DIRECTIONS

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...and the hands that keep them rolling

iNRRTS

IN THIS ISSUE

FROM THE EDITOR-IN-CHIEF

The summer is winding down. Truly, the older I get, the faster time passes. I encourage you to register for the 2025 CRT Congressional Fly-In. Show up, speak up and shape the future. Register TODAY at www.crtaccess.com.

Amy Odom, BS

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LIFE ON WHEELS

Chad Waligura:
No Limits, Just Possibilities

WRITTEN BY: Rosa Walston Latimer

There's a particular kind of determination that doesn't raise its voice but refuses to sit still. The type that rewrites the rules when the old ones no longer apply. That's the force behind a quiet revolution in adaptive hunting, where Chad Waligura meets barriers with ingenuity. At the center of that movement, Waligura doesn't tell his story to impress you; he insists it's not really about him at all.

"There are a lot of people out there who have it tougher than I do," he said. "I'm just one guy who didn't want to give up hunting." And he didn't. Not when a diving accident left him paralyzed at 17. Not when he spent weeks (and sometimes months) developing adaptive hunting gear. Not when the outdoor industry overlooked sportsmen with disabilities.

Instead, Waligura found workarounds and brought others along with him. With his dry wit, calm conviction and deeply rooted respect for the outdoors, Waligura instills his immeasurable capacity to overcome situations that appear impossible. The spinal cord injury could have ended his time outdoors years ago. Instead, it shaped a calling that would take him across continents, into magazine bylines and the lives of thousands of other people with disabilities searching for purpose, adventure and a way forward.

Today, Waligura is a respected writer, magazine editor, video producer and adaptive hunting pioneer. He is also the founder of Able Outdoors, a nonprofit online magazine and media company that celebrates and supports physically challenged athletes in the wild. His journey from injury to influence is one of grit, humor and a deep-seated drive to make the world more accessible.

Chad Waligura, who volunteers with the TIRR Peers organization at Memorial Hermann in Houston, demonstrating a trigger pull device for William Whitten, an outpatient.

Chad Waligura's team for the Sprint Triathlon, a 500-yard swim, 10-mile bike ride and 5K run. (l to r) Jay Shaw, Liza Criswell, Chad Waligura, Georgia Karmue, Stephanie Welch, Simeon Hughes and Chad's dog, Vegas.

After his accident and extensive time in rehab, Waligura earned a bachelor's degree in Rangeland, Wildlife and Fisheries Management from Texas A&M University. Later, he added a master's in education. "I grew up hunting and fishing," Waligura said. "That was an important part of my life."

Raised in El Campo, Texas, Waligura's father and grandfather introduced him to nature at a young age. "I knew I wanted to stay close to nature," Waligura said. "I just didn't know exactly what that would mean from a wheelchair."

He began experimenting with accessible hunting equipment and seeking out landowners who would allow adaptive hunting setups. "There wasn't a whole lot out there for people in wheelchairs," he said. "So, I started making calls, trying stuff, figuring out how to get back outdoors." He created a website called Follow Me Outdoors, one of the first online platforms devoted to hunting and fishing for people with disabilities. "It was just a place to share what I was learning," Waligura said. "If I found something that worked, I'd put it up there for others." His vitality and curiosity have grown the website into a

LIFE ON WHEELS

Chad Waligura participating in a Hunt Fish Podcast Summit with top national outdoor media personalities.

Chad Waligura, (c, front) with Chelsi Gearty and Neil Peltier, first time adaptive turkey hunters on opening weekend. (l to r, back) Ethan Hill, volunteer guide, and Brian Bartlett, an outdoor-enthusiast buddy.

dynamic community of people with disabilities who love the outdoors as much as he does.

Waligura's writing caught the attention of editors at Buckmasters' Rack magazine, where he became a frequent contributor. His work also appeared in Turkey & Turkey Hunting, Eastman's Hunting Journal, King's Hunting Illustrated and Sports 'N Spokes, among others. He was named Challenged Hunter of the Year by Buckmasters, and Safari Club International honored him with its Pathfinder Award.

Despite the accolades, Waligura kept his focus practical. "I didn't want to be some inspirational story people forgot about after they read it," he said. "I wanted to be the guy you could email and ask, 'Hey, how do I rig this rifle mount?' or 'Where can I find a guide who understands chairs?'" A few years later, Waligura took his mission a step further by launching an online resource for the physically challenged interested in outdoor pursuits. He named it Able Outdoors (https://ableoutdoors.net/), a title that reflects his belief that disability is not the end of ability, it's just the beginning of adaptation.

Trixie and Chad Waligura after passing her American Kennel Club Junior hunt tests. He was the first quadriplegic to handle a dog in both AKC and United Kennel Club hunt tests.

"Able Outdoors is about showcasing what's possible," Waligura said. "It's not about overcoming. It's about doing — with the right tools, the right attitude and the right support."

The site features everything from gear reviews and hunting trip recaps to interviews with adaptive athletes and guides. In 2021, Waligura partnered with Ashlee Lundvall, a fellow outdoor advocate and wheelchair user from Wyoming, to produce video content and expand their reach. "We want people to see us out there. Not in a 'look at us' way, but more like, 'If we can do it, you can too.'" Episodes of Able Outdoors are available on CarbonTV, an online streaming platform for the outdoor enthusiast. (https://www.carbontv.com/shows/able-outdoors/)

Waligura is especially passionate about organizing group hunts for people with disabilities. "There's something powerful about shared experience," he said. "When you get a group of guys and girls out there who've all had something happen to them but who are still chasing ducks or sitting in a deer blind, it changes how you see yourself. You're not just surviving. You're living!"

Waligura has led hunts across Texas and the U.S. and has traveled internationally to hunt in Canada, Argentina, Mexico and South Africa. His personal hunting stories are compelling,

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but his greatest joy comes from helping others experience the outdoors for themselves.

Beyond outdoor adventures, Waligura gives back through mentorship. As a founding member of the TIRR Peers Organization at Memorial Hermann Hospital in Houston, he visits newly injured patients, offering encouragement and straight talk. “I don’t sugarcoat anything,” he said. “This life isn’t easy. But it’s not impossible. And the sooner you start figuring out how to live it, the better off you’ll be. In addition to my helpful rehab experience, I wish I had had me visit me back in 1986 after my accident.”

That mix of honesty and hope is Waligura’s hallmark. “People don’t want pity,” he said. “They want real advice. They want to know how to load a gun, how to go to the bathroom in a duck blind, how to get back to doing what they love. That’s what I try to give them. If someone’s willing to reach out to me, I’m going to help them however I can.”

Chad Waligura testing an adapted fly rod with Capt. Stephen Stubbe of Mudfish Adventures on Toledo Bend Lake.

Waligura’s impact on individuals with disabilities is enduring because of his authenticity. He’s not trying to brand himself or chase headlines. This devoted, earnest outdoor enthusiast is simply doing what he loves and making a way for others to do the same. His voice — grounded, clear and passionate — resonates with anyone who’s faced a challenge and wondered, “Can I still do this?” His answer is always, “Yes.” Maybe not in the same way as before. Maybe not as easily. But, “Yes!”

“You don’t have to do it all at once,” he said. “Start small. Get out in your backyard. Try fishing from the dock. Figure out what your limits really are and then start pushing on them. You’ll be surprised how far you can go.”

Waligura continues to travel, hunt, write and film. He’s constantly on the lookout for new gear, new hunting companions and new ways to help people get back into nature. But as his platform grows, his mission remains the same. “The outdoors saved me. And now I want to make sure others have the same experience.” That is the clear-eyed philosophy — equal parts moxie, heart and Texas practicality — that makes Waligura a trailblazer and an intuitive guide through possibilities. In a world that too often defines people by what they’ve lost, Waligura demonstrates what it means to move forward.

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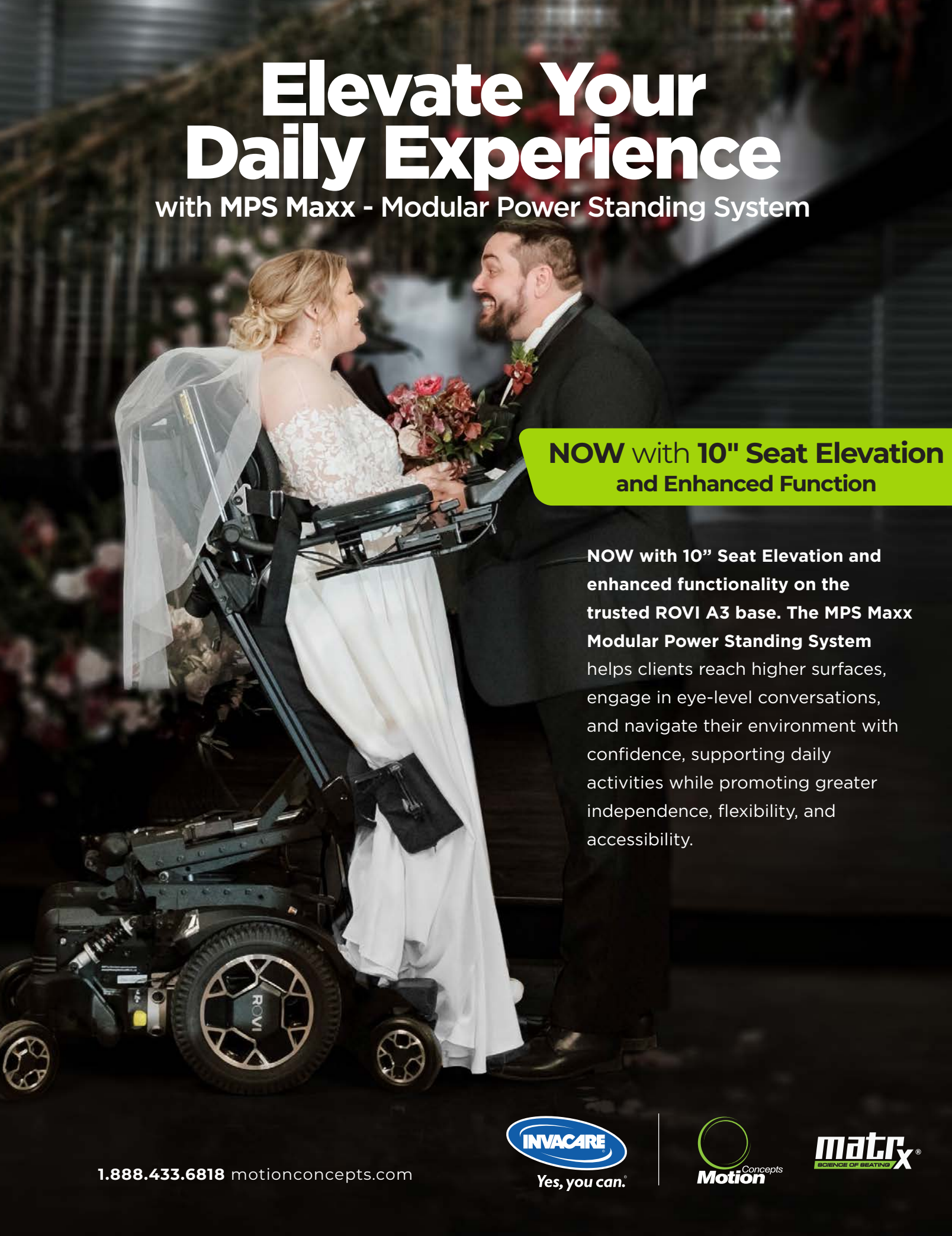

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MOMENTS WITH MADSEN

A Commitment Milestone:
iNRRTS Celebrates 1,000 Registrants, Looks to the Future

WRITTEN BY: Andrea Madsen, ATP

In 1992, NRRTS was born from a simple but urgent truth: Complex Rehab Technology users deserved more. They deserved more than unqualified providers, more than unclear standards and more than a system that treated their life-sustaining equipment as ordinary retail goods. They deserved professionals, individuals who brought skill, ethics and accountability to the provision of complex seating and mobility equipment. NRRTS answered that call by establishing the first registry of suppliers who committed themselves to professional excellence and a code of ethics specific to this work.

Now, more than three decades later, iNRRTS has reached a remarkable milestone: 1,000 active Registrants. This is not simply a number. It is a testament to a profession that continues to grow in its standards, its scope and its responsibility to those we serve. It marks a moment to reflect on how far we have come and to recognize the profound importance of what lies ahead.

The Roots of a Movement

When NRRTS was first conceived, the landscape of CRT provision was dramatically different than from today. There were no defined qualifications for suppliers. No standards for practice. No recourse for those who experienced substandard care. Anyone could sell a wheelchair, with little regard for whether it met the clinical needs of the person using it. This absence of accountability left too many people vulnerable, at risk for poor outcomes, medical complications, and diminished quality of life.

NRRTS was established not just to recognize those who were doing things right, but also to create a framework that ensured consistency, integrity and professionalism. The Registry set forth requirements for continuing education, adherence to a code of ethics and a public commitment to competence in the field. Registrants were expected to demonstrate knowledge, pursue growth and serve their clients with respect and responsibility.

Through these efforts, NRRTS helped elevate the role of the supplier from vendor to professional, a critical distinction in a field where equipment decisions have direct implications for health, independence and dignity.

A Legacy of Leadership

Over the years, NRRTS has evolved alongside the CRT industry itself. Registrants have been at the forefront of advocacy efforts, pushing for appropriate coverage policies, ethical business practices and recognition of CRT as a distinct and essential service. The Registry's standards have become a benchmark, reinforcing the idea that this work requires not just technical skill, but empathy, ethics and accountability.

