

Protection & Advocacy Project

Technology For Independence



Introduction

HELLO
MY NAME IS

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ND Protection & Advocacy

What you will learn today: The value of assistive technology in promoting independence, along with...

- What assistive technology is
- Why assistive technology matters
- How to access assistive technology

What is Assistive Technology?

Assistive Technology

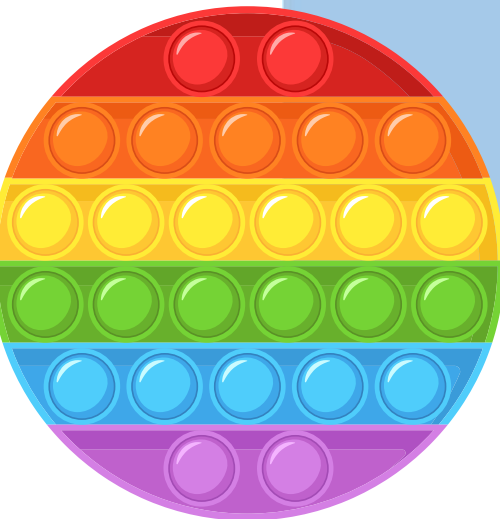
Assistive technology (AT) is any item, piece of equipment, software program, or product system that is used to increase, maintain, or improve the functional capabilities of individuals with disabilities. Assistive technology can be “low tech” or “high tech”.

Low Tech - Simple, cost-effective tools that enhance accessibility and independence.



High Tech - More complex tools that often involve digital or electronic components.



Low Tech

- Adaptive Utensils for Eating
 - Large-print books and labels
 - Non-slip Pencil Grips
 - Visual Aids
 - Sensory Support
 - Button Hooks and Zipper Pulls
 - Wheelchair Ramp
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High Tech

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- Screen Readers
 - Smart Home Devices
 - Communication Devices
 - Wearable AT Devices (hearing aids, smart watch)
 - Remote Monitoring
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Why Does Assistive Technology Matter?

Understand Our Community

More than 1 in 4 adults in the United States have some type of disability.

