awareness for safer, more dignified, accessible air travel through research and advocacy. And so, I had the pleasure of starting to work with All Wheels Up through the founder and president, Michelle Irwin, during my capstone projects. And that's sort of how I started working with them. And through that process, I sort of became more invested in accessible air travel. And I personally believe that our capstones should be an extension at some point of what we do, right? We don't have to like, stay in that field forever, but we want them to be meaningful and impactful to the profession itself. And so, when I started working with All Wheels Up, I realized that there was a real need for them to have an OT on their board or to have somebody involved. And so, after I finished my capstone, I was sort of able to continue to participate with All Wheels Up.

So, All Wheels Up does a number of things. They've done some of the first crash testing involving wheelchairs for people on planes. And so that was that was really impactful because that sort of helped to show that that was an option, that putting in a wheelchair on an airplane was something that was feasible. The other thing that we've done a lot of, and this is sort of part of what I did as well, when I was working with them in the beginning, was we do a lot of advocacy on the Capitol Hill and with other nonprofits. So, when we started, we met with 26 congressional offices, the disabilities director at the white House, and also the Department of Transportation to advocate not only for training, but also for other elements that were needed in the FAA Reauthorization Act of 2024 that was signed recently this year. And we sort of helped push a 60 page this this is more recently, but we're helping to push for 60-page coalition reply to a notice of proposed rulemaking, which is in regards to the Dot sort of creating or stressing the need for training for people with disabilities in in the air travel space.

And so that was something else that we're working on currently. We also do a lot of education and advocacy as well with different Conferences. So, we've gone to like the International Seating Symposium we've done. I was at AOTA last year. We didn't have a booth, but I think we have plans to have a booth this year for AOTA. We also have other conferences that we're a part of. We went to asthma, which is the Aerospace Medical Association conference, to sort of advocate towards pilots and flight medical staff and why this was important and why we needed to look at adaptation. So, we're involved on that side with the advocacy, but we're also involved on the other side, which is doing the research and doing some testing and sort of producing the background to sort of show why this is important and show why this is impactful.

MATT BRANDENBURG:
I love that. It sounds like such a wonderful organization that plays such an awesome role in advocating, but also in conducting the research, like you said. Building an evidence base to have these to kind of be more of a catalyst for change to happen and for more equitable air travel to become available. What would be kind of some of the long-term effects and issues that people traveling with a medically prescribed wheelchair could experience under the current air travel protocol?

ALEXANDRA BRUCE:
That's a big category. So, there's a lot right there that to unpack. I think there's been over I think last year there was over 11. Oh no, I lied. There was over 40,000 complaints related to disability related complaints as how they classify them for the DoD related to air travel. So that means that there was 40,000. That's an insane number within itself. But there's also been a lot of wheelchairs that have been damaged as well. And as I think as OTT professionals, we understand that how much work goes into getting a wheelchair and making it specialized for that for a person and making sure that it fits their specific needs. Last year, there were around 11,000 reports of damage to the Department of Transportation related to air travel and wheelchairs. So, first of all, you have damage, right? So, you have damage to wheelchairs. That's also been reported to probably be an underreported number, just in the sense that, like some people aren't reporting when their wheelchair is damaged or there's also a concern to and this is something that we're pushing for as well, is what damage looks like.

Right? Because damage isn't really defined right now. And so, making sure that we're able to define what that damage looks like can sort of tell us Also about how impactful this is being. So, one part you have damage to people's mobility devices, right? And we all know how important those are for people to be independent in their lives. The other part of that is stuff that happens while they're on the plane, right? So, if you're transferring someone out of their wheelchair into an aisle chair, sometimes people have seen these, sometimes people haven't, but it's a very narrow seat that just has a lap belt for people. So, if you don't have trunk control, if you don't have head control, that's something that someone is going to have to come in and hold your head. Or sometimes they'll use like the seat belt extenders to strap people to wrap around their bodies. Right. So, then you're looking at one and, you know, just feeling undignified when you're sort of feeling like you're bound together on this very thin seat and then you're transferred into your chair.

So, when you're transferred into your chair, there's the chance of tissue breakdown. There's also the chance of that when you're sitting in a chair for a long period of time. So, a lot of times people with disabilities, they're put on the airplane first, right. So that means you're waiting for a lot longer period of time because typically they're also the last ones off the plane. So not only if you think if I'm taking an hour and a half flight, if I'm flying from I live in DC and I'm flying home to Atlanta, it's an hour and a half flight. I can get to the airport an hour before because Reagan is wonderful and I can get seated, get settled, and I'm probably only sitting down for like an hour and 45 minutes max. That time can be doubled or tripled if you're a person who has to be transferred into the seat or transferred out of the seat, right, because you have to wait for the people to get there, the wheelchair attendants to be able to come and help you transfer in and transfer out of your chair, so you have that damage that's happening.