Education is a central pillar of NRRTS's mission, providing opportunities for Registrants to deepen their knowledge, share expertise and stay informed of best practices. The creation of webinars, CEU opportunities and the respected DIRECTIONS publication have helped ensure that suppliers remain informed and engaged as lifelong learners.

The NRRTS Code of Ethics has stood as a guiding document throughout these decades, reminding Registrants that their decisions impact lives in ways far beyond equipment delivery. It codifies the values of integrity, advocacy and respect that continue to shape our profession.

Becoming iNRRTS: A Global Perspective

As the profession has matured, so too has the recognition that the challenges and opportunities in CRT are not confined by borders. Complex needs are universal, and the expertise required to meet them is a global conversation. The transition from NRRTS to iNRRTS marked an important acknowledgement of this reality, broadening the reach of the Registry and inviting professionals around the world to share in this mission.

The "i" in iNRRTS reflects both "international" and "inclusive." It speaks to a vision of collaboration, where suppliers from diverse health care systems and cultural contexts can contribute to and benefit from shared knowledge, standards and advocacy. This evolution ensures that iNRRTS remains not only relevant but also vital as the world becomes more interconnected and as access to CRT becomes a global human rights issue.

A Milestone Worth Celebrating: 1,000 Strong

Reaching 1,000 active Registrants is more than a statistic, it is evidence of a thriving community united by purpose. It reflects the trust that professionals place in this organization to uphold standards, support education and lead the conversation on what it means to deliver ethical, competent and person-centered CRT services.

This milestone is also a reflection of the changing health care landscape. Policymakers, payers and the public increasingly recognize that quality outcomes in mobility, positioning and communication require knowledgeable providers. The growing number of Registrants signals that more professionals are embracing accountability, seeking peer connection and valuing continued learning.

Every Registrant represents a point of impact. Behind each number is a person serving individuals with disabilities, advocating for the right equipment, ensuring proper fit, supporting health outcomes and, ultimately, enhancing lives. The ripple effect of 1,000 committed professionals is immeasurable.

Looking Ahead with Optimism and Purpose

While this milestone invites reflection, it also serves as a springboard for the future. The work is far from finished. The challenges facing CRT remain formidable: inconsistent access, evolving technologies, regulatory complexities, and the ever-present need to center the voice and experience of the person using the equipment.

iNRRTS stands ready to meet these challenges. The commitment to professional standards remains unwavering. The investment in education will only deepen. The emphasis on ethics will continue to guide decision-making in an environment where pressures can threaten to erode quality.

Moreover, iNRRTS is positioned to lead with a vision that is both global and forward-looking. Opportunities to collaborate with international organizations, share best practices across borders and advocate for policies that recognize the unique nature of CRT are expanding. As the Registry grows, so too does its capacity to influence positive change.

Technology will continue to reshape our field, from advancements in materials and manufacturing to new approaches in assessment and data integration. iNRRTS Registrants are uniquely prepared to navigate these developments with discernment, ensuring that innovation serves the needs of the people who rely on CRT.

A Shared Achievement

This milestone belongs to every Registrant, past and present, who has chosen to align with the values and standards of iNRRTS. It belongs to the volunteers, board members and staff who have nurtured this organization through decades of change. It belongs to the advocates who have championed the importance of qualified suppliers. And it belongs to the community of CRT users whose needs inspire our unwavering commitment.

Reaching 1,000 Registrants is not the finish line. It is a reminder that together, we are stronger, more capable and more prepared to face the complexities of our work. It is a moment to reaffirm our shared mission: to ensure that people with disabilities have access to the technology and expertise they need to live fully, safely and with dignity.

The future of iNRRTS is bright because it is grounded in the principles that launched this journey over 30 years ago: ethics, education, accountability and advocacy. These principles remain the foundation upon which we build our next achievements.

As we celebrate this milestone, we do so with gratitude for the past, pride in the present and optimism for the future. Together, we will continue to elevate our profession and, more importantly, the lives of those we serve.

Here's to the next 1,000.

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Andrea Madsen, ATP, is the executive director of iNRRTS, the International Registry of Rehabilitation Technology Suppliers. She has over 20 years' experience providing Complex Rehabilitation Technology to adult and pediatric patients in Southern Minnesota, Western Wisconsin, Northern Iowa and internationally through her work with the Mayo Clinic. She holds a Bachelor of Science in business management and finance, is a credentialed Assistive Technology Professional and has been a Certified Complex Rehabilitation Technology Supplier®. She served for 10 years on the iNRRTS board of directors and as committee chair for the Midwest Association of Medical Equipment Services. She has lectured for the University of Minnesota Rochester, University of Wisconsin La Crosse, the Mayo Clinic College of Medicine and Science and at the International Seating Symposium.

NOTES FROM THE FIELD

A Committed, Calm, Confident Career

WRITTEN BY: Rosa Walston Latimer

David Regnier, RRTS®, didn't set out to build a career in home health care. He admits it started almost by accident — a fluke. At just 20 years old, he accepted a job as a shipper/receiver for a small health care company in Sydney, Nova Scotia. "I thought it was just something to do until I figured out my next step," Regnier said. But the work drew him in. What began as a temporary job evolved into a vocation, and nearly two decades later, Regnier is still in the same field. Now, he is a trusted expert and sales professional with Lawtons Home Healthcare, serving the Cape Breton Island area with dedication and depth of knowledge that only experience can bring.

"I've been in sales for 14 years, but I've been in this industry since 2006," Regnier said. "I started at the bottom and worked my way through." That firsthand knowledge of the field — from logistics to service to client care — has shaped his approach to what he does now as a rehab product specialist. "You understand how all the parts work together. That's important when you're dealing with someone's mobility. And ultimately, quality of life."

Lynne and David Regnier

Cape Breton Island is a large, mostly rural, area with about 130,0000 residents. Regnier spends much of his time on the road, serving long-term care facilities and individual clients in their homes. "We don't have a rehab center here on the island," Regnier said. "I work with occupational therapists and physical therapists to trial and deliver equipment and make sure each client has what they need."

That need varies widely. Regnier's work touches nearly every facet of mobility and accessibility — wheelchairs, power chairs, lifts, home modifications, vehicle adaptations and more. "Everything is the same, but different at the same time," he said. "Every person is unique. And that's what keeps me interested. I'm always learning, always adjusting."

One of the constants in Regnier's work is the importance of communication. "I always try to manage expectations," he said. "People often don't know exactly what equipment will do or what it won't do. I try to be as clear as I can up front so they're not disappointed later."

The Regnier family: (l to r) David, Lynne, Lilly, Annabelle and Noah

He has learned to ask the right questions from the start: What do you want this equipment to help you do? What are your goals? Are there any safety concerns? "Sometimes goals conflict. I help the client prioritize, taking into account possible cognitive limitations."

That ability to listen deeply and to make clients feel heard is one of Regnier's strengths. "I'm a man of few words," he said. "But that works in this field. People may come to me upset, sometimes angry, but I don't take it personally. I've learned to let them talk. I understand that they are not mad at me; they're just frustrated with the situation. I listen, and then I offer some solutions."

Over the years, he has heard hundreds of stories — some heartbreaking, some inspiring. He recalls a patient who was paralyzed after an auto collision. "They were a quadriplegic, and even if their equipment wasn't working properly, they were always smiling. In spite of this person's circumstances, they were a positive, resilient person. You remember people like them."

While Regnier finds his work fulfilling, it is not without frustrations, particularly when it comes to funding. "Most

NOTES FROM THE FIELD

David, Lilly, Noah and Annabelle Regnier at the Ontree Fun and Adventure Park in Nova Scotia.

David and Lynne Regnier at the Fantasy Fable Masquerade charity ball for the local library.

David Regnier exploring one of the thousands of lakes around Nova Scotia.

David Regnier ready to hit the road for a short bike trip.

programs will cover basic, medically necessary equipment. But when it comes to devices that improve someone's quality of life, power assist add-ons for manual wheelchairs, for example, they don't qualify." He tries to inform clients of these possibilities when appropriate, even if they're not covered by insurance, because he believes in promoting independence and community engagement. "It's tough when you know something could help, but the funding just isn't there."

Staying energized in such a demanding role requires a clear mindset. "There are definitely days that feel overwhelming," Regnier said, "But I try to remind myself it's just one day. It won't last forever." He makes time to recharge, especially with his family. "We love to travel. It's a four-hour drive to a city from where we live, so we plan trips and camping getaways. My wife and I have three kids — Noah, Annabelle and Lilly — and we're all big Formula One racing fans. We follow the whole calendar, debate races, argue about drivers. It's a fun, family activity."

Regnier and his wife, Lynne, have been married for 20 years and live in a wooded area just outside of Sydney. "When we bought our home, I was already thinking about accessibility," he says. "I've seen so many people forced to leave their homes because they weren't accessible. I wanted a place we could stay in as we age." His career has shaped how he sees the world. "Now, wherever I go, I notice whether a place is accessible or not. It's second nature to see the world through my career experiences."

That sense of awareness, of attentiveness, is a through-line of Regnier's work. It is not just about selling equipment, but it is also about meeting people where they are, hearing their concerns and helping them maintain dignity and independence. He credits much of his early development to mentors like Tim and Valerie Spencer, who gave Regnier his first job in the industry in their family-owned business. Later, after the Spencers sold their company, Tim hired him as a service tech in another home health care business. "Tim eventually moved on, and I stepped into his sales position," Regnier said. "Looking back, I realize how fortunate I was to learn from someone like Tim so early in my career."

Asked how he defines success in his role, Regnier doesn't

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Family selfie: (l to r) Noah, David, Lilly, Annabelle, and Lynne Regnier.

hesitate. "If no one's mad at me, that's a good day! Seriously, I consider my day a success when I've helped solve a problem. When I've made sure a client or their family understands the equipment and what it can do. When I've communicated clearly enough to avoid surprises. For David Regnier, that's not just a good day—it's the whole point of being in this profession."

Regnier's work is about listening well and guiding others through complex decisions with clarity and care. In a profession where the smallest detail can shape the quality of someone's daily life, this kind of quiet dedication has a lasting impact.

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David Regnier, RRTS, with 20 years' experience in the industry, is a rehab product specialist with Lawtons Home Healthcare, a large provider in the Maritime Provinces of Canada. He lives in Sydney, Nova Scotia, with his wife and three children. Regnier is primarily responsible for Cape Breton Island, a region with a population of 130,000, which is directly connected to mainland Nova Scotia via a causeway.

TECH CORNER

Lifecycle of Mobility Devices, Custom Seating, Repairs

WRITTEN BY: Scott Brown

Maximizing value from a mobility device can have different implications for different people.

Understanding not only what an individual needs clinically but also what they want to achieve in their mobility environment is integral to proper equipment provision. Solutions that are focused solely on current capabilities may introduce a limiting factor, negatively influencing cognitive and/or physical development.

When fitted properly, the equipment should adequately support the individual's functional needs while providing the opportunity to achieve their goals, whether those are clinical, physical, social or intellectual. Looking beyond the clinical need, the equipment should allow the individual to build on their capabilities and showcase their individuality.

Seating and wheeled mobility is a very specialized industry with a wide variety of product solutions designed to address a wide range of clinical needs. Identifying the proper application of products without recognizing that each individual is unique and has different goals can lead to inconsistency in meeting expectations for both the end user as well as the equipment provider.

Customization through personalizing the product is a common strategy used in the industry to help ensure that we are addressing both clinical and personal objectives. Sometimes that can be a subtle variation in product design that provides that individual with more range of motion, increased stability or improved posture. Other times it may be a fully customized seating system designed around the specific anatomical measurements of the individual. Stealth's "Custom Seating" solutions are a great example; providing patient specific configuration through a wide array of easily selectable modifications allows us to create complex outcomes without a huge investment in time.

Once delivered and the equipment is in use, we encounter the next level of value assessment.

- How well does the equipment hold up under real world conditions?
- How much maintenance is required?
- Who will work on my equipment if repairs are needed?

The majority of equipment in the marketplace does require periodic service and repair throughout the lifecycle of the product. Historically, service technicians employed by equipment providers are tasked with much of this effort, but manufacturers are starting to recognize the demand being put on this group and are looking at ways to bridge the gap.

Over the years, we've seen product evolution resulting in less moving parts, minimizing welds, tool-less adjustments and countless other design changes geared around making the products easier to use while also making them less susceptible to repair and maintenance.

Another way the industry responds to the service demand is by introducing technology innovations. On the power mobility side of the business for example, we are benefiting from technology-based services like "Interactive Assist" thru Q-Logic, which allows us to remotely evaluate chairs for repair and maintenance, saving money for the provider and more importantly reducing downtime for the end user.

As an industry we put our equipment through extremely stringent testing to ensure that it will not only function safely but also will provide adequate longevity in the process. We are continuously exploring new ways to make our products more intuitive and more user-friendly while working to reduce the likelihood of service or repair calls. The pursuit of improvement is a foundational piece of this industry and the passion we use to continue.

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Scott Brown is the national sales and business development manager for Stealth Products LLC. Brown has been working on the manufacturing side of the Complex Rehab Technology industry for 35 years, with a specialization in custom seating solutions. His involvement in research and development projects over the course of his career has contributed to countless products releases, many of which are still actively used in the marketplace today.

CLINICAL PERSPECTIVE

Indications for When to Use Custom Seating to Promote Function and Reduce Progression of Asymmetry, Pressure Injury Risk, and Pain

CEU ARTICLE REVIEW

WRITTEN BY: Melanie Parker, DPT, ATP/SMS

When assessing a person's wheelchair seating, there are many factors to consider. Their skin health, seating history with its successes and failures, transfer style, level of activity and ability to maintain adjustable seating are just a few of these considerations. Also, a consideration is the complexity and correctability of their posture if they present with asymmetries in their positioning. As the evaluation progresses, the mental decision tree of the therapist and Complex Rehab Technology supplier may conclude that custom seating is an optimal choice.

