

# Aging Everywhere All at Once: Unlocking Independence with Assistive Technology



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# What is Assistive Technology? & Who is it for?

# Assistive Technology in 2026

- Nearly 40 Years of AT Evolution
- Now AT is an ecosystem that supports functional capability across the lifespan
- Yet misunderstandings persist
- The reality: AT serves anyone navigating changes in vision, hearing, memory, mobility, fatigue, speech, or behavioral health (and more!), regardless of age and whether they identify as "disabled."
- The [21st Century AT Act \(2022\)](#) anchors AT in lifespan access and cross-disability reach, defining both the technology and its beneficiary population in functional terms.



# Definition of AT

- **ASSISTIVE TECHNOLOGY**—The term ‘assistive technology’ means technology designed to be utilized in an assistive technology device or assistive technology service.
- **ASSISTIVE TECHNOLOGY DEVICE**—means any item, piece of equipment, or product system, whether acquired commercially, modified, or customized, that is used to increase, maintain, or improve functional capabilities of individuals with disabilities.
- **ASSISTIVE TECHNOLOGY SERVICE (abbreviated)**—means "any service that directly assists an individual with a disability in the selection, acquisition, or use of an assistive technology device," encompassing evaluation, acquisition, customization, coordination with therapies and education plans, instruction for the individual and their support network, training for professionals and employers, and, critically, "expanding the availability of access to technology, including electronic and information technology, to individuals with disabilities" (clause G).

# AT is...

defined by

**what it does**

in improving, maintaining, or increasing the functional capabilities of the person

VS

**what the device is**



# The Assistive Technology Umbrella-1



The Legal definition of AT is inherently broad enough to include all of this technology  
**AND MORE, including technology that has not been invented yet!!**