You also have the lack of accessibility when it comes to restrooms, when you're looking at people's restrooms and their ability to use the bathroom. This is where you've seen some of these shocking videos of people dragging themselves down the aisle of the plane to get to the restroom or using a skateboard or some other type of device to sort of help them get there, because aisle chairs are not required to be on the plane during the flight. So, your wheelchair is taken away from you, but they're not giving you another option for you to have that wheelchair while you're on the plane. Right. And a number of studies, we've seen people who are reducing their water intake days before they're flying so that they are able to hold it for the whole flight. You also see people who are wearing diapers who typically don't. You typically aren't wearing diapers, who are self-tapping and they are self-tapping in a way that's not very safe, because they're doing it while they're on the plane in their seat because they're not able to reach the restroom.

And so that's another area where you're likely to get UTIs, which can be very dangerous for people. You also have circulation injuries which happen or, you know, blood clots because people are stuck in chairs for long periods of time and they can't really move their legs and arms and the way that they need to, because, I mean, we've all been on a very long flight. And, you know, there's not a lot of room to sort of stretch your limbs and move around. On the flip side, there's also injuries that happen as well to people who are lifting passengers with disabilities. So, there's not a lot of training that's happening with those workers. And so, there's a lot of bending and twisting and lifting that's not happening in a safe and ergonomic way because those employees aren't they're not under OSHA when it comes to their training and how things are covered. And so that's something that we're working on as well, is working on how to make sure that they understand, you know, the same way we go through school and we practice lifting and transfers, making sure that those workers are able to safely lift pass passengers not only so that they're not becoming injured, but also the passengers aren't.

There's a there's a whole bunch of stuff. Evacuations is the other one I will mention. So, evacuations, you know, in the beginning, they give you the whole little report as to what happens if there's an incident on the plane, right, that's the plan. And so, if you're in a wheelchair and you get transferred or onto the seat in the plane, right, there's not a separate plan for you. And I think that's something that needs to be addressed for sure. All Wheels Up works with a couple of companies that have helped to make modifications for people regarding that, but right now there's nothing set. There's nothing on the airplane that's specific to help people with disabilities evacuate off a plane if there's emergency when there's been incidents in the past. I know there was like an incident a while back. It might have been, I think it was in China. The plane went up into flames when that when that situation happened, I was talking with a couple of the people that I work with, and we're like, like, how would you get the people with disabilities off that plane?

So, everyone got off safely, but there's not that opportunity for those people if we don't have some type of solid plan of evacuation.

MATT BRANDENBURG:
This is honestly, you know, shocking to hear all these shortcomings when it comes to accessibility of air travel and increased risk that people with disabilities take on when they decide to travel by air. You know, they're taking on a physical risk to their bodies. They're risking, you know, their own safety. If something were to happen. They're sacrificing so much independence and putting, you know, their device at risk as well. It's really shocking, and I think really illustrates the need for change and for change to happen quickly. I'm really interested. And I want to learn more about All Wheels Up's proposed solutions. You mentioned two of those key components earlier, which were implementing designated wheelchair spots on airplanes and standardized training for those who assist wheelchair users throughout the air travel process. How did you arrive at these interventions to help promote increased safety and well-being of wheelchair users and the personnel assisting them?

ALEXANDRA BRUCE:
I think it's a lot of just listening and talking with people and their experiences flying and traveling with a disability or with someone that they love with a disability. Michelle Irwin, our founder, her son has a disability himself. And so, she sort of learned about this when she started traveling. And she was like, wait, what? This is happening. And I think for a lot of us, you know, the flight process itself is so chaotic that a lot of times we're not always paying attention to what's happening for other people, but once you start to look and listen and sort of listen to people's experiences and listen to people describe being asked, well, why can't you just lift yourself up out of your wheelchair? Why can't you just do this? Or people getting frustrated with, oh, well, it can't be that bad. You get to get on the airplane first, right? All these kinds of things and not sort of having that that background training that's needed. I think that's sort of how we came to the conclusion that training was needed.

