



TECH TALK: PERSONAL MOBILITY DEVICES

Mobility Reimagined: Exploring
Personal Mobility Devices and
Smart Tech

SESSION GOALS

By the end of this session, participants will:

- Understand what personal mobility devices are and who they support
- Learn about the spectrum of mobility aids—from traditional to high-tech
- Explore innovations like Zeen and smart-powered chairs
- Discover how tech enhances accessibility, comfort, and independence
- Discuss what to consider when choosing or recommending a mobility device



WHAT ARE PERSONAL MOBILITY DEVICES?

- Devices designed to assist with movement and transportation for individuals with mobility impairments or chronic conditions
- Examples include:
 - Manual wheelchairs
 - Power wheelchairs
 - Scooters
 - Standing aids
 - Powered gait trainers
- Used by people with:
 - Neuromuscular conditions
 - Aging-related mobility loss
 - Injury recovery
 - Congenital conditions (e.g., CP, spina bifida)

📌 Mobility tech isn't just transportation—it's access, dignity, and independence.



CATEGORIES OF PERSONAL MOBILITY DEVICES

Category	Description	Common Users
Manual Wheelchairs	Lightweight, self- or caregiver-propelled	Active users, temporary mobility loss
Power Wheelchairs	Motorized chairs with joystick or head control	Long-term mobility needs, low upper body strength
Scooters	3- or 4-wheel seated mobility devices	Seniors, chronic fatigue or arthritis
Gait Trainers / Walkers	Assist standing and walking safely	Rehab settings, MS, spinal injury
Standing Devices	Enable upright positioning safely	SCI, wheelchair users, bone health needs

CATEGORIES OF PERSONAL MOBILITY DEVICES



Manual Wheelchairs



Power Wheelchairs



SCOOTERS




Gait Trainers / Walkers



Standing Devices

Spotlight: Zeen - Powered Standing & Mobility

- Zeen is a next-gen powered standing mobility system
- Combines standing frame + powered mobility + transfer device
- Features:
 - Sit-to-stand powered lift
 - Drives while standing or seated
 - Natural eye-level interaction
 - Promotes circulation, bone health, and dignity
- Ideal for:
 - Paraplegics
 - Stroke survivors
 - Individuals seeking partial weight-bearing standing
-  Zeen isn't just mobility—it's upright mobility with physical and emotional benefits.



POWER WHEELCHAIRS



- Types:
 - Front-, mid-, or rear-wheel drive
 - Elevating seat functions
 - Tilt/recline for pressure relief
 - Custom programmable driving controls
- Tech Add-ons:
 - Bluetooth/IR control of devices
 - Powered seat elevation
 - Switch or head control systems
 - Connectivity with smartphones or tablets
- Brands to know: Permobil, Quantum, Invacare, Sunrise Medical
- ♥ Today's power chairs are mobile computing platforms on wheels.

Smart Features in Modern Mobility Devices

Feature	Benefit
Integrated sensors	Detect obstacles, inclines, or tipping risk
App controls	Remote driving, battery status, seating profiles
Bluetooth connectivity	Control TVs, phones, doors from joystick
Smart suspension	Smoother rides, terrain tracking
Voice assistant integration	Hands-free commands (Alexa, Siri)

◆ Smart mobility = less effort, more control, and a better ride.

EMERGING & SPECIALIZED MOBILITY DEVICES

- Omni-wheel tech: Tight turns in narrow spaces
 - Robotic exoskeletons: Supported gait training (e.g., ReWalk, Ekso Bionics)
 - All-terrain chairs: Beach, snow, or hiking accessibility
 - Foldable or travel power chairs: Lightweight for air or car travel
 - Indoor/outdoor hybrid designs: Easier transitions across surfaces
- ♥ Mobility doesn't stop at the curb—it should go everywhere you do.



ReWalk

CONSIDERATIONS WHEN CHOOSING A DEVICE

- 🔋 Power needs (battery range, charging access)
 - 🧑 Seating/positioning needs (pressure relief, support)
 - 🏠 Environment (home layout, terrain, transport options)
 - 💻 Tech literacy (Is a smart chair empowering or overwhelming?)
 - 🧑🏠 Medical recommendations (OT/PT input is key)
 - 💰 Insurance/coverage (Medicare/Medicaid may limit options)
- 📌 The “right” device is the one that fits the person’s whole life.