While custom seating is often the superior option given the ability to create a unique system to meet a user's unique needs, there needs to be great consideration of the greater clinical picture which can include caregiver need and level of involvement, the presence of multiple caregivers, and the ability of the user and/or their caregivers to consistently and properly position the user in the system.

This article examines the evolution of custom seating, the impact of technological advancements, funding considerations, research on its benefits — including potential effects on scoliosis and asymmetry progression — and clinical factors in choosing custom versus standard seating options.

Historical Perspective

The evolution of wheelchair seating systems reflects significant advancements in the rehabilitation field. Early wheelchair models prioritized mobility and transportation with little regard for posture, skin integrity or long-term comfort. These early wheelchairs were heavy and were minimally adjustable. Early seating options were typically planar, not matching the contours of the human body. In the mid-20th century, attention began to shift toward addressing pressure injuries and postural deformities resulting from prolonged sitting and uncorrected postural asymmetry. Initially, seating options were limited to basic cushions and backrests, often using foam or rubber materials with minimal contouring.

Early wheelchairs, dating back to the 16th century, focused on basic mobility and were often commissioned for individuals with specific conditions like gout or arthritis. These early designs often included features like adjustable backrests and legrests but lacked the sophisticated postural support and pressure management of later custom seating.

The rise of customization and specialization throughout the years can be seen in this timeline as documented by Tom Borcherding and Hymie Pogir in their article "CRT Pioneers and Innovators throughout History" on LUCI.com:[1]

- John Rogers (University of TN, Memphis; Rancho Los Amigos) pioneer of custom seating utilizing bean bag and vacuum technology (the "Desmo System"), and first-generation pressure sensors. Circa late 1960s. In the early 1980s, pioneers like Mike Silverman (PinDot Products) started using computer-aided design (CAD) in the commercialization of custom molded seating.
- Robert H. Graebe (ROHO Inc.) pioneer of the original pressure relieving cushion (the "ROHO Cushion") that has benefited millions of individuals across the world. Circa 1968.
- Joan Bergman (University of Alabama) pioneer who used weather balloons to develop early solutions in custom molded seating. Circa late 1970s.
- Marty Carlson (Gillette Children's Hospital; Tamarack Habilitation) pioneer of the sitting support orthosis and numerous other orthotics-based principles and designs that influenced modern day wheelchair seating. Circa 1978.
- E. Fernald State School (Boston) pioneer of the first planar seating simulator used internally by Elaine Cox first at the State School in Boston then later in Florida to help with care for the institutionalized client and the transition to community-based homes. Circa late 1970s.
- Michael Bullard pioneer of the Flamingo Seating Simulator – the first commercially available planar simulator. Circa early 1980s.
- Doug Hobson (University of Tennessee – Memphis) pioneer of custom seating using a vacuum and bead seat design. Circa early 1980s.
- Mike Silverman (PinDot Products) pioneer of using

computer-aided design in the commercialization of custom molded seating. Circa 1982.

- Rick Jay (Jay Medical) pioneer of the first wheelchair cushion to utilize the pressure-equalizing benefits of fluid incorporating a stable foam base (the "Jay Cushion"). Circa 1983.
- Simon Margolis pioneer of the Bi-Angular Back and the Sub-Asis Bar, and influencer over many of today's CRT practices.
- Allen Siekman (Stanford University; Beneficial Designs) pioneer of the Anti-Thrust Seat (circa late 1970s) and forerunner of dynamic seating (circa 1990s). Also instrumental in the development of international wheelchair seating standards and testing.
- Kerry Jones and Cathy Bazata (Rehabilitation Technology Center) pioneers and early influencers of seating and positioning principles incorporated today by numerous manufacturers. Circa 1983.
- Jody Whitmyer (Whitmyer Biomechanix). Pioneer of numerous head positioning solutions. Circa 1988.
- Matthew Kosh, David Hintzman (Bodypoint) pioneers of body-contoured hip belt pads and harnesses, the 4-point hip belt and dynamic postural supports that maintain posture while allowing for movement. Circa mid-1990s.
- Leslie Fitzsimmons (Lakeview Cerebral Palsy School + Stealth Products) pioneer of the i2i head positioning system (original name the "Fitz Headrest"). Circa 2001.
- Tom Hetzel and Joe Bieganek (Ride Designs/ Aspen Seating) pioneers of commercialized Orthotic and Prosthetic wheelchair seating wherein pressure and shear stress are intentionally and specifically applied to low-risk anatomy, thus allowing the cushion contours to be separated from the high-risk areas (off-loading). Circa 1998.
- This period also saw the establishment of specialized wheelchair seating clinics in North America and Europe, focused on assessing, fitting and providing custom seating solutions.
- Dynamic seating, which allows for controlled movement and postural adjustments, also emerged, with early examples like the EndoFlex by PinDot Products.

Impact of Advances in Technology

Modern custom seating is a direct result of advances in research and technology. Modern custom seating is characterized by a focus on:

- **Shape Capture**: Using techniques like scanning and molding to accurately capture the user's body shape.
- **Advanced Materials:** Utilizing a variety of materials like foams, gels and air cushions to provide support, pressure relief and comfort.
- **Personalized Adjustments:** Allowing for fine-tuning of seat depth, width, back height and other dimensions to meet individual needs. Custom seating allows for personalization of offloading, contours and other dimensions to create a system specified to the user's body and functional needs. Many custom seating systems allow for modifications in the field or office with simple, everyday tools. This provides greater access by the user and their carers to have optimal outcomes.

Customization is now a key aspect of wheelchair design, with a wide range of options available to enhance mobility, posture and overall user experience. A wheelchair is no longer seen as just a mobility device to move from point A to point B, but also as a functional extension of the person. This progressive, more holistic mindset shift has also led to higher demand for customization of the entire system.

Over time, the field of seating and wheeled mobility has recognized that poor seating contributes to the progression of musculoskeletal asymmetries, pressure ulcers and pain. While there are certainly guiding principles that can be applied universally, the recognition that no two bodies are the same has also bolstered the expansion of the field of custom seating. This understanding led to the introduction of modular and custom seating systems designed to optimize function and prevent complications. Key milestones include the integration of pressure mapping in the 1990s and the rise of computer-aided design (CAD) for seating fabrication in the 2000s. Today, seating interventions should be guided by evidence, best clinical practices and person-centered care principles. As it is said, we can't do better until we know better, but once we know better, we must do better.

Technological advancements have revolutionized wheelchair seating systems, particularly in the development of custom-contoured solutions. Custom seating now has the ability to incorporate some or all of the following:

- **3D Scanning and CAD/CAM:** These technologies allow clinicians to capture precise anatomical details for users with complex postural needs. The digital design process ensures a high level of accuracy and reproducibility.
- **Pressure Mapping Systems:** These tools evaluate real-time

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pressure distribution, guiding clinicians in choosing or adjusting cushions to minimize risk areas.

- **Advanced Materials:** Innovations in foam composites, viscoelastic materials and air- or fluid-filled cells have improved pressure redistribution and comfort.
- **Dynamic Seating:** Some systems now include components that adjust position throughout the day to mimic weight shifts and reduce pressure buildup.

These tools enhance clinician and supplier ability to provide highly individualized interventions that improve clinical outcomes.

In summary, the history of custom seating for wheelchair users reflects a journey from basic mobility devices to sophisticated systems tailored to individual needs. This evolution has been driven by a combination of technological advancements, changing social attitudes and a growing understanding of the importance of postural support and pressure management.

Funding Considerations

Despite the clear clinical need for custom seating, funding remains a significant challenge. Coverage varies by country, insurance provider and region. In the U.S., Medicare and Medicaid cover seating when medical necessity is established by documentation from the therapist and/or doctor. Private insurers often follow similar guidelines.

Documentation must link the seating system to one or more of the following:

- Prevention of pressure injuries
- Mitigation of postural deformities
- Pain reduction
- Functional improvement

The Centers for Medicare and Medicaid Services requires sufficient documentation for a higher complexity of support. Per CMS Pub. 100-03 (Medicare National Coverage Determinations Manual), Chapter 1, Sections 280.1, 280.3, the user must meet criteria for position and pressure relief seat or back and have documentation as to why the prefabricated items do not meet their needs. Additionally, "there [must be] a comprehensive written evaluation by a licensed/certified medical professional, such as a physical therapist (PT) or occupational therapist (OT), which clearly explains why a prefabricated seating system is not sufficient to meet the beneficiary's seating and positioning needs. The PT or OT may have no financial relationship with the supplier."

This additional documentation can include detailed clinical justification, such as documentation of skin breakdown (stage, location, onset), pressure mapping data and equipment trials. Some payers limit replacement frequency, making it essential to select systems that accommodate user growth or disease progression.

Clinicians and suppliers must be well-versed in funding criteria and advocate strongly for their clients through documentation and appeal processes when necessary.

Purpose of Custom Seating

Custom seating is prescribed to achieve several clinical and functional goals:

1. **Support Optimal Function:** Postural alignment enhances upper extremity function, head control and endurance.
2. **Prevent or Minimize Postural Asymmetries:** For individuals with neuromuscular conditions, scoliosis, pelvic obliquity, contractures and windswept deformities can worsen over time without intervention.
3. **Reduce Pressure Injury Risk:** Redistributing pressure over a broader area theoretically reduces the risk of skin breakdown. Custom contouring of seating products can provide significantly more contact and, therefore, pressure distribution than modular seating products with standard contours.
4. **Alleviate Pain:** Proper support reduces muscular strain and joint compression.
5. **Improve Participation:** Comfortable, stable seating facilitates engagement in activities of daily living, education and community life.

Does It Do What It Is Supposed to Do?

These are all desirable goals for the end user. However, outcomes do not always reflect the achievement of these goals, which leads one to ask if custom seating does really meet the desired goals. Given that custom seating is comparatively new in the industry, we are just now able to review data from users who have been in custom seating systems for years versus those who have not. Fortunately, historical and emerging research support the effectiveness of custom seating:

- **Hosking (2024)** conducted a longitudinal, retrospective cohort study showing that children with neurologic and neuromuscular disorders using custom-contoured seating had slower scoliosis progression than those using modular systems. They did this by retrospectively evaluating the comparative effect of two wheelchair seating systems, Custom-Contoured Wheelchair Seating and Modular Wheelchair Seating, on scoliosis progression in children with neuromuscular

and neurologic disorders and to determine any predictors for scoliosis progression. The participants consisted of 75 males and females with a mean age of 10.5 years old at the time of seating intervention, from 2012 to 2022. Of the 75 participants enrolled, 51% had cerebral palsy. The interventions were two specialized wheelchair seating systems, CCS and MWS. The main outcome measure was the effect of the seat type on Cobb angle over time. Fifty were issued CCS and 25 were issued MWS. Baseline Cobb angle was 32.9±18.9° for the MWS group and 48.0±31.0° for the CCS group. The generalized least squares model demonstrated that time since seating intervention, seating type and baseline scoliosis severity were all predictive of scoliosis progression. Condition, gender and age at interventions were not predictive. The research showed that the velocity of scoliosis progression in these children with neuromuscular conditions was slowed in the CCS compared to the MWS group, although scoliosis deteriorated regardless of intervention.[2]

- **Hosking (2025)** also performed a scoping review, finding that custom-contoured seating improves skin integrity, pain levels and postural alignment in users with neuromuscular disorders. Researchers conducted a review using 17 full-text articles from 2021-2022, exploring outcomes related to "(1) posture and musculoskeletal deformity, (2) quantitative measures of body structures and functions, and (3) qualitative perceptions, opinions, and quality of life indicators." This review identified a significant gap in the literature regarding the effects of custom-contoured seating on cardiopulmonary function, pressure injury management and upper limb function. While no evidence suggested increased risk compared to alternative seating options, custom-contoured seating was consistently associated with high levels of user satisfaction, comfort and functionality. The findings also indicated immediate improvements in postural alignment; however, the long-term impact on the progression of musculoskeletal deformities remains unclear. The primary aim of this review was to assess the existing evidence on custom-contoured seating for wheelchair users with neuromuscular disorders, synthesize current knowledge, guide clinical practice and highlight areas for future research.[3]

- **de Mare et al. (2023)** proposed that contouring the seating base would positively impact the pressure distribution effectiveness and reduce user discomfort with prolonged sitting. They studied 13 healthy participants who each tried three differently contoured seating surfaces and rated their perceived comfort sitting on each. Pressure mapping measures were also taken. Results found that contoured seating bases rated more favorably for pressure distribution, reduction in peak pressures of buttocks and reduction of discomfort, which may help in long-term skin preservation. This article also highlights the need for research to examine the effect of contouring on stability, as well as to compare the effects of contoured seating bases and contoured cushions.[4]

- Similarly, **Tasker et al. (2014)** also used able-bodied participants' ratings of sitting discomfort and pressure mapping measures on different contoured seat cushions. Thirty-one participants sat with limited movement for 30 minutes in three sessions and rated perceived discomfort while the pressure-mapping interface simultaneously measured peak pressures. This study showed a correlation between discomfort and high pressures, with the least of both on a more custom contoured cushion. While the findings of this study and those of de Mare et al. (2023) support the notion that custom contoured seating will increase sitting tolerance by decreasing discomfort and improving pressure distribution, thereby decreasing risk of skin breakdown, findings are somewhat limited to the neurologic population, as all participants were able-bodied.