The wheelchair spot itself came through because a lot of the injuries, a lot of the things that I just discussed are related to potential long-term issues. Pressure injuries can lead to death. Right. There's been instances of this in the past in Gracia Figueroa. She was actually someone who advocated she had she has a disability. She was in a wheelchair. She advocated for accessibility with air travel. And she ended up passing away a couple years ago because of an injury that she received because her wheelchair was broken. She had a sore pressure injury on one of her hips and that that led to an infection. And so, I think looking at those people, if we keep people in their wheelchair, right, then you're taking away the risk of tissue breakdown, right? Which leads to the risk of infection, etc.. And so, um, the wheelchair spot is sort of part of that, right? So, if we keep people in their device, which one enables them to be more independent when they're on the plane, right. Enables them to be comfortable and be able to move around the way that they're used to.

It also keeps their device safe, right? So, under the plane, when wheelchairs are loaded into the cargo hold of a plane, um, you know, those people down there are doing the best that they can and none of those people want, I think, want for someone's device to be broken. But I also don't think that they understand how to move a lot of those devices. Right. You sort of only know from experience, etc. and they're also running on a quick timeline and turnover of trying to get everyone loaded up. And so, if we're able to keep people in their devices, it sort of removes that hazard of is my device going to be broken, am I able to communicate, am I able to move around on the plane, am I able to have the supports that I need posturally so that I can sit up and so that I can be on a flight safely? Because, you know, like a lap belt isn't necessarily the best option for everybody when they're flying. We can talk about there's a couple modifications that you can do related to lap belts and evacuations and stuff that we can discuss, but that was sort of how we came to that is, you know, having one a wheelchair spot would drastically reduce those injuries associated with transfers, and address the broken wheelchairs.

But having that alone, without the training, you're still going to have these instances, instances of people feeling embarrassed and feeling degraded and feeling, you know, re disabled when they're in this environment and interacting with people who aren't typically interacting with people with disabilities in a professional setting. And were you having to move them around? Right. So, if you think about it, people are used to people with disabilities just publicly, but they're not used to having to care for them and to tell them where to move, etc. And that's how you get in these situations where people are pushing people's wheelchairs without permission, right. Or they're like, I don't understand why you can't just pick yourself up and walk down the runway or different situations like that. And I think having that training so that one, the staff is equipped and understands what different passengers' needs may be. And they feel more empowered to be able to assist them and talk about what they might need in a way that's appropriate and also doesn't make the person with a disability feel like they're being degraded or that they're a problem, right.

That's sort of how we came up with those.

MATT BRANDENBURG:
Absolutely. Those are wonderful solutions, and it makes a lot of sense to have a practical solution. A designated wheelchair spot sounds like it wouldn't be too difficult to implement. And then the training to, you know, support the implementation of that solution. It all makes really good sense. I wanted to ask you a follow up about what kind of the roadblocks are to getting these solutions put into practice. I love that you were including stakeholders and people with disabilities to help, you know, come up with the appropriate solutions. But what's kind of the next step? You mentioned that your organization works with the FAA and the DoT. What needs to be done to really implement these interventions, and when could we expect to see them on planes?

ALEXANDRA BRUCE:
That's a complicated question, but I think we've made a real we've made a lot of good progress in the last two years, actually. I'm feeling very hopeful that we were in the right direction. Right. This is a new field and a new environment to be in when it comes to research and when it comes to people getting on board with why this is important. But once people hear about it and you explain to them how much like just a general like I remember starting my capstone and explaining this to family members who have no medical background, no background with people with disabilities or anything else like that. Right? They just have flown before, and you explain to them how much a wheelchair costs, or you explain all the different situations and all the loops that these people have to go through in order to fly, just like we do. And what how much of a privilege it is to just sort of like, you know, breeze through security, get on the plane and not have to worry about if this is going to cost me my life or my mobility is a big privilege.

So, I think it's starting to have traction in social media and like just with people understanding and knowing what you're talking about. So, I think that's a big step, right. So, people identifying this as a problem. The next big thing that's happened recently and this happened at the beginning of the year, is that the dot basically came out with this NPRM, which I sort of referenced earlier, and this is something that we were advocating for, so I'm really excited about it. They came out with this rule to strengthen the Air Carrier Access Act to ensure that passengers who use wheelchairs can travel safely and with dignity. Right. And so, this requires this proposed rule would require airlines to do better in accommodating passengers with disabilities, and also would set the stage for mandating enhanced training for employees and contractors who physically assist passengers with disabilities. So, in that training and the NPRM, which is like a notice of proposed rulemaking, I think what they're looking at is yearly training, right.