World Health Organization

Cognition

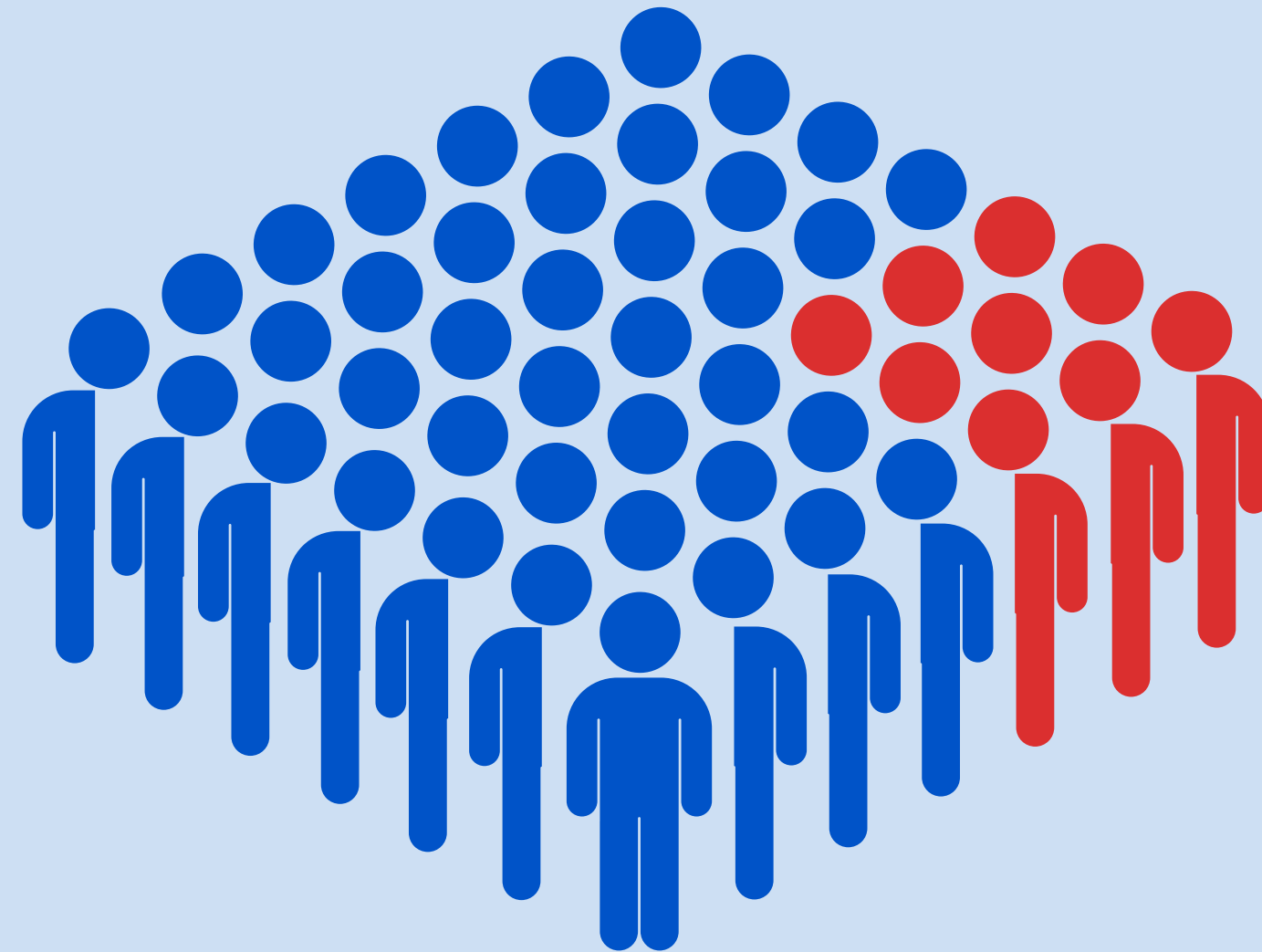
Mobility

Hearing

Vision

Self-care disability

Independent Living Disability



Understand Staffing Shortages

The State of America's Direct Support Workforce Crisis

Survey of organizations delivering disability services:

- **95%** of respondents indicated they had experienced moderate or severe staffing shortages in the past year.
- **54%** of respondents indicated they deliver services in an area where few or no other providers deliver similar services.
- **77%** of respondents reported turning away new referrals in the past year due to ongoing staffing shortages.

ANCOR State of America's Direct Support Workforce Crisis 2023

Consequences of Lack of Services

- Loss of Independence
- Isolation and Mental Health Struggles
- Barriers to Employment and Education
- Health and Safety Risks

Hopeful Solution

- Finding ways to bridge the gaps in services and supports
- **ASSISTIVE TECHNOLOGY**



Who Needs Assistive Technology?

Assistive Technology can be used anytime an individual needs support with communication, mobility, safety, learning, or daily tasks.

- 2.5 billion individuals globally
- 2 in 3 older individuals

World Health Organization



Real World Solutions: Assistive Technology for Independence

What does it mean to be

INDEPENDENT

Independence can mean...

- Living safely at home
- Communicating wants and needs
- Participating in the workforce and community

Assistive Technology can be utilized to increase independence.

Living Safely at Home

- AT can support daily living tasks and create a safer environment.
- Reduces need for constant in-person support while maintaining dignity in the least restrictive setting.

Examples:

- **Smart medication dispensers** (e.g., Dose Flip) to ensure medications are taken on time.
- **Environmental control systems** (smart plugs, thermostats, lights) for comfort and safety.
- Fall detection **sensors** or **wearable alert devices** .
- **Automated door locks** for security.

Communicating Wants and Needs



- Communication access is central to self-advocacy and decision-making.
- AT ensures individuals can express preferences, request help, or participate in conversations.

Examples:

- **Augmentative and Alternative Communication (AAC)** devices for nonverbal individuals.
- **Speech-to-text apps** for people with hearing loss.
- Video calling technology for remote check-ins with caregivers or friends.
- **Smart speakers (Alexa, Google Home)** to request assistance or control the home.

Participating in the Workforce and Community

- AT opens doors to employment, volunteering, and social engagement.
- Helps bridge gaps created by transportation, physical access, or communication needs.

Examples:

- **Screen readers or magnifiers** for people with vision loss.
- **Ergonomic and adaptive workstations** for mobility impairments.
- Customizable **Adaptive tools** including modified keyboards, mice, and more.
- **Time Management Apps** to assist with routine management
- **Digital calendars** with reminders (Google Calendar, Outlook) send alerts for meetings, shifts, or community events.

Workforce and Technology Project

Workforce and Technology Project

- Goal: Address workforce shortages in disability services through assistive technology.
- Focus: Increase independence, reduce reliance on in-person staffing, improve quality of life, keep individuals in the least restrictive setting.
- Plan: Pilot Project, Trainings, Outreaches, Collaborative Efforts