- **Lephart et al. (2015)** cite a school setting case study comparing the impact of planar versus custom back seating systems in a 19-year-old young man with quadriplegic cerebral palsy and neurological scoliosis. The study measured oxygen saturation (SaO2), heart rate, respiration rate, body temperature, processing time to activate switches and response accuracy. The young man had improved accuracy with decreased processing time and variability with all vital sign measures when using the custom back. Per the study, "SaO2 levels increased from 'distressed' to 'normal' while using the custom molded back. While the study also cites that fatigue and motivation may impact overall scoring, he did appear more functional when supported by the custom back.[6]

- **Sonenblum et al. (2018)** studied real-time tissue deformation by various seating products in four participants with chronic spinal cord injury who had documented atrophy of tissue

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around the bony prominences of the pelvis. Using FONAR Upright MRI, participants were scanned sitting without pelvic support with buttocks fully suspended and then sitting on three different contours of cushion — a high profile ROHO cushion, foam Matrx Vi cushion, and offloading Ride Designs Java cushion. Multiplanar scans were analyzed to provide 3D renderings and measurements of tissue thickness and shape. The results showed that while buttock deformation occurred on all three cushion types, the deformation was different for each type. Bulk tissue thickness reduction at the ischium occurred more in the immersion style cushions of ROHO and Matrx Vi compared to the off-loading orthotic style of the Ride Java cushion. The findings of this study were varied and appeared individualized, but the overall results that decreased tissue thickness reduction on the off-loading design is to be considered in persons presenting with tissue atrophy in the pelvis.[7]

• **Ride Designs (2017)** presentation at ISS 2017 (International Seating Symposium) presented research findings from the 1970s to the present that emphasized early intervention with custom seating yields better outcomes than waiting until significant deformity has occurred. Their key argument was that custom-molded seating should be considered an early, not late, intervention for individuals —especially children — with significant neuromuscular disabilities. Early implementation can prevent or reduce postural, physiological and functional decline, while improving quality of life. As a child grows and develops, the custom seating should support optimal posture and function. Research and clinical experience show that waiting too long can result in structural damage such as scoliosis, pelvic obliquity, skin breakdown and internal dysfunctions, which may be nonreversible or require highly invasive and complex surgeries to correct. Planar and generic contoured seating options often have compromised support and effectiveness over time. Growth mechanisms in traditional seating often limit the precision of proximal support, which is critical for stability. Given the natural mechanics of the human body, our body adapts to forces. This is seen in Wolff's Law, which describes how bones adapt and remodel in response to the mechanical stresses placed upon them. Essentially, bones become stronger and thicker in response to increased loads and can become weaker and thinner with decreased loads. This is foundational for how we apply forces to the human body for the purposes of corrective positioning. Children with cerebral palsy, for example, are at high risk of scoliosis due to the distortional forces of spasticity. Custom seating can be used to sustain the child's posture in an optimally corrected posture against these forces to potentially reduce the risk for scoliosis, which may also help delay or avoid spinal surgery. Custom seating using an orthotic approach may also help support recovery post-surgery. Adults who are done growing may also benefit from custom seating post adult-onset injury or disease to maintain proper posture, as well as to mitigate pressure injury risks. Advanced custom seating supports posture and skin health and can adapt to changes like weight loss or tissue atrophy. They conclude that custom molded seating is not just a last resort but a proactive, primary intervention that should be used early in care planning. Modern technology supports pediatric and adult users more effectively than traditional systems, providing long-term health and functional benefits.[8]

While individual outcomes vary, data suggest that when seating is more similar to the user's unique morphology and monitored over time, the risk of complications decreases significantly.

Clinical Considerations: For and Against

While research is favorable towards custom seating for sustained decreased in pain/discomfort and deformity and the promotion of function, there are many other clinical considerations to determine whether custom seating is the most appropriate solution for the user. Below are general considerations for and against custom seating.

For:

• **Postural Management:** This is essential for clients with fixed deformities or who are at risk of developing them. Users who have an unsuccessful history with standard "off-the-shelf" products to correct/sustain posture, especially those whose postural support needs are asymmetrical, should consider custom seating. Those with fixed or flexible scoliosis — just know how far you can correct. It is advised to avoid moving the user to max postural correction.

• **Pressure Management:** Pressure management is crucial for those with limited mobility and poor sensation. Users who have continued issues with skin breakdown or pain despite many changes to seating and compliance with active pressure relief strategies (pushups, repositioning, etc.) should be considered for custom seating to offload problematic areas precisely.

• **Pain Reduction:** Custom seating, with its personalized contour and targeted support, can benefit individuals with

musculoskeletal or neuropathic pain.

- **Function:** Proper alignment facilitates better respiratory function, feeding and interaction with the environment. Users with postural instability related to their asymmetries, which impede their ability to perform functional and self-care tasks, are likely good candidates.
- **Skin:** Users who have continued issues with excessive moisture due to sweating or incontinence can benefit from greater airflow, which can be built into a custom design.

Against:

- **Complexity of Fit:** The complexity of custom seating requires skilled clinicians and CRT suppliers/seating technicians and often involves multiple fitting sessions. Some manufacturers require specific training and/or certification. Failure to shape, capture or fit correctly could cause harm to the user, increase costs from the need to remake the system, and decrease billable time for the supplier.
- **User Tolerance:** Some users may resist change or find initial seating uncomfortable.
- **Adjustment Needs:** Clients with rapidly changing conditions may outgrow or outpace the system.
- **Cost:** Can be prohibitively expensive without full funding.

General Considerations When Selecting Manufacturer/ Product:

- **Body temperature regulation:** There are many variations of custom seating. Clients with body temperature regulation issues should be considered for more breathable products if users tend to be hot or sweat excessively to decrease the risk of moisture buildup and skin breakdown.
- **Incontinence:** Incontinence increases skin breakdown through maceration and persistent moisture, which makes the skin more likely to tear. Clients with significant incontinence issues seeking custom seating should be considered for custom seating products that are nonporous/ nonabsorbent, such as Ride Custom 2 and Matrix USA custom seating products.

Environmental Considerations: For and Against

While the clinical picture for the user may lean favorably toward using custom seating, there are additional environmental considerations when deciding to use custom seating. These are to include, but not limited to:

For:

- Custom seating can be designed to integrate with user environments, including home, work and school settings. Examples include custom contouring for placement of power chair controls and support surfaces like trays.
- Proper positioning of the user will support their interaction with tables, desks and communication devices, as indicated in the research by Lephart et al. (2015).

Against:

- Large or uniquely contoured seating to accommodate/ correct those with significant windswept, oblique or rotated postures may not fit through standard doorways or into vehicles.
- Heavier systems may reduce manual propulsion ability. Consider hardware and materials used when selecting custom seating for those who independently propel a manual wheelchair and for dependent manual mobility when caregivers are elderly or have limited ability to push a heavier wheelchair system.
- Consider how contours of seating will affect transfer techniques — use of lifts, lateral transfers with sliding boards and caregiver assistance (Where does the caregiver need to be positioned to safely support the user?).
- Multiple caregivers and caregiver turnover can present challenges in providing the necessary education to all caregivers on the proper positioning of the user in the custom seating system. Improper positioning can result in skin injury and pain; consider full contact foam seating, which is not so specific. Use caution when considering firmer products, such as Ride Custom 2, that require precise positioning.

Environmental assessments during the evaluation phase are essential to ensure the seating solution enhances rather than hinders participation. Careful consideration should also be given to caregivers' perceptions of the materials used. For example, if the materials are firm for offloading, it is important to educate caregivers as to the clinical reasoning and design intent to prevent rejection of the system due to caregiver perception that the material is "too hard" and therefore not helpful or uncomfortable to the user, especially if the user is insensate or not able to verbalize their own discomfort.

Professional Considerations: For and Against

Each therapist and CRT supplier is accountable for judging their professional abilities and

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capacities to create, supply and maintain/support the user in a custom-molded seating system. These considerations should include:

For:

- Represents a commitment to person-centered, evidence-based care.
- Facilitates interdisciplinary collaboration among therapists, CRT Suppliers and physicians.
- Enables measurable outcome tracking and ongoing client education.

Against:

- Requires significant time and clinical expertise. Some custom seating products require the supplier to be certified to supply and modify custom seating products. This can be challenging to schedule delivery and follow-ups if these are typically assigned to noncertified technicians.
- Demands familiarity with funding processes and documentation.
- Risk of overprescribing if not clinically warranted.

Ultimately, custom seating must be prescribed judiciously, balancing benefit with practicality, cost and client goals. Given the high complexity of considerations and their impact on the success of the custom seating system, it is strongly recommended that a supplier that is not experienced in the nuances of custom seating have support of a colleague that has experience and can guide the supplier. Manufacturer representatives can offer useful support, but the overall clinical picture must be presented and clinically justified by the supplier and prescribing therapist to ensure optimal outcomes.

Conclusion

Custom seating can play a pivotal role in preventing and managing secondary complications in wheelchair users when properly prescribed and designed. When selected and implemented appropriately, research consistently shows custom seating can slow the progression of deformities, reduce the risk of skin breakdown, alleviate pain, improve function and support meaningful participation in life roles. As technologies evolve and evidence grows, rehabilitation professionals must stay informed and advocate for seating solutions that truly support long-term function and well-being. Considerations for custom seating must go beyond medical needs and include professional, environmental, social and functional considerations to have the most successful outcomes.

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Melanie Parker, DPT, ATP/SMS, has been a physical therapist for 21 years in various clinical settings and has performed seating and mobility evaluations for clients of all ages for most of her career. She is passionate about a client-focused model and advocating for the best outcomes for her clients. She owned and operated Confident Living, a comprehensive seating and mobility clinic in Richmond, Virginia, from 2019 to 2024. Now, she is broadening her practice through The Wheelchair Clinic, which provides seating evaluations in 11 states. Based on the struggles heard and seen from clients and families new to disability and her struggles to find the resources for her son, who has autism, she founded The Whole Family Foundation, a nonprofit to educate, empower and connect families who have a member with a disability to strengthen the family unit. Outside of work, she loves spending time with her family and dogs, traveling, cooking, napping and being active in her community.

CLINICALLY SPEAKING

Physical Therapist Promotes A Family-Centered Practice

WRITTEN BY: Rosa Walston Latimer

Pediatric therapy isn't just about helping kids with independence and mobility, at least not to Ashley Schilling. For her, it's about helping families live together fully and on their terms. And sometimes, the best way to do that is by putting a child on an adaptive bike.

As a pediatric physical therapist, university professor and national advocate for adaptive mobility, Schilling brings high energy and deep purpose to every role she holds. Whether she's mentoring students, collaborating with engineers or fitting a child for an adaptive bike, her approach centers on one unwavering principle: families should always be in the driver's seat. This proven lesson surfaces time and again, shaped by the therapist's experience and introspection.

Ashley Schilling, PT, DPT, PCS, with Trent Thompson, teaching a course on adaptive bikes for AMBUCS, an organization inspiring mobility and independence.

Schilling, PT, DPT, PCS, always thought she'd become a pediatrician. Medicine fascinated her, and she had a natural draw toward children. But somewhere among MCAT prep and medical school interviews, Ashley had what she calls a "gut check moment." Her goal wasn't just about treating children; it was about helping them move, thrive and participate in life alongside their families. That realization would eventually shape every aspect of her career.

During her time at Iowa State University, Ashley discovered her true path. Encouraged by a health professions counselor shadowing a variety of clinicians, she found herself watching Division I athletes train under the guidance of a physical therapist who did more than help with injuries — he educated, motivated and built lasting relationships.

"That's when it clicked," Schilling said. "I saw what it looked like to truly partner with someone in their care. I remember thinking, 'I want to do that with kids and families."

Schilling pivoted from pre-med to physical therapy, eventually earning her doctorate from Washington University in St. Louis. Clinical rotations at institutions like St. Jude Children's Research Hospital and the Shirley Ryan AbilityLab introduced her to complex care environments, laying the foundation for what would become her guiding principle: every decision, every intervention and every recommendation should include what matters most the patient and to the family.

Listening First

Early in her career, Schilling approached therapy with a goal-oriented mindset, focusing on outcomes, milestones and mobility benchmarks. However, over time, a significant shift occurred.

"The most effective teacher throughout my career has been listening to families," she said. "At first, I approached equipment recommendations from a therapist-centric view. I wanted the child to walk, so I prescribed what would help them walk. But I wasn't asking what the family wanted or could realistically accommodate."

A turning point came during her work with a young boy with cerebral palsy whose family's main goal was for him to walk. Although Schilling

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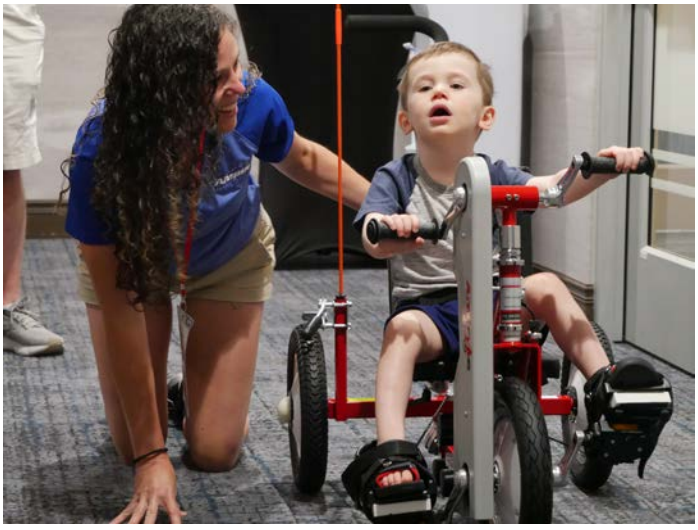

Ashley Schilling, PT, DPT, PCS, fitting an adaptive tryke for Tanner.