So, this is something that you would renew. And this is something we sort of advocated for on the Hill, which is this idea of sort of like CPR training. Right? You have CPR training. Everybody has a standard training. You have to renew it. Right. But CPR training looks the same regardless of which where you're at. Right. So, it has the same parameters. And that's something that has been really exciting to hear about because, you know, there have been a lot of smaller organizations that have started training at one specific airline. But the problem with that is it's great when you have it at one airline, but you're not going to end up at that airline. Right. So, you're flying somewhere different. So, you have to have this continuity over all airlines in order for it to be safe for you to fly. Right. Because if I'm at the Miami airport and Miami airport is super accommodating and the staff is great and everything, but I'm flying to Milwaukee. Milwaukee Airport might not have that right.

And so, making sure we have that continuity of training is really exciting, because that means that everybody is coming to the stage with the same, with the same resources and the same goals. Along with that, there's other, um, things that got put into the FAA reauthorization that also sort of target looking at training and looking at evacuation plans, and sort of moving in that direction of how we can sort of have safe accommodations for air travelers with disabilities. That, to me is very exciting. We also have a lot more stakeholders, including like, you know, people who are the airline framers. And, you know, I think a lot of people have seen recently, Delta has they have like developed a prototype of what a wheelchair spot could look like on a plane. So then when you're having this traction of ideas and knowledge, it's moving in the right direction. And also, Senator Tammy Duckworth, along with some other congressional offices, did a great job in sort of mandating that you had to sort of do this reporting.

So, we sort of are starting to get more of the data in through the Department of Transportation that's showing, you know, how many complaints related to people with disabilities are being had for wheelchairs and for airlines and what that looks like, because having that information helps us to sort of understand what needs to change. So, like if you go if you Google, you can sort of Google and look at the number of complaints that have been made and what those complaints were about and what the person identified as their disability or their issue was with, with airlines. And that's really important because that helps us to target what training needs to look like and what the main issues are. So, I think I'm really excited about that. I'm also really excited, and this is just on an OT standpoint that this is coming up more I think, you know, being on this podcast, I've, we've had like a number of students, myself included, but like having students after that have come to All Wheels Up and are asking to do their capstones on this.

I think that shows that we're moving in the right direction.

MATT BRANDENBURG:
Absolutely. I'll Wheels Up is such an awesome organization. I definitely invite our listeners to check out All Wheels Up on social media and look into, you know, some of this data that that you're sharing with us today, that that number is still so staggering to me, 11,000 reports of damage to wheelchairs. I'm really glad that you and All Wheels Up is doing this work, and it's beginning to gain traction. And what sounds like, to me a sustainable and a continuously improving way, which I think is how it needs to be implemented. Our presenting sponsor is New York University, Steinhardt's top ranked department of occupational therapy, which now offers an entry level OTD for aspiring occupational therapists. NYU additionally offers advanced degrees for practicing therapists that can be completed in person or online. Study and work with leading educators, researchers, and master clinicians in the vibrant setting of New York City and have access to a diverse patient population and extensive health care system.

Learn to deliver exceptional patient care or deepen your knowledge and practice as you focus on applied scientific inquiry and clinical areas such as pediatrics, developmental disabilities, mental health and assistive rehabilitation technologies. Take the next step by visiting steinhardt.nyu.edu/OT to learn more. Could you share with us maybe a case study or a clinical example of how you've seen, or how you hope to see implementing these solutions in a way that can help lead to improved health and accessibility for people using wheelchairs during air travel.

ALEXANDRA BRUCE:
You know, I'm really excited that we have a lot of new research that's coming out, but I will say it's still continues to be an area that we're severely lacking some research, right? So, there's a need for more research. But All Wheels Up is leading a TRB study that is looking at the technical feasibility of a wheelchair spot on airlines. There's also a number of research studies that have been able to show how like they've sort of grabbed data and sort of looked at what the complaints are and what the solutions that people with disabilities are saying. And a lot of those are saying that training was the number one. And so that's the other reason why we sort of push for training is like, OK, well, if we're looking at this data and it's showing that they're like, alright, what's the biggest thing? How can we solve this after a wheelchair spot. Right. But for just all over disabilities, regardless of if it's a mobility disability or somebody who has, you know, a mental disorder or a psychological condition, something like that.