Pilot Project Outcomes

| Participant | Living Situation | Key AT Provided | Technology Adoption | Reported Outcomes | Barriers |
|-------------|---------------------------------------------|----------------------------------------------------------------------|---------------------|-----------------------------------------------------------------|---------------------------------------------------------------|
| 1 | Independent Living | Smart home tech, hospital bed, transfer system, home security | High | Improved safety, emotional well-being, mobility | Implementation |
| 2 | Residential Habilitation | Smart home tech, smart plugs, doorbell, ceiling lift, automatic door | High | More autonomy, fewer staff needs, increased communication | Complex Medical Needs |
| 3 | Independent Living | Calendar, Echo Show, bike basket, grocery cart, smart lock | Low | Maintained independence using personal phone | Implementation, Disrtust in New Technology |
| 4 | Institutional Setting to Independent Living | Med dispenser, bean bag, cabinet locks, visual cues, fidgets | Moderate | Safer medication use, better compliance, increased independence | Implementation resistance, lack of interest in some new items |

Barriers We Faced

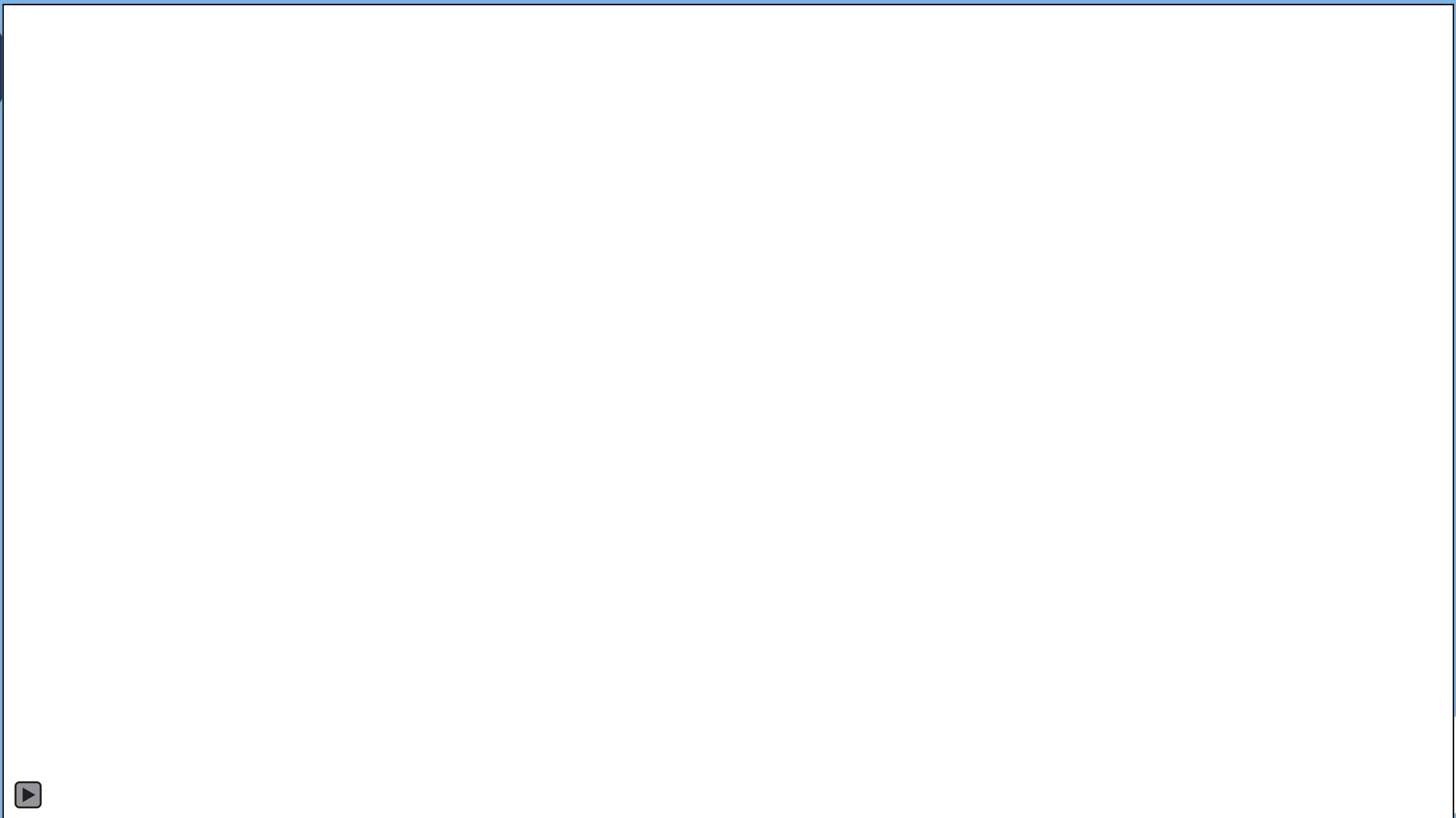
- Complex Needs
- Implementation
- Resistance to New Technology
- Lack of Interest



What We Learned

- Technology works best when it's person-centered and goal-driven.
- Training for staff, individuals, and families is critical for success.
- Gradual introduction of devices builds confidence and adoption.
- Collaboration between agencies, vendors, and families strengthens outcomes.
- The use of assistive technology can be cost efficient.
- **ASSISTIVE TECHNOLOGY CAN INCREASE INDEPENDENCE**

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Increasing Independence Through Assistive Technology

Getting Started

First Steps:

1. Think about your daily routines, needs, and goals.
2. Identify tasks that need support.
3. Understand your funding options.
4. Connect with local supports.