Ashley Schilling, PT, DPT, PCS, treating Jack in clinic as his mother, Ellie, assists.

could see the potential benefits of a manual wheelchair — greater independence, less fatigue and more peer interaction — the parents weren't ready. Years later, when the patient and his mother visited Schilling's student lab at the University of Tennessee in Chattanooga, the boy was using a wheelchair and thriving. His mother shared with the physical therapy students that her son had described using the wheelchair as feeling "free."

"That moment really stuck with me," Schilling said. "It made me wonder if I had asked different questions earlier, could he have felt that freedom sooner?"

Today, she embraces what she calls "the power of 'and' over the tyranny of 'or.'" A child can have both a walker and a wheelchair. A family can pursue strength-building goals while also prioritizing playtime. "We need to empower families to know it doesn't have to be either/or," Schilling said. "Let's figure out how to make both happen."

Schilling's approach to problem-solving is collaborative and refreshingly unbound by discipline. Her husband, Kyle Schilling, a mechanical engineer, is a key creative partner in designing adaptations for equipment that doesn't quite fit her "unique little humans."

"I'll dream something up in my head, and Kyle will make it happen. Honestly, I am sometimes jealous of how engineers think. They have access to materials and tools and a totally different perspective." Schilling believes the best solutions often come from outside the field of rehabilitation. "We may not speak the same language, but there's real value in that reality. We need to ask for outsider views more often."

Delivering Access, Inspiring Movement

That philosophy has served Schilling well in another deeply invested endeavor — her leadership with AMBUCS. The physical therapist's connection to the nonprofit organization began in 2010 when she and her husband helped found a Nashville chapter. The group provides adaptive tricycles and bikes to children and adults who need customized mobility solutions.

"The first time we gave a bike away, I was overwhelmed," Schilling said. "I love riding my bike. It brings me joy and freedom. I realized then that everyone deserves access to that experience."

She saw children who had never moved independently light up as they pedaled for the first time. Adults rediscovered mobility they thought was lost. Disabled veterans regained a piece of their independence. "It's not just about physical therapy goals," Schilling said. "It's about life."

As her involvement with the AMBUCS organization deepened, Schilling realized a significant gap. While therapists certainly believed in and supported the benefits of adaptive cycling, there were no clear guidelines for evaluation and fitting. So, she wrote them.

Schilling's informal guidelines, initially developed for her local chapter, grew into a national continuing education course for therapists. She presented it across the country, and then created a virtual version, now available through the AMBUCS website. The course walks clinicians through evaluation strategies, fitting techniques and, true to her philosophy, how to listen to families throughout the process. (https://AMBUCS.org/amtryke-evaluation-and-fitting-for-therapists/)

Ashley Schilling's children, Graham and Isla, and her husband, Kyle, (l to r) enjoying a favorite family pastime.

"A 7-year-old isn't going to tell you their bike helps their range of motion," Schilling said. "They are going to tell you how much fun it is. That joy is therapeutic in itself."

As the current AMBUCS Amtryke Director of Education, Schilling continues to advocate for what she calls "participation-focused outcomes." She asks families questions such as how often their child now plays with friends and how many times they have gone to the park since getting an adaptive bike. These are the stories that, paired with clinical data, will build a case for insurance coverage and long-term support. "An adaptive bike isn't just a 'nice to have' anymore," she said. "It is a must-have."

All In, All the Time

In addition to her national role with AMBUCS, Schilling is an assistant professor of physical therapy at the University of Tennessee at Chattanooga, where she also holds the Sharon Vanderbilt Professorship in Pediatric Physical Therapy. She practices clinically at Erlanger Children's Hospital and is board-certified in pediatric physical therapy.

Somehow, Schilling balances all this while parenting two young children, training for endurance races and enjoying outdoor adventures with her husband and their rescue dog, Sandy.

"Being outside with my family, that's what I love," Schilling said. "We like the mountains, the beach, and Kyle and I have both done half-Ironman races."

Despite her packed schedule, Schilling's energy is constant. She credits her drive to the families who trust her with their children's care. "They're the reason I keep learning, keep growing," she said. "They remind me what matters most."

If a child feels joy on a bike, that's not extra — it's essential. For Schilling, mobility is about more than movement; it's about connection, freedom and participation. And when a family gets to say, "We did this together," that's when therapy becomes much more than a plan of care.

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Ashley Schilling, PT, DPT, PCS, is an associated faculty member and pediatric content lead, for the Department of Physical Therapy at the University of Tennessee at Chattanooga. She is also a pediatric physical therapist for Erlanger Children's Hospital. She has established a post-graduate continuing education course on adaptive bikes for physical and occupational therapists. She leads this program as the current Amtryke Director of Education for AMBUCS, a national nonprofit organization that inspires independence and mobility by providing adaptive bikes to children and adults with disabilities. (https://AMBUCS.org/)

CLINICAL EDITORIAL

Sign Me Up!

Strategies to Engage Therapy Practitioners

WRITTEN BY: Amber Ward, MS, OTR/L, BCPR, ATP/SMS, FAOTA

As an educator and speaker, I have heard comments from occupational and physical therapy students and practitioners, that getting into Complex Rehab Technology seems "hard," "too much," "overwhelming," etc. I propose a shift to a mentoring model with smaller goals, building skills and proficiency to support client management and CRT.

Almost all therapy practitioners graduate as generalists and begin to gain experience as they work; most get very little hands-on practice with CRT/DME in school and fieldwork. I propose a shift in focus from an "all or nothing" practice of CRT to a way to build confidence and provide support with smaller bites. I will share a few ideas that could increase support, interest, knowledge and skills in all levels of mobility management.

The first idea is a regular weekly, biweekly or monthly appointment (20 to 30 minutes) with a clinic, company, therapy group or nursing facility staff for short in-services. This could be a combination of virtual and hands-on with a product, maybe a lunch-and-learn or staff meeting series. Maybe a topic or tip of the week? This might be a time for all attendees to physically practice tasks such as: adjusting armrest height, legrest length, brakes on a manual wheelchair, trial proper inflation and adjustment of an air cushion, practice pelvic positioning and how to tell impact, or learn/practice how to use an Allen wrench to adjust a headrest.

Along the same lines is educating staff on common problems and solutions that might be seen in their practice area. The educator could provide real-world solutions (with next to no resources), such as when residents continually slide out of their chair. These small bites can be fun and informative as well as low key and low pressure for all. Once that relationship/schedule is established, the educator can then offer other knowledge and training with goals set for proficiency in CRT topics.

Another solution is to create a list of potential quick-fixes and offer training to discern when to self-manage an issue and when to call for help. This simple education could save a lot of time and resources. Topics may include managing:

- Armrest, legrest height, footplate angle
- Headrest position
- Chair won't drive, red X, errors
- Taking chair in and out of gear
- Items worn on chair, batteries not holding a charge, charging process
- Tripping a fuse and reset
- Cushion sliding around, cover on backwards
- Sliding out/falling out of the chair
- Arm sliding off joystick or armrest
- Client can't control their chair well
- Tightening bolts, stripped screws
- How to fold a manual wheelchair and remove the wheels and backrest for transport
- Requirements for a seating clinic and what can be done by a therapist with less experience

When the supplier does come out to see a client, scheduling the therapist at the same time if possible makes good sense. Ask the therapy practitioners to assist with tool turning, decision-making, adjustment, programming and other items to gain experience. One might see the supplier on one side of the wheelchair adjusting an armrest, and the therapy practitioner is on the other side adjusting at the same time. The supplier could talk to them about why a certain headrest was chosen while the therapy practitioner turns the tool. This allows growth of knowledge and experience and increased confidence in a "safe" environment. Offer mentoring, shadowing and other opportunities to encourage interest and growth in the world of DME and CRT evaluation and management.

All of us, no matter our experience level, can educate others on CRT options, how to help spend money wisely, and how to find loaners and identify resources. This might include recommending custom manual wheelchairs with tilt instead of standard manual wheelchairs for a facility or air versus foam cushions for longer-term cost/benefit. Perhaps talking to a pediatric practitioner about how to trial a certain stander, benefits of a backrest that is not standard or for a rehab therapist about how seat elevate facilitates independence. A client in home health who has muscular dystrophy, ALS or other disorder may also

go to a clinic with the OT/PT who are experienced with the needs and may have additional resources.

Along with invitations to days of education and networking provided by larger suppliers and groups, there are opportunities for all of us to provide continuing education for local, regional and state groups and conferences. As an OT, I have partnered both with suppliers and manufacturers to provide very well attended classes for CRT on early pediatric power wheelchairs, basic versus complex chairs for certain clients, alternative drive controls, connecting phone/tablet to complex power wheelchairs, and others. From the feedback after the classes, attendees were very appreciative and happy to have the new information. Try to get contact information after the event as this can often spark a quest for further knowledge or new connections for all.

Some OT/PT doctoral programs offer advanced clinical skills training in CRT as part of their capstone or final project. It's a great way for that student to gain an inside perspective as they gain knowledge regarding brands and options, technical skills, and troubleshooting, while supporting evaluation processes, fitting, training and more. Program faculty can open doors for students by facilitating these opportunities with suppliers and students and creating opportunities.

If not done already, I like the idea of a "CarFit" for wheelchairs, perhaps called "ChairFit." CarFit is a program developed by AARP and the American Occupational Therapy Association that offers older adults the opportunity to check how well their cars "fit" them as well as offers other safety information. Groups trained in CarFit host community days where older adults have their cars evaluated and adjusted to increase safety as drivers and for community mobility. There are similar programs for car seat safety checks as well. Envision a drop-in day of wheelchair education and simple management, where clients could come and get advice about how to pursue modifications or repairs, a chair "check over" for potential safety problems, training on simple fixes that families/clients can do (take out of gear, etc.), how to find a seating clinic or therapist, and handouts/info for all kinds of issues. Clients could meet and talk together while waiting for assistance, thereby creating community, and students would get training with real-world needs. A wide variety of sponsors, suppliers, manufacturers, students, therapists and others could come together to assist; there would be very specific parameters and attention to liability concerns.

Establishing relationships, encouraging growth, advocating for change and supporting self-help seems like win-win for our community. Access to seating specialists and the more people with knowledge and interest the better. Consider taking students/mentees who are interested in assistive technology, wheelchairs and/or becoming an ATP. While taking a student/mentee is not always easy, it is exciting to launch another practitioner who will have an excellent foundation to begin managing wheelchairs. I hope this editorial will spark your own ideas, and please consider taking small actions for a strong community and the future of CRT.

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Amber Ward has been an occupational therapist for more than 31 years, most recently in an outpatient clinic for individuals with progressive neuromuscular diseases and in a wheelchair seating clinic. She is an adjunct professor in the Occupational Therapy Assistant and master's Occupational Therapy programs at Cabarrus College of Health Sciences in addition to working full time in the clinic. She received the RESNA Assistive Technology Professional certification in 2004, and the Seating Mobility Specialist in 2014. She is the author of numerous articles and book chapters, as well as speaking and presenting locally, regionally, nationally and internationally. Ward is also a friend of iNRRTS.

INDUSTRY LEADER

Just Ask 'Why?':
A CEO's Hands-On Approach to Leadership

WRITTEN BY: Rosa Walston Latimer

Crispin Teufel has a very clear vision for his role as CEO of National Seating & Mobility. Two guiding principles —"Just ask 'why?'" and "Listen and learn." — are paramount in his approach to leadership and decision-making.

"I knew I didn't want to spend most of my time at headquarters, as you might expect when starting with a new company," Teufel said. "From day one, I decided to spend time in the branches to learn more about the team and what they do to best support our clients. Of course, I also learned the intricacies of (Complex Rehab Technology)."

The CEO doesn't shy away from asking "Why?" in any circumstance. "I certainly ask that question quite a bit. Some responses are good laughs by the team, and some responses are legitimate considerations to look at something differently."

Now, as Teufel immerses himself in the CRT industry, this question may be even more important to help discover new ways of doing things to evolve the business and continuously improve the client experience.

Please tell us more about your mission to "listen and learn" since joining National Seating & Mobility almost two years ago.

I have ridden along with our technicians and Assistive Technology Professionals. I spent some time on the phone with our customer service specialists and then finally met with our branch leaders. I wanted to begin with the foundation of the business, focusing on the individual employees, to gain an understanding of what we were doing to take the best care of our clients.

Crispin Teufel (right) participating in National Seating & Mobility regional technician training.

I've always lived by the mantra that what you learn from the folks who are actually doing the jobs is probably the most unfiltered opinion possible about whether we do things well or not so well. I implemented many of the recommendations and requests that our team presented when I visited the branches. I have learned a lot from them and will continue these visits. The further up the chain of command you go in an organization, the more politics play into the answers you get. The more filtered the information is. I enjoy spending time with the staff, and I believe they appreciate my interest in their work. Perhaps some are surprised that I am interested in understanding what they personally contribute to National Seating & Mobility, as well as to our clients' journeys. The positive response has been very rewarding.

Continuing with that thought, how do you personally advance a "people-first" culture?

As you can see from how I began my career with National Seating & Mobility, it makes no difference to me whether I am talking to one of my direct reports or to a branch team member who has a story to share. I believe I truly embrace the concept of an open-door policy to make sure that individuals are willing and want to have a chat with me, and that I'm not an "ivory tower leader" who no one ever talks to. That is simply not who I am.