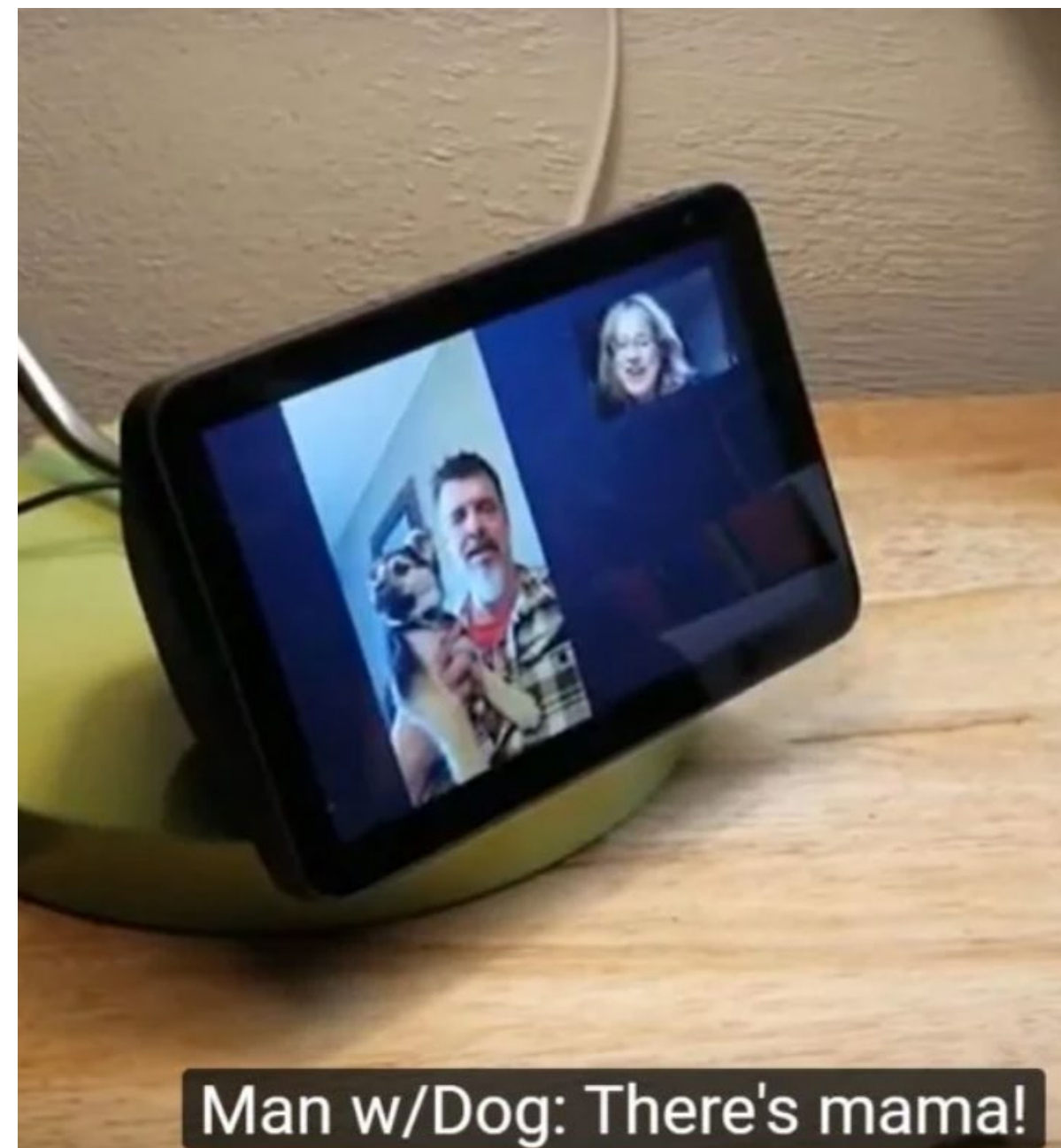
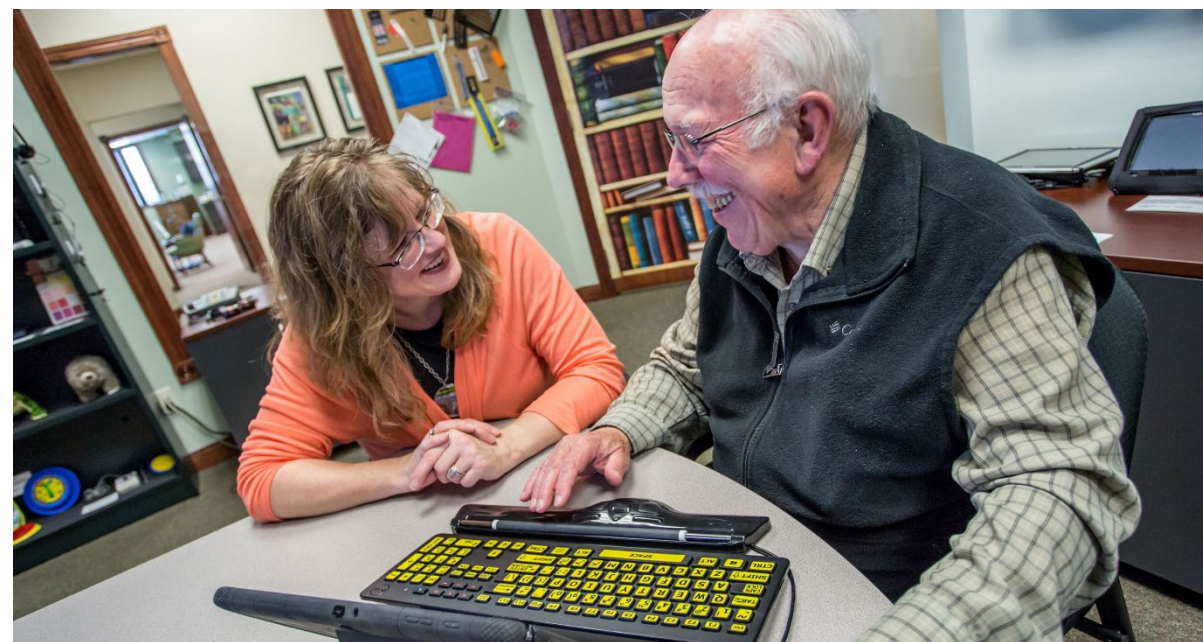
1. **Speech Communication** such as dedicated speech generating devices, mainstream tech with apps, low tech picture boards, accessibility features and other access devices, etc.
2. **Vision**-magnifiers, mobile devices with apps, software, talking devices, large print keyboards, etc.
3. **Hearing**-amplified telephones, alerting systems, video communication with ASL, personal hearing systems, etc.
4. **Home Modifications**-ramps, grab bars, walk-in showers, etc.
5. **Environmental Controls**-smart home devices (i.e. smart speakers, sensors, smart plugs, cameras, thermostats, door openers, TV controls, smart deadbolts, remote shades, etc.), built-in accessibility features, and other access devices, etc.
6. **Communications Technology**-telehealth, remote monitoring, care companions, social isolation, built-in accessibility features, mounts and access devices for mobile phones for communication, as well as the connectivity to run the devices, and more.