Start with Self-Reflection

Think About Your Daily Routines, Needs, and Goals

- Identify what's working and what's not in your day.
- Ask: “What would make my day easier or safer?”
- Consider your goals — independence, safety, communication, work, recreation.

Identify Tasks That Need Support

- Look at daily challenges:
 - Cooking, medication management, communication, safety, etc.
 - Is there something that currently requires staff assistance that you would like to do yourself?

Think About These Areas of Your Life

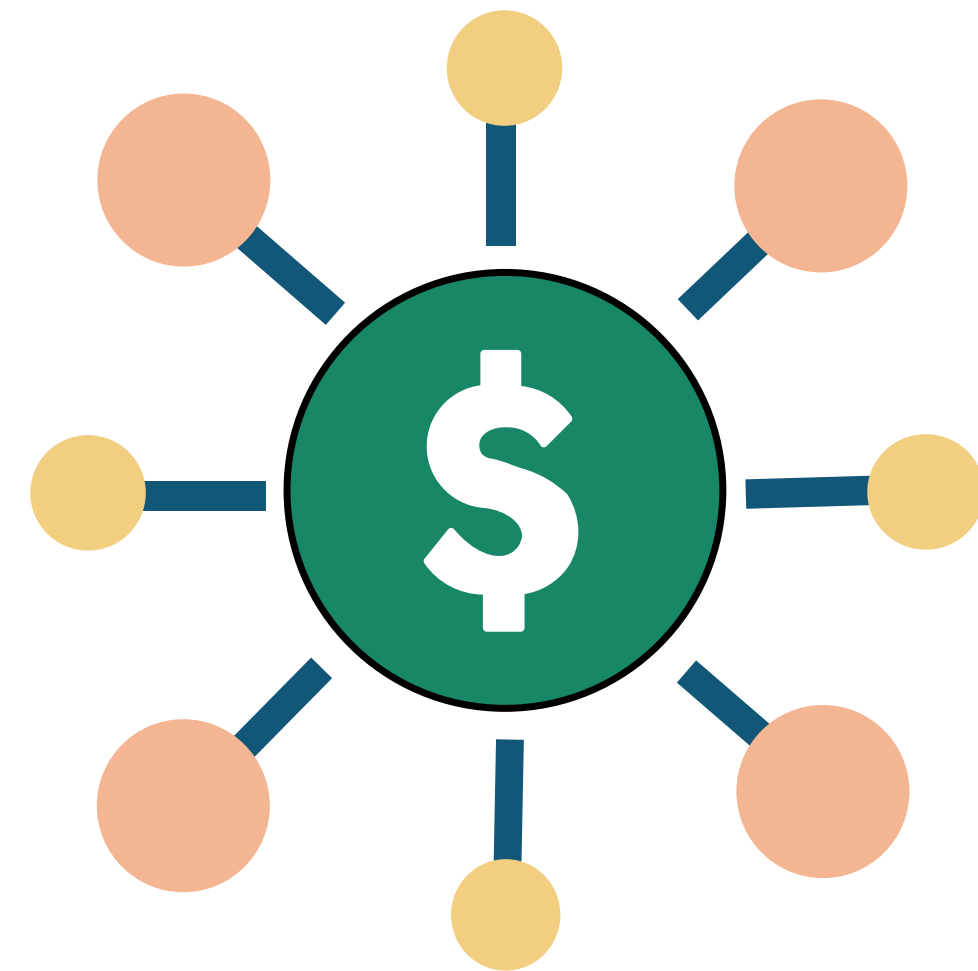


- Daily Living
- Safety & Security
- Communication
- Mobility
- Work & Learning
- Community Participation

Understanding Funding for Assistive Technology

Funding options for assistive technology in North Dakota varies from person to person, but may include...

- Private Insurance
- North Dakota Medicaid
- Medicaid Waivers
- Veterans Affairs Benefits
- Local Organizations



You're Not Alone in This Process

Connect with Local Supports

Build a support network early and receive an assessment to help understand how assistive technology can increase your independence.

Examples:

- **ND Protection & Advocacy** — rights, advocacy, and problem-solving.
- **ND Assistive** — assessments, device trials, training, funding options.
- **Vocational Rehabilitation** — AT for employment goals.
- **School -based teams** — AT for students.
- **Health Care Providers** - PT, OT, Speech, Primary Care

Questions?



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