I think that being yourself is extremely important, and I've stressed to my team that "this is as real as it is going to get." You might not like what I have to say, but I will always communicate candidly and with purpose. Integrity is essential. An important value that I have lived by is that it is the team that wins the game and not a single person.

Is there something you have learned in the field that surprised you?

Interacting with our clients, consumer advocacy groups and feedback groups was a good reminder, rather than a surprise, of how important our work is and how important our clients are. Additionally, personally, this experience was a reminder of how blessed we are. This work makes you very humble. In addition to National Seating & Mobility staff in the field, I am fortunate to spend a lot of time with our clients, either online or in person. Their stories are not only humbling, but it is enormously "cool" to see what the equipment we provide enables them to do. It is fantastic!

INDUSTRY LEADER

Crispin Teufel presenting an award at National Seating & Mobility's annual symposium.

Has there been a particular moment in your career or an influence early in life that set you on the path toward leadership?

I've always enjoyed stepping up to take on responsibility in a leading role. The most defining moment in my life was probably when I was 16 years old. I spent a year in the United States as an exchange student from Germany, living with a host family. That experience made me very independent and taught me the importance of stepping up to accomplish what I wanted to do in the future. It made me who I am today. Fortunately, my host family from over 30 years ago is now within a half hour of me, and I still have a close relationship with them.

Please bring us up to date on the status of the NSM360 vision for comprehensive mobility solutions for your clients.

We have refined this vision a bit, but conceptually, NSM360 is still intended to consider how we can serve our clients more holistically, and that has truly not changed. Outside of the CRT products and services we provide to our clients we also assist with other needs. For many of our clients, we can help by coordinating with health care providers for medical supplies, and, where available, NSM teams can also address home accessibility needs.

Crispin Teufel (left) joining in National Seating & Mobility leadership training with participants from across North America.

Drawing from your personal experience, what advice would you give to aspiring leaders who aim to make a positive impact in our industry?

I believe the way in which I have learned, and continue to learn, about our industry from the bottom up is an effective approach to leadership. This has worked wonders for me. I have learned a tremendous amount from our teams and especially from our staff-level members. I also think it is important to try to understand our industry, not just from the field you work in, but also from funding to operations. If you only take an interest in one area, you will be missing out big time.

When I look at the broader industry and lean back a bit from the individuals who care for our clients in our branch locations, I'm surprised by the way service and repair work is reimbursed. The entire process, from getting a client situated in a chair to obtaining a simple repair order, is very complicated. This is just one example of the necessary improvements needed to serve our clients better. This industry has a lot to bear, and we offer an essential service. Considering what is happening in this country, both politically and in health care regulation, it is even more critical that we take a stand for our clients.

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Crispin Teufel, CEO of National Seating & Mobility for almost two years, has been described as a "transformational leader." With an extensive professional background in finance, the native of Germany originally came to the United States to serve as CEO and finance director for Lincare. Teufel lives in Florida with his wife and two children.

Rebuilding a Culture of Learning in CRT

WRITTEN BY: Alli Speight, MSc.OT, ATP/SMS

The Complex Rehab Technology field is built on collaboration, innovation and education. It is a specialty that demands not only deep clinical reasoning but also technical knowledge, effective communication and shared understanding between therapists, suppliers and manufacturers.

But what happens when the industry's commitment to education is disrupted?

In recent years, we've seen a slowdown in hands-on learning. The pandemic led to canceled conferences, paused in-services and fewer opportunities for mentorship. Today, that challenge is compounded by shifting priorities: Clinical caseloads are heavier, appointment times are tighter, and structured education often takes a back seat.

Now more than ever, we must recommit to a culture of learning with renewed purpose and shared responsibility.

Education in CRT Isn't Optional; It's the Foundation

Complex Rehab Technology is not just about choosing a product. It's about translating complex functional needs into personalized solutions that often have long-term implications for a person's health, independence and participation in daily life.

Understanding how to interpret a postural asymmetry, advocate through funding documentation or adjust hardware for a specific activity isn't always intuitive. Without structured learning pathways, professionals are often left to "figure it out" on the fly, sometimes at the expense of clinical efficiency or client outcomes.

"Seating and mobility best practices are constantly evolving ... As a clinician, any education is important (in-person and virtual) to maintain strong working relationships with the CRT Supplier and manufacturers we work with. It's essential to understand not only how the equipment functions, but also how it supports the client's specific goals. Hands-on experience allows for a deeper understanding of the equipment's impact and strengthens clinical knowledge."
— Allanna Jost, OT, Continuing Care, Nova Scotia

Ongoing education is how we stay connected to best practices, new technologies and to each other. It allows us to move from reactive decision-making to proactive clinical reasoning, and it builds the confidence required to navigate complex scenarios with clarity and purpose.

"OT school teaches students from all backgrounds and previous educational experiences how to become a 'generalist' occupational therapist. Therefore, upon graduation it is essential to begin building a plan for continued learning ... it's also an opportunity to explore new facets of the profession that may be unfamiliar and offers a chance to connect and network with those in our profession!"
— Claire Carfagnini, OT student

Why In-Person Learning Still Matters

While virtual education has increased accessibility and remains a valuable tool, it can't fully replicate the benefits of in-person learning. Live sessions create meaningful space for hands-on experience, real-time problem-solving and rich discussion between clinicians, suppliers and manufacturers.

"In-person training is especially valuable, hands-on practice completing adjustments makes client appointments more efficient. In-person sessions also promote natural discussion of case studies with fellow therapists, which foster creative solutions."
— Holly Buckler, OT, Specialty Seating Service, Halifax

Clinicians and CRT Suppliers alike benefit from working directly with equipment — trialing configurations, troubleshooting together and seeing how different setups affect posture, function and comfort. These shared learning moments foster collaboration and mutual understanding.

"Being a therapist for 15-plus years, I find that on-going education around seating and mobility is crucial to maintain competency in your role. It's not just about knowing what to do, but intuitively understanding how and when to do it, which directly strengthens clinical confidence."
— Amy MacDonald, OT Practice Consultant, Nova Scotia

For newer clinicians, in-person education is especially vital. Many enter the field with limited exposure to CRT-specific assessments or equipment. These learning opportunities help build the product knowledge, clinical reasoning and professional relationships essential to success in this highly specialized area of practice.

How Do We Enhance Our Industry's Culture of Learning

Reestablishing a strong educational culture isn't just about attending more sessions. It's about embedding learning into everyday practice.

- **At the clinic level:** Block off regular time for product demos, team discussions or clinical case reviews. Emphasize mentorship for new professionals.
- **At the CRT Supplier level:** Create accessible educational materials and opportunities for both staff and clinicians to pursue ongoing development.
- **At the industry level:** Collaborate to co-host events and simplify access to courses.

We can also leverage the momentum of existing events at national conferences, provincial education days, and supplier- and manufacturer-hosted sessions to engage therapists and sales representatives in practical, relevant and hands-on training.

"Providing someone with a wheelchair must be one of the most complex interventions we provide as therapists. Attending CSMC provided me with new ideas, opinions and skills to help me work through the complexity of seating and mobility practice"
— Andrée Gauthier, OT Reg. (Ont.)

*See the end of this article for a list of educational opportunities and resources available throughout Canada. *

A Shared Responsibility

If we want to continue advancing CRT practice, education must be a shared priority. It's not up to just one profession, one CRT Supplier or one clinic. All stakeholders, occupational therapists, physical therapists, suppliers, manufacturers, educators and policy leaders have a role to play in building systems that make learning sustainable.

Rebuilding our education culture means actively supporting those newer to the field. It means making space for learning, slowing down enough to teach each other and reinforcing collaboration. Whether you're five months or 15 years into your career, staying up to date benefits everyone.

"No two clients are the same, and with so many equipment options available, there's always something new to learn. Ongoing education is what allows us to make thoughtful, individualized decisions and keep up with the tools that can truly improve someone's function and quality of life."
— Sarah Timleck, OT, and owner, True Therapy Group, Ontario

Who Benefits from Education?

- Clinicians who are confident in their CRT knowledge are more likely to advocate effectively for clients. Ongoing professional development has been shown to improve clinical decision-making and increase confidence in managing complex cases (Cervero & Gaines, 2015).
- Suppliers who stay current reduce errors, improve efficiency and build stronger relationships. Technical training and collaborative education have been linked to improved service delivery and fewer product-related issues in assistive technology provision (Lenker & Paquet, 2003).
- Administrators see improved efficiency, better outcomes and more consistent service delivery across teams. Organizational support for education is correlated with better staff retention and improved patient satisfaction scores (Irvine, Martin & Cuthbertson, 2019).
- Clients ultimately receive better, more personalized equipment — and a better experience.

Self-Check: Are You Supporting a Culture of Learning?

Use the checklist below to reflect on your own approach to professional development. How many of these questions can you say yes to?

Questions:

☐ Have you attended a CRT-specific course this past quarter?

☐ Do you currently have time blocked off in your calendar for upcoming education?

☐ Have you shared a new resource or tip with a colleague recently?

☐ Have you participated in hands-on training this year?

☐ Have you invited a colleague to attend education with you this year?

Results:

- **4–5:** You're leading by example — keep growing!
- **2–3:** You're on the right track — prioritize consistent learning.
- **0–1:** Time to reinvest in your development — your confidence and your clients will benefit.

A Commitment to Growth

It's easy to deprioritize education when time is short and workloads are high. But this isn't a field that allows us to stay still. The more we invest in meaningful learning, the better we serve our clients and each other.

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Let's rebuild our culture of learning with intention, collaboration and the understanding that education in our industry isn't a luxury.

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Alli Speight, MSc.OT, ATP/SMS, began her career as an occupational therapist in the community setting, where her expertise was sought after for conducting home safety and mobility device evaluations. Her dedication to enhancing the lives of individuals through optimal seating and mobility solutions led her to join Motion Composites in 2016 as a clinical education specialist.

In her role at Motion Composites, Speight proved instrumental in elevating the brand's presence in the ultralightweight wheelchair sector across Canada and the United States. She became a respected figure in the field, providing global education on best practices in Complex Rehab Technology, with a primary focus on ultralightweight manual wheelchairs and seating and positioning prescriptions. Speight's passion and expertise earned her speaking opportunities at prominent conferences, including the International Seating Symposium, Canadian Seating and Mobility Conference and Assistive Technology Suppliers Australia Expo, among others. She is also a member of the Canadian Advisory Committee for the International Registry of Rehabilitation Technology Suppliers (iNRRTS).

REHAB CASE STUDY

Here Comes the Sun:
How Orthotic and Prosthetic Sciences Unlocked Outdoor Accessibility Barriers

WRITTEN BY: Daniella Giles, PT, DPT, ATP, SMS
CREATIVE CONTRIBUTIONS BY: Faith Brown, OT Clinical and Education Specialist Sunrise Medical UK

THIS ARTICLE IS SPONSORED BY RIDE DESIGNS/SUNRISE MEDICAL

Abstract

This case study presents the seating and mobility journey of Glenda, an 80-year-old woman with severe postural asymmetries, who had been unable to leave her bed for over four years. Using Ride Designs custom AccuSoft seating and a Quickie Iris tilt-in-space base, she was able to rebuild her upright tolerances and participate in life roles out of bed. As a result, Glenda mobilizes throughout her home environment daily, demonstrates improved head control and has improved participation in activities.

Background

Glenda* is an 80-year-old woman who lives in a scenic part of Wales, Great Britian, in a residential facility converted from a large historic manor house.(1.) She has always lived in highly supported environments due to difficulties related to lumbar level spina bifida and intellectual developmental disabilities. Her home has a range of daily activities and trips to the local establishments. Even though she does not speak, Glenda communicates via movements, expressions and gestures, never hesitating to push away what doesn't interest her.

When she moved to her current home, Glenda was unable to sit out of bed safely as the facility did not have a mobility base to fit her unique posture. Glenda had been referred previously for a traditional custom-moulded carved foam seat, but this was abandoned at time of moulding because the size of wheelchair it would require could not fit through any doorway.

Current Presentation and Set Up

Postural presentation: Significant mid-thoracic hyper kyphosis, with chin resting on her sternum. When optimally supported, she demonstrates active head movement with mild cervical extension and looks around her environment. She rests with her shoulders flexed and internally rotated with elbow flexion and demonstrates volitional movement in both arms, with more strength and control on the left.

Her pelvis rests in a right pelvic obliquity and a mild/moderate spinal curvature concave to the right. She has high tone and underlying contractures in bilateral lower limbs, dominated by wind-sweeping towards the left. Her left hip is more flexible,

1. Glenda has been bedbound for over four years.

achieving approximately 10 degrees abduction at most corrected, but her right hip appears to be at least partially subluxed on palpation and in high levels of flexion, internal rotation and adduction, reaching grossly -20 degrees at most neutral position. Both hips have very limited extension. Hamstrings are tight bilaterally, with fully flexed knee position at rest in bed. She is reported to have recently started botulinum toxin injections to improve lower limb ease of movement and was noted to have progressive relaxing of knee flexion when sat in hoist.

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REHAB CASE STUDY | CONTINUED FROM PAGE 31

2. Shape capture assessment, frontal plane view. Glenda demonstrated a positive response.

4. Glenda's final shape with trim lines.

Goals

1. Enable wheelchair use daily to engage in social activities with other residents, access to garden, dining room, medical appointments and potentially leisure trips out.

2. Improve head control and cervical extension for swallowing and to allow healing of Stage 1 pressure injury.

3. Sit up in wheelchair daily for health benefits of being out of bed, including circulation, respiration and active movement.

Intervention

Glenda was moulded at her home using the Ride Designs small base and shape capture system; (2., 3.) shape capture assessment, frontal view.