# The Assistive Technology Umbrella-2

The Legal definition of AT is inherently broad enough to include all of this technology  
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7. **Learning, Cognitive, Developmental, Behavior Health Technology**-wandering tech (i.e. GPS, alarms systems (analog/smart)), mobile devices and apps (i.e. scan & read), wearables, software, educational tools, memory devices and reminder systems (i.e. medication management systems-analog/smart), robotic pets, etc.
8. **Daily Living Technology**-PERS and fall detection systems, medication management systems (analog/smart), smart devices for living (i.e. wearables, toothbrushes), tech for eating, toileting, dressing, robotics, etc.
9. **Vehicle Modifications & Transportation Tech**-ramps, driving controls, seat assist, etc.
10. **Recreation, Sports and Leisure Tech**-adapted gaming tech, gardening tools, etc.
11. **Mobility, Seating, and Positioning**- wheelchairs, exoskeletons, access controls, Durable Medical Equipment, etc.
12. **Computers and Related**-includes mainstream tech such as computers, tablets and other mobile devices, software, all access methods (i.e. mouth joystick, eye-gaze, onscreen keyboards),
13. **and More!!!**

**NOTE:** Assistive technology wears many hats; a single device often fits into several different categories depending on how it's used.



# Samples of Assistive Technology

# Who is Assistive Technology For?

- **People with Disabilities**
- **Older adults and those Aging into Disability**
  - "Underrepresented population" to include "older individuals" and "youth with disabilities aging into adulthood."
  - To "increase access to and acquisition of assistive technology addressing the needs of aging individuals and **aging caregivers in the community**."
  - Requires State AT programs to collaborate with the State agency under the **Older Americans Act**
- **Temporary, Intermittent, and Progressive Conditions**
- **People Who Do Not Yet Identify as Disabled**
- **Support Networks**
  - AT services include instruction for caregivers, family members, guardians, and advocates, and for professionals, employers, and others substantially involved in the major life functions of individuals with disabilities .

# **What is the Assistive Technology Act?**

# **&**

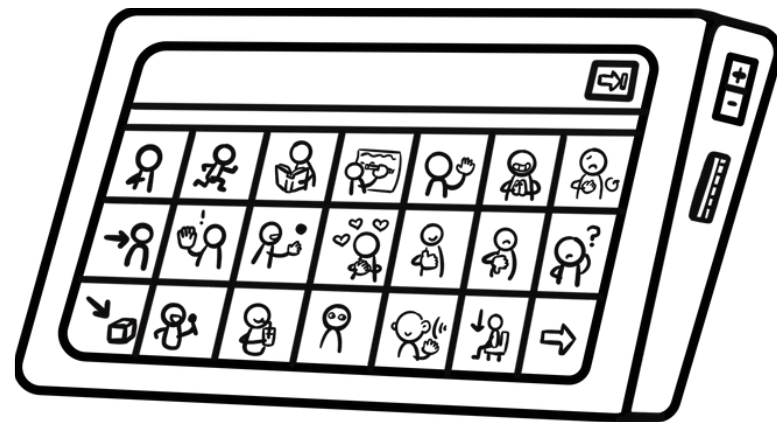
# **What are Assistive Technology Act Programs?**



# What is the Assistive Technology Act-Summary