You know, what can be done for those. And that was training. 2021, I think is a good study to look at regarding that. There's also Morris, 2022 to name a couple. There's also a good one that looks at the major trends related to like a literature review to was to increase training, and that one was Davis and Christie 2017. But those are all sort of looking at different studies and how this relates and what's needed in order to go forward, at least for All Wheels Up. All of our all of the research that we do is open sourced. So, if you go to our website, we have a list. That's sort of all the research that we've done related to the feasibility of wheelchair spot, the potential for training, all that stuff's on there. I will say additionally, I'm looking to find funding right now, and I'm looking through a couple of different avenues to sort of help support research related to investigating the feasibility of accessibility related training for airline employees with for passengers with disabilities, along with producing that training through an occupational therapy lens.

Because that's I think, one of the main differences between All Wheels Up and a lot of the other nonprofits in this area is, thankfully, through lots of education and advocacy, I was sort of able to advocate for why it was important and get that buy in. And I think that's something that is really needed. Um, and we're trying to sort of push for in general to other nonprofits and also to the Department of Transportation as to, yeah, we need training, but who is going to be doing that training and what lens is that training going to be done from? So...

MATT BRANDENBURG:
Absolutely. Thank you All wheels Up. It sounds like such a wonderful organization. I can't say enough good things. I love that, you know, all your research is open source, that there's key stakeholders and people who are directly impacted by, you know, the accessibility of air travel involved with the organization. And I love that you're bringing the OT lens to All Wheels Up as well, what recommendations would you give to, um OT practitioners to address accessibility and performance of air travel in their own practice?

ALEXANDRA BRUCE:
I would say one do a little research for yourself. I think there's a lot of good resource sources out there, um, related to accessible air travel. Um, you know, I would also say ask your patients how they travel and if they travel and if they're saying they don't travel. Ask them why. Because a lot of times I had this recently, um, with someone that I worked with who was talking about traveling and talking about how traumatic it was traveling with their child with a disability and trying to hold them up because they don't have trunk control on a long, you know, eight plus hour flight. Right. And so, they're trying to hold this child up. Um, and how that sort of has limited their ability to go see family and to go, um, participate in other functions around the country. And I think, just asking your patients and your clients what barriers they're seeing for their travel, not just air travel, but other types of travel too, because I think this is one thing I forgot to mention earlier, but I think is really important, is we all talk about how, you know, air travel is safer than traveling by car, right?

That's sort of what we tell people when they're sort of nervous about traveling on a plane. But we sort of have to look at the reverse of that, right? So, you have a lot of people with disabilities who are avoiding air travel, right? Because it's very dangerous for them for a number of reasons. But instead, they're turning to traveling by car, traveling longer distances by car. And so that that within itself can be more dangerous than them traveling in air travel, not in the sense of their wheelchair being broken, but in the sense of, you know, the number of automobile accidents we have per year. Right? So, if we can make accessible air travel a safer option that people can confidently choose, they're going to go towards, they're going to go towards the direction of air travel, which is safer overall for everyone. Right. So, one asking about patients and how they travel and if they travel and what the barriers are for themselves to, I would say reading and looking at the passengers with disabilities Bill of rights to know about that that came out of the Department of Transportation and that sort of gives people access to what their rights are.

So that tells you about when you should file a complaint and how you should file a complaint. And if you're allowed to keep certain things with you and what that looks like. And so having that information and sort of preparing your, your, the people that you work with on what it might look like and what their rights are related to that. Right. Because a part of being an OT is not only us advocating, which we definitely need to be doing in this, in this field, but also empowering the people that we work with to be able to advocate for their rights and for what they need. And so, if we're able to sort of prepare them beforehand, that's a that's a wonderful thing. The other thing and I talked about this briefly earlier is modifications. Right. So, it's kind of tricky modifying with something where, you know, there's very strict rules about what you can bring on and what you can't bring on to an airplane, etc. Right. But you know, knowing and talking with your, your patients, you know, to be able to sort of look at, oh, can you bring your seat on.