3. Shape capture assessment, transverse plane view.

Glenda demonstrated a positive response. A manual IRIS wheelchair was used as the moulding base, with the backrest recline set to a fully open position to accommodate her limited hip flexion and very tight hamstrings.

Key points of support were shaping to encourage spinal extension within range and accommodation of lower limb position. (4. Glenda's final shape with trim lines). She sat in mould for approximately 15 minutes once the shaping was completed, and during this time showed relaxation of tone and lifted her head, maintaining the position for several minutes at a time in tilt.

Overall anticipated size of TIS manual wheelchair base was confirmed against home environment. Measurements and turning radius information indicated that it should be able to access without difficulty.

Equipment and Related Components

Ride Designs Ride Custom Back with AccuSoft foam liner, and Ride Custom AccuSoft Cushion.

An IRIS TIS base was used to achieve full 45 degrees of tilt if needed for effective offloading of pelvic area in the chair, as well as a compact turning base. This also allowed the use of Z-Finity footplates to support feet in necessarily rearward position due to hamstring contractures. The padded footplate cover portion of the JAY footbox was provided to protect feet for a client who does not tolerate wearing shoes.

Outcome

On day of delivery, we reviewed our plan of care, photos and goals. We set up all equipment per stated goals.(5.) Minor modifications were made for optimizing fit. (6.) Glenda spent two hours in her new seating and wheelchair. She travelled in the wheelchair into a large dining room at her residential home and met several residents for the first time. (7.) She was able

to sit on the patio in the direct sunlight. Skin over her sacral, thigh and gluteal areas was checked before and after, with no signs of increased redness or marking. (8.) She lifted her head several times and maintained the position for up to 10 minutes. (9.) Per staff interpretation, she showed no signs of fidgeting, facial expression or sounds that would suggest discomfort.

Glenda then progressed her time in the chair with skin checks, increasing by 30 minutes daily. In a follow-up conversation, her advocate stated she thought the new system was "wonderful." Glenda now gets out of bed daily for several hours, participating in activities and interactions at her home. She continues to make gains in head control and the red mark on her chest has disappeared.

Recommendations

- Environmental considerations are a key part of determining the right seating.
- For clients who have not been mobilizing for an extended period, a gradual approach is recommended to build stamina for wheelchair use. This client was able to increase wheelchair use in progressive increments, with regular review of skin.
- It may be possible to support clients to become mobile again with the right seating and wheelchair base, even with advanced age and previous long periods of bed rest.

5. The assistive technology team setting up mobility base and seating components in accordance with goals.

6. On-site modifications were made to optimize fit.

7. Glenda in the day room area with peers for first time.

8. Skin checks performed every 30 minutes with positive response.

9. Glenda demonstrating improved head control and elevation off sternum.

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Daniella Giles is currently the North American clinical education manager for Ride Designs. Over the past 15 years with Ride Designs, she has provided clinical guidance to physical and occupational therapists and Assistive Technology Professionals to produce custom seating solutions aimed at solving the most complex skin and postural support needs of wheeled mobility users. Giles received her Master of Physical Therapy in 2001 and completed her doctorate in 2019. With over 20 years of experience as a PT, she has diverse knowledge of treatment interventions aimed at allowing individuals with profound mobility challenges to thrive. She has presented the unique principles of Ride Designs orthotic seating to rehabilitation and durable medical equipment groups across the U.S., Canada and Europe.

CRT UPDATE

Summer 2025 CRT Update

WRITTEN BY: Wayne Grau

Medicaid's Future and the 'Big, Beautiful Bill' Raise Industry Concerns, Demand Action from Rehab Technology Community

We have all witnessed the passing of the One Big Beautiful Bill Act of 2025, as we try to understand what this will mean to the consumers utilizing Complex Rehab Technology and the CRT industry. We waited to make any comments until we knew what was in the bill, and we could speak with some confidence about what we were expecting. While there are no direct cuts to CRT, a high level of concern remains regarding any potential reduction in Medicaid funding. Historically, whenever states look to make cuts, CRT has always been on the table. We have seen some very ludicrous proposals to CRT because the legislators and regulators do not understand CRT and the value it brings to people's lives.

We (consumers, manufacturers, suppliers, academics, clinicians and advocacy organizations) will have to follow the blueprint that was laid out when seat elevation was covered, coded and funded. ONLY by working together were we able to get this passed finally. We NEED TO WORK TOGETHER. More information will be forthcoming as we develop a plan to be ready at a moment's notice to gather the troops and FIGHT to ensure that consumers receive all the equipment they qualify for, so they can lead their best life. More to come ...

State Legislative Activity Moving Forward

Most of the state legislatures have adjourned. Several issues remain that NCART and our Government Affairs team are currently working on. The focus, however, is on 2026 and potential legislation or regulatory threats and opportunities. As stated above, there are numerous unknowns that we must consider as we develop the plan for 2026. However, rest assured, we will be ready to lead the legislative and regulatory efforts in the CRT industry.

Legislative Site Visits

One of the most impactful ways to communicate the value of CRT to legislators is to host them at your facility for a site visit. Past legislative meetings have once again proven that legislators do not understand the CRT industry or the value our members bring to the lives of individuals who utilize CRT equipment. A site visit provides an opportunity for you to educate legislators about the products, services and challenges you face in delivering CRT services to their constituents. A perfect time to host these visits is during the summer recess for both state and federal legislators.

To initiate the process, call the legislator's office (federal or state) and request to speak with the legislator's scheduler. The legislator has certain weeks to set aside for in-district or in-state work weeks to meet with constituents. We encourage all our members to consider a site visit. If you need materials, please don't hesitate to contact NCART.

Washington, D.C., Legislative Fly-in

iNRRTS, NCART and US Rehab will be hosting the Washington, D.C., Legislative Fly-in on Sept. 16 and 17, 2025. Following a successful 2024 Legislative Fly-in, the CRT industry must continue to collaborate effectively with the U.S. House of Representatives and the U.S. Senate. Numerous programs are being discussed in Washington right now, and we need to ensure that any debate on topics that may have a positive or negative impact on CRT is conducted with legislators. We encourage everyone to put a hold on these dates to add your voice to our legislative efforts.

Thank You

I am writing this one week before the anniversary of Simon Margolis' passing. I know what an incredible person and mentor that Simon was to many who read DIRECTIONS. I got to know Simon as I began representing Pride/Quantum on the original NCART board. It was like getting a master's degree in CRT every time we spoke. I am forever grateful to Simon and to many people who have helped me understand this incredible industry in which we work. If the measure of a person is whether they gave more than they took, then Simon was SUPERMAN. I hope to uphold that same standard. THANK YOU to all who came before us and who have shared their wisdom and experience.

Advocacy Quotes

"The best advocacy is always storytelling."
— Willie Parker

"There are no better storytellers than the people who take their knowledge, create a solution, and help people live their best lives. All iNRRTS Registrants."
— Wayne Grau, NCART

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Wayne Grau is the executive director of NCART. His career in the Complex Rehab Technology industry spans more than 30 years and includes working in rehab industry affairs and later exclusively with complex rehab companies. Grau graduated from Baylor University with an MBA in health care. He's excited to be working exclusively with complex rehab manufacturers, providers and the individuals we serve who use CRT equipment.

CLINICIAN TASK FORCE

Generating Discussion:
Innovation, Integration and Impact of AI in CRT

WRITTEN BY: Tabatha James, ATP/SMS, OTR; Leslie Jackson, OTD, OTR/L, ATP, CEASIII; Amber L. Ward, MS, OTR/L, BCPR, ATP/SMS, FAOTA

Artificial Intelligence is a rapidly evolving set of tools designed to support and automate specific human tasks. AI is already reshaping nearly every area of society, from education and research to health care and service delivery. In Complex Rehab Technology, AI holds potential not as a stand-alone decision-maker but as a tool to support clinical thinking and streamline systems. But as the use of AI continues to evolve, CRT providers must proactively decide, "Will we shape AI integration or have it shaped for us?"

Periods of health care crises often prompt organizations and industries to consider new technologies, as part of a proactive effort to prevent future disruption. For example, the COVID-19 pandemic required health care and governmental agencies to identify and record large amounts of data. Efficient analysis of the information was needed to support care providers, research initiatives and patient treatment.

More recently, the Office of Inspector General highlighted how "Operation Goldrush" led to 15 individuals being charged in a multibillion-dollar fraud and money laundering scheme, resulting in money stolen from the Medicare program and private health insurance companies.[1]

Tracking funds and services demands detailed analyses of large data volumes, something technology and AI can accomplish far more efficiently than manual systems. Emerging tools can detect patterns and flag anomalies for early detection of fraudulent and unethical practices. These tools could help reduce unnecessary denials and make it easier for funders to trust the clinical expertise of clinicians and Assistive Technology Professionals, especially at a time when many are overwhelmed by paperwork and burnout.

Understanding of AI varies widely across the CRT field, and there are many tools, uses and implications to figure out. To help bridge the gap, this article offers a clear overview of AI and encourages discussion about its potential and limitations in our industry.

In this article series, we'll explore the opportunities,

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concerns and real-world impact of AI in CRT through questions posed to board members from the Clinician Task Force, RESNA and other industry stakeholders. Topics include service and repair, workforce strain, device life cycles, ethical considerations and fraud prevention. Our goal is to build a shared understanding of AI's role in CRT, one that promotes ethical use, sparks meaningful dialogue and helps us adapt together as technology continues to evolve.

AI refers to computer systems that can mimic certain parts of human intelligence, such as problem solving, learning and decision-making by sifting through data and finding patterns. These systems are already part of daily life: Voice assistants like Alexa and Siri, personalized recommendations on streaming services and self-driving cars use AI to interpret their environment to make real-time decisions.

These systems use AI to learn from experience and weigh multiple outcomes when making decisions. A common form of AI is called machine learning, which allows computers to sort information, predict outcomes and uncover trends without needing step-by-step instructions.

For example, in a smart wheelchair, machine learning can process data from sensors (such as motor strain, battery performance or tilt frequency) to predict when a component might fail or identify patterns that suggest improper positioning. This type of predictive insight can help clinicians and technicians intervene earlier, improve safety and reduce equipment downtime.

AI is often seen through a range of perspectives. Some view it as a helpful tool, others as a potential disruptor. While AI can analyze large amounts of data quickly and identify patterns that might be difficult for humans to detect, its true value in CRT lies in how it complements clinical expertise. Think of AI as a helpful tool, not as a replacement for human judgement. In CRT especially, person-centered care and clinical reasoning must always lead the way.

With the client at the center, we will explore how AI can be used constructively in the CRT industry to support collaborative care, simplify operations, improve continuity and reduce burnout and admin overload.

Across health care, AI is already being used for tasks like clinical documentation, medical imaging, patient monitoring, research and even robotics in minimally invasive procedures.[2]

In CRT, integrating AI could mean expanding the use of remote diagnostic tools for all types of equipment, simplifying documentation with speech-to-text features and using predictive systems to flag maintenance needs before problems arise. Most importantly, AI could increase access to educational tools that help clients, clinicians, caregivers and policymakers better understand CRT and support innovation-driven, evidence-based best practices across the field.

While AI offers many promising opportunities, it also raises important ethical questions, especially around equity, machine decision-making and human oversight. "AI is a support and augmentation tool," explains Dr. Mona Flores, Global Head of Medical AI at NVIDIA, "and it's up to us to harness its power for the good."[2]

As AI becomes more integrated into everyday life, people tend to respond in different ways. Most of us fall into one of the following categories:

1. **Early Adopter:** "I typically embrace new technologies quickly and help others adopt them."
2. **Pragmatic Evaluator:** "I adopt new technologies after seeing clear evidence of benefits and manageable risks."
3. **Careful Traditionalist:** "I prefer proven methods and adopt new technologies only when necessary."
4. **Industry Skeptic:** "I'm generally cautious about new technologies due to past negative experiences."

Which category you fall into might shape how you approach AI tools, but either way, it seems the technology is here to stay. It is already being used in so many areas of life and work and has come a long way from "Write this term paper for me" and "Alexa, turn on the lights."

To better understand how AI is being used, managed and guided in the CRT field, we're inviting board members from CTF, RESNA and all key stakeholders to weigh in on a series of focused questions. These questions aim to explore the complexities of AI through real-world CRT concerns.

Here are just some of the questions we're asking leaders across the field to reflect on. Whether you answer one or all, your input will help shape conversations about the role of AI in CRT:

Practice-level, day-to-day impact

- How can AI help with compliance while still respecting clinical judgment?
- Which AI tools are needed to support clinicians, technicians and ATPs do their job more effectively without replacing their expertise?
- Can AI improve transparency and traceability without increasing audit burdens?

System-level changes and innovation

- How might AI help CRT keep pace with rapidly changing rules and requirements?
- Could AI support predictive maintenance and improve how we track equipment life cycles?

- How can AI expand access to diagnostics and services in rural or underserved communities?

Ethics, safeguards and standards

- What kind of oversight is needed when AI and human decisions conflict?
- How do we guard against bias in AI tools that might impact who gets access to CRT?
- What roles should RESNA and CTF play in setting responsible frameworks for AI use?

As a final reflection:

- How would you measure successful AI integration in CRT? What outcomes or success metrics would show that it's making a meaningful difference?

If you'd like to weigh in, scan the QR code at the end of the article to share your thoughts. Whether you're an early adopter, a skeptic or somewhere in between, your insights will help guide thoughtful, inclusive progress for our field. As a thank you, participants will receive a summary of response themes prior to the next article in the series. We are excited to hear from you and look forward to sharing what we learn.