Accessibility & Independence

- Smart mobility supports:
 - 🧠 Cognitive and executive function (reminders, automation)
 - 💬 Communication access (built-in AAC support or mounting)
 - 📱 Digital control of environment (home automation, apps)
 - 🛡️ Safety: caregiver alerts, GPS, fall detection on some platforms
- 📍 Mobility isn't just physical—it's also about connection, control, and confidence.



TRY IT, TOUCH IT, ASK FOR IT



- Many devices (like Zeen) are available for:
 - Demo at expos or mobility clinics
 - Insurance trial periods
 - VA or grant-based funding
- Tips:
 - Request a home or clinical trial
 - Ask for newer tech during equipment evaluations
 - Bring in peer support or user experts to evaluations
- 📌 You don't have to settle—ask for what fits your life, not just your diagnosis.

FINAL TAKEAWAYS

- Personal mobility tech is smarter, more powerful, and more customizable than ever
- Devices like Zeen, smart power chairs, and smart locks or apps can transform daily independence
- Start with your goals, not just diagnoses
- Advocate, test, and explore – the tech exists, and you deserve access to it
- ♡ Mobility is more than movement—it's freedom.



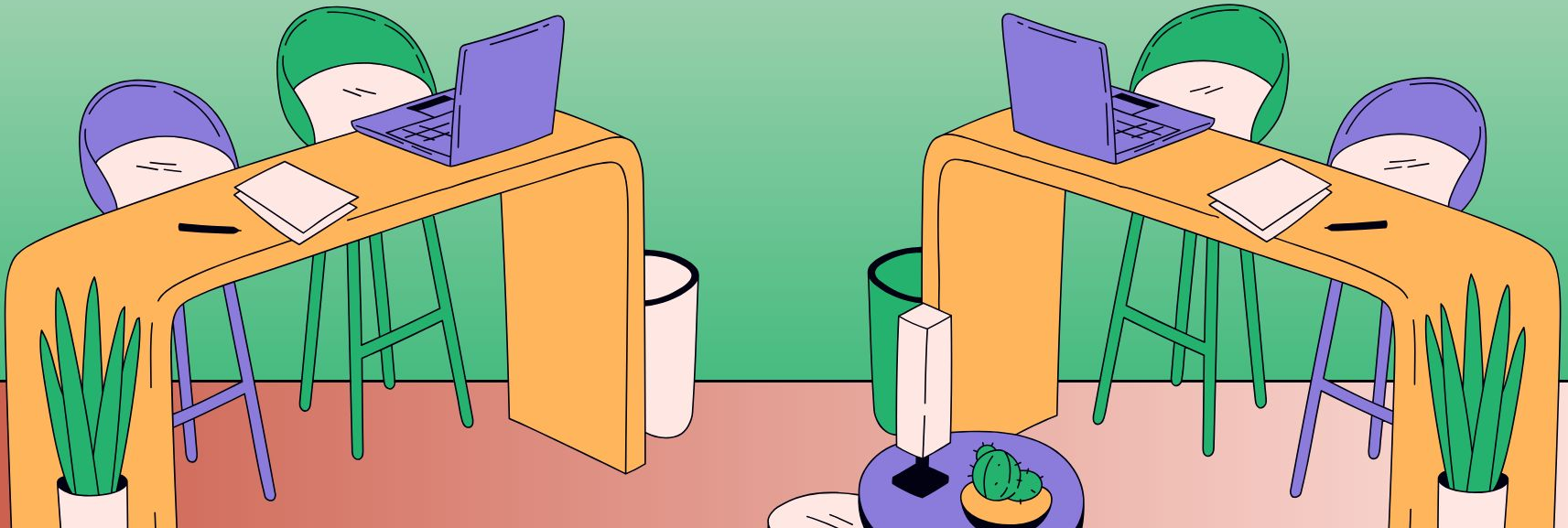


Lauren and Tanner Huff

PANEL



Q&A



THANK YOU FOR LISTENING!