So, like we might not be able to bring our wheelchair on, but can we bring our seat cushion on so that we're able to have a little bit more pressure release? Are we able to adapt our seat belt? So, there's adaptations. It's called a CARES harness. And so, it's sort of a straps to the chair, but it gives you chest support for the plane seats. And so, sort of knowing about these other adaptations that are out there that are approved by the FAA so that people can fly and feel empowered to fly. Also, you know, education regarding your wheelchair. So, breaking down your wheelchair, being able to how you're going to transport your wheelchair, being able to put your wheelchair back together because sometimes, depending on how big the cargo hold of the plane is, they might have to break your wheelchair down, right? So, if you don't know how to put it back together, then that's going to make it really difficult for you to travel, knowing the battery type, that kind of stuff. The other thing I always like to do, and I've done this with a couple clients that I've had that I've, that are traveling, is creating a card that has all the information on there and making sure to go to the website of the airline that you're traveling with and looking at what they have related to accessibility and air travel and sort of looking at what you might think you need for the trip, etc.

And sort of working with your client to make sure that they're advocating and maybe, you know, role playing a little bit on that of like, hey, you need to move me like this. You can't pick me up like that. I need this help. I don't need you to touch my wheelchair without my permission, that kind of thing.

MATT BRANDENBURG:
And I love that air travel is so difficult for people with disabilities. And I want to thank you for sharing those recommendations, because as OT practitioners, it's really our duty to educate ourselves on, on, um, this, this topic and really strive to educate ourselves to a point where we can empower the people that we work with to take those steps and to improve their accessibility when using air travel. Thank you so much for everything you've shared today, it's time for our Golden Nugget segment, our concluding question. If you could share one piece of advice or one recommendation with practitioners, what would it be?

ALEXANDRA BRUCE:
I think the biggest thing is one try to discuss or incorporate a question about accessible air travel with the people you serve, and you work with. Bring it up like ask and see what they say. And then also ask what the hardest part of it is for them. Because then that gives us an idea of where we need to go. But you're happy to send me those two. If you're like, this is something that someone that I'm working with is having a hard time with. So that's something that we're aware of or, you know, when we're working on training. But I really do think that, you know, being able to incorporate a question about, um, accessible air travel or about how somebody is traveling in general is really important to understanding, you know, work, right? You know, am I able to travel for work. If you know my company wants me to fly to Pittsburgh, am I able to go to Pittsburgh? Or am I able to fly for a funeral or a wedding, or what that looks like and what those barriers are for those people? So, I think that's the one thing I would say is just try to discuss it more with the people that you serve.

And then I think the other one is just to do your research a little bit and to look into that, um, even if your research is just, you next time at the airport, like observing what features that you see that are accessible for people in the airport itself, on the plane, you know, and thinking about, well, I have this client, how would they how would they be able to navigate this environment when you're flying?

MATT BRANDENBURG:
Absolutely. Those are wonderful recommendations, Alexandra. Thank you again so much for your time and for sharing your knowledge. What you've shared today and what we've discussed, I think is wonderful for starting a note practitioner's journey and their education on this topic and beginning to apply some of these principles more into the day to day. So, thank you again so much for being on today.

ALEXANDRA BRUCE:
Thank you so much. I'm happy to be here. I could talk about accessible air travel all day, every day. It's just something that I think is really important right now to allowing people and empowering people to be able to travel and to participate in their life. I did want to talk about All Wheels Up, just the global forum that we do, which is we bring people together from all around the world.

MATT BRANDENBURG:
Absolutely, yeah. Can you tell me about this global forum that All Wheels Up kind of conducts?

ALEXANDRA BRUCE:
Yes. So, we have a global forum right now. It's yearly. We're actually going to have one in two weeks at the Volpe Center, which is with the DoT in Boston this year. And basically, what the Global Forum does is we bring together people from all over the world, from all parts of air travel. So, this would be we have flight attendants, we have air fitters, we have people who are doing string constraint systems. So, like shoestrings, all these type of companies, we sort of have them all come together along with people who are in politics, the DoT, FAA, people like that. We bring them all together and we sort of talk about what the problems are and what the solutions are. And we have people talk, we have student posters and research related to that. And so, we sort of talk about what the issues are and how they need to be addressed. And I think that that's really fun. You always learn something new, and you learn about a different perspective. But we have, you know air flight companies, not just from the United States, but from different countries who are also very invested in learning how they can make air travel in their country more accessible.

MATT BRANDENBURG:
And that's wonderful. And it's great to hear that these solutions are gaining traction, not just within our own country, but internationally as well. So again, props to you. Props to All Wheels Up. Thank you for doing such important work.

ALEXANDRA BRUCE:
Thank you so much. I'm so happy to be here.

MATT BRANDENBURG:
Thank you, listener, for tuning in. And thank you to NYU Steinhardt Program and Occupational Therapy for sponsoring this episode. Thanks for listening to the Aota podcast. Tune in again next time.