REFERENCES:

1. Health and Human Services Office of Inspector General. (2025, June 30). Eastern district of New York: 11 defendants indicted in multi-billion health care fraud Scheme, the largest case by loss amount ever charged by the Department of Justice. Retrieved from https://oig.hhs.gov/fraud/enforcement/11-defendants-indicted-in-multi-billion-health-care-fraud-scheme-the-largest-case-by-loss-amount-ever-charged-by-the-department-of-justice/

2. Laviola, E. (2023, July 11). What types of AI are being used in healthcare? HealthTech. Retrieved from https://healthtechmagazine.net/article/2023/07/types-ai-in-healthcare-perfcon

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Tabatha James, ATP, SMS, OTR, is a supplier-side Assistive Technology Professional and Seating and Mobility Specialist and occupational therapist invested in furthering the Complex Rehab Technology industry through public health policy, clinical advocacy and technology innovation. With a passion for improving health care access and equity, she collaborates with clinicians, policymakers and industry leaders to drive meaningful changes. James' dedication extends to mentoring emerging professionals and contributing to initiatives that improve access and lead to better outcomes for individuals relying on CRT.

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Leslie Jackson, OTD, OTR/L, ATP, CEASIII, has served as an occupational therapist for over 25 years in various settings, including outpatient, acute care, home health, acute rehab and a doctoral-level academic program. She currently leads the outpatient Seating and Mobility Clinic for Marion Health and serves as an occupational therapist for Veteran Affairs. Jackson earned the Assistive Technology Professional certification from RESNA in 2008 and is certified in ergonomics and LSVT BIG, a treatment protocol for individuals living with Parkinson's disease. She volunteers as an executive board member for the Services for the Visually and Hearing Impaired, a nonprofit organization providing assistive technology and education to its clients. Jackson is honored to contribute through the Clinician Task Force's advocacy and educational initiatives.

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Amber Ward has been an occupational therapist for more than 31 years, most recently in an outpatient clinic for individuals with progressive neuromuscular diseases and in a wheelchair seating clinic. She is an adjunct professor in the Occupational Therapy Assistant and master's Occupational Therapy programs at Cabarrus College of Health Sciences in addition to working full time in the clinic. She received the RESNA Assistive Technology Professional certification in 2004, and the Seating Mobility Specialist in 2014. She is the author of numerous articles and book chapters, as well as speaking and presenting locally, regionally, nationally and internationally. Ward is also a friend of iNRRTS.

RESNA

RESNA Update: RESNA Announces New Webinars, Board Members, 2026 Conferences, Position Papers

WRITTEN BY: Andrea Van Hook, RESNA Executive Director

New Webinars – Live and On-Demand

For the past two years, RESNA has offered a monthly webinar series during the second half of the year. This year, we are pleased to present five new webinars, live and on-demand, for 0.1 IACET CEUs each.

We kicked off our annual webinar series on June 19, with "Return to Work Assistive Technology for Skilled Trades and Agricultural Workers," presented by Ned Stoller, ATP, assistive technology specialist for the National AgrAbility Project. This webinar is now available for on-demand viewing.

By the time you read this, our July 23 webinar, "Creating Mobility Solutions for Children," will have passed. This inspiring presentation showcased interdisciplinary collaboration among students and faculty members at Thomas Jefferson University from industrial design, occupational therapy and physical therapy to address the seating and mobility needs of children with mobility impairments.

The remaining webinars are:

- Sept. 10, 2025, at 12 p.m. ET: "Telerehab and Telewellness for People Aging with Disability"
- Oct. 8, 2025, at 12 p.m. ET: "3D Printing Sports and Recreation Equipment"
- Nov. 19, 2025, at 12 p.m. ET: "The Safe and Sound Protocol (SSP): A Calming Tool to Enhance Sensory Regulation and Assistive Technology Outcomes"

Check out these and other on-demand CEU opportunities in RESNA's store on our website. Search for "Webinars." RESNA members can access most webinars for free as a member benefit; nonmembers pay $45.

Announcing New Board Members

RESNA members recently voted in the annual board elections for officers and board members. Starting their terms on Aug. 1, 2025, are:

- Ana Allegretti, PhD, OTR, ATP
- Stephanie Bay, Ph.D. CCC-SLP, ATP
- Julienne Brown, PT, DPT, NCS, ATP/SMS
- Christina Maragioglio-Esposito, ATP, RET
- Cara Masselink, PhD, OTR/L, ATP, HPCS

RESNA thanks Gabrielle Kowalski, Cindi Petito and Seong-Hee Westlake for their service.

RESNA 2026 Conferences Announcement

RESNA is pleased to partner with iNRRTS, NCART, U.S. Rehab, International Seating Symposium and the Clinician Task Force on two Abilities International conferences next year. These new professional conferences will offer two days of continuing education for Assistive Technology Professionals prior to the popular, public Abilities Expos in Long Beach, California, Chicago, Illinois, and Greater New York.

In Long Beach (March 26 -27) and Greater New York (April 30-May 1), RESNA will provide continuing education sessions and workshops covering the diverse array of assistive technology. We will also be focused on knowledge translation from research to practice through scientific paper platforms and posters. Finally, we will also offer our annual student competitions, the Student Design Challenge and Student Scientific Paper Competition, as well as the Developers Showcase. Please see the RESNA website for more details and, if interested, how to submit presentations.

RESNA Position Papers

RESNA Position Papers are free and available to the community. They provide practical information about the appropriate applications of various assistive technology devices. Check out the two latest position papers:

- RESNA Position on Assistive Technology for Lying Posture Care Management
- RESNA Position on the Application of Tilt, Recline and Elevating Leg Rests – A Literature Update

You can find the full list of position papers on the RESNA website under "Resources/ Position Papers and Guidelines."

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Andrea Van Hook is executive director of RESNA. She has more than 20 years of experience in nonprofit association management and lives and works in Washington, D.C.

Renewed iNRRTS Registrants

The following individuals renewed their iNRRTS Registration between May 27 through August 22, 2025.

PLEASE NOTE **IF YOU RENEWED AFTER AUGUST 22, 2025**, YOUR NAME WILL APPEAR IN A FUTURE ISSUE OF DIRECTIONS.
IF YOU RENEWED PRIOR TO MAY 27, 2025, YOUR NAME IS IN A PREVIOUS ISSUE OF DIRECTIONS.

FOR AN UP-TO-DATE VERIFICATION ON REGISTRANTS, PLEASE VISIT WWW.NRRTS.ORG, WHICH IS UPDATED DAILY.

Aaron Olson, RRTS®
Aaron Mckenzie, RRTS®
Aaron Harvey, RRTS®
Alan F. Bettencourt, ATP, CRTS®
Alicia Truebenbach, ATP/SMS, CRTS®
Austin Sweet, ATP, CRTS®
Avrohom Ellinson, ATP, CRTS®
Bennie G. Jones, ATP, CRTS®
Bernard Opp, RRTS®
Blake Faulk, ATP, CRTS®
Bradley Coughlin, RRTS®
Brennan Arbogast, ATP, CRTS®
Brent Manning, ATP, CRTS®
Brett A. Watson, ATP, CRTS®
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Cary Marsh, ATP, CRTS®
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Christian Stephens, PTA, ATP, CRTS®
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Christopher Kelly, RRTS®
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Craig Moulden, ATP, CRTS®
Craig Hustler, RRTS®
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Curtis Noble, RRTS®
Cynthia Bohlmann, COTA/L, ATP, CRTS®
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Deborah Guglietti, RRTS®
Deborah J. Lazure, ATP, CRTS®
Dekuan Yan, RRTS®
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Eric Gilbert, RRTS®
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Jasmine Libarian, ATP, CRTS®
Jason Melms, ATP, CRTS®
Jason Simpson, ATP/SMS, CRTS®
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Jay Lujan, ATP, CRTS®
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Toby Bergantino, ATP, CRTS®
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William Shirley, ATP, CRTS®
William Scarborough, RRTS®
Zane Jacobs, ATP, CRTS®
Zeb Dugan, ATP/SMS, CRTS®

New iNRRTS Registrants

CONGRATULATIONS TO THE NEWEST INRRTS REGISTRANTS. NAMES INCLUDED ARE FROM MAY 27, 2025, THROUGH AUGUST 22, 2025.

Jodi Sands-Paton, RRTS®
Independent Living Specialists
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Motion
Ontario, Canada

Alexandru Aparaschivei, RRTS®
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Alison Lowe, RRTS®
HME Home Health
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Benjamin Stewart, RRTS®
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Britni Horncastle, RRTS®
Southward Medical Supplies Ltd.
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Mobility Solutions, Inc.
CA, United States

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Nova Scotia, Canada

Euan Ferguson, RRTS®
HME Home Health
British Columbia, Canada

Gary Clarke, RRTS®
Independent Living Specialists
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Gerald D. Kurtz, Jr., ATP, RRTS®
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Motion, Mobility & Design Inc.
OH, United States

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Jade Ahuriri, RRTS®
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Queensland, Australia

Jane Hedger, RRTS®
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Jane Lennox, RRTS®
Motion
Ontario, Australia

Jayveer Singh, RRTS®
Independent Living Specialists
South Australia, Australia

Jeanine Eadie, RRTS®
Independent Living Specialists
Victoria, Canada

Joanne Ward, RRTS®
Independent Living Specialists
Queensland, Australia

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Mobility Solutions, Inc.
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Joshua Saigal, RRTS®
Independent Living Specialists
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Kevin Frelke, RRTS®
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Lawrence (Skipper) Hays, RRTS®
Rehab Medical Inc.
LA, United States

Loretta Pender, ATP, CRTS®
ATF Medical
GA, United States

Louise Bothe, RRTS®
Independent Living Specialists
South Australia, Australia

Marco Kroon, RRTS®
Independent Living Specialists
Queensland, Australia

Marisol Lopez, RRTS®
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Martina Pauline Rutaquio, RRTS®
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Michael Shaner, RRTS®
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Michael Myers, ATP, CRTS®
Leeden Wheelchair, Lift and Sport
AZ, United States

Paula Pimpinella, RRTS®
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Peter Le, OT, RRTS®
Independent Living Specialists
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Ray Doulat, RRTS®
HME Home Health
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Regina Grimes, PT, C/NDT, ATP, CRTS®
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Simone Tadros, RRTS®
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Terry King, ATP, CRTS®
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Willie Ulloa, RRTS®
SG Homecare
CA, United States

Zachary Bennett, RRTS®
Motion
Ontario, Canada

Congratulations to the following individuals who have completed Level 1 of the CRT Supplier Certificate Program.

These individuals can state they are a iNRRTS Certified CRT Supplier, Level 1.
NAMES LISTED ARE FROM MAY 27, 2025, THROUGH AUGUST 22, 2025.

Ginnie Trieu
Lorenzo Taylor
Russell Levy
Charlotte Cullen
Daniel Trevean
Adrianne Allen
Kate Drury
Joshua Saigal
Rainer Olson
Sarah Sheldon

Former iNRRTS Registrants

The iNRRTS board determined RRTS® and CRTS® should know who has maintained his/her registration in iNRRTS, and who has not.
NAMES INCLUDED ARE FROM MAY 27, 2025, THROUGH AUGUST 22, 2025. FOR AN UP-TO-DATE VERIFICATION ON REGISTRANTS, VISIT WWW.NRRTS.ORG, UPDATED DAILY.

Nicole Berger, MSPT
Chattanooga, TN

Timothy Houghton
St Paul, MN

Blaine Hunt, ATP/SMS
Carlsbad, CA

Reggio Blackwell
Countryside, IL

Olga Fomina, ATP
Hayward, CA

Roberta Lopez
Burnaby, British Columbia

Aaron Miller
Indianapolis, IN

Nick Epp-Evans
Nanaimo, British Columbia

Myles Ferrier
Courtenay, British Columbia

Shannon O'Donnell
Windsor, Ontario

Vanda Obratov
Mississauga, Ontario

New CRTS®

CONGRATULATIONS TO iNRRTS REGISTRANTS RECENTLY AWARDED THE CRTS® CREDENTIAL. A CRTS® RECEIVES A LAPEL PIN SIGNIFYING CRTS® OR CERTIFIED REHABILITATION TECHNOLOGY SUPPLIER® STATUS AND GUIDELINES ABOUT THE CORRECT USE OF THE CREDENTIAL. NAMES LISTED ARE FROM MAY 27, 2025, THROUGH AUGUST 22, 2025.

Austin Sweet, ATP, CRTS®
National Seating & Mobility, Inc.
Chattanooga, TN

Coleman R Mansfield, ATP/SMS, CRTS®
Reliable Medical
Bradenton, FL

Derrick Dobbs, ATP, CRTS®
National Seating & Mobility, Inc.
Temple, TX

Jakob Lopez, ATP, CRTS®
Alliance Rehab & Medical Equipment
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James Larkner, ATP, CRTS®
National Seating & Mobility, Inc.
Countryside, IL

Loretta Pender, ATP, CRTS®
ATF Medical
Newnan, GA

Michael Myers, ATP, CRTS®
Leeden Wheelchair, Lift and Sport
Tempe, AZ

Paola Mena, ATP, CRTS®
Browning's Pharmacy & Health Care
Melbourne, FL

Regina Grimes, ATP, CRTS®
Southern Mobility Specialists, Inc.
Tupelo, MS

Scott Schanbacher, ATP, CRTS®
Freedom Mobility Center
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Terry King, ATP, CRTS®
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As Corporate Friends of iNRRTS, these companies recognize the value of working with iNRRTS Registrants and support iNRRTS' Mission Statement, Code of Ethics and Standards of Practice.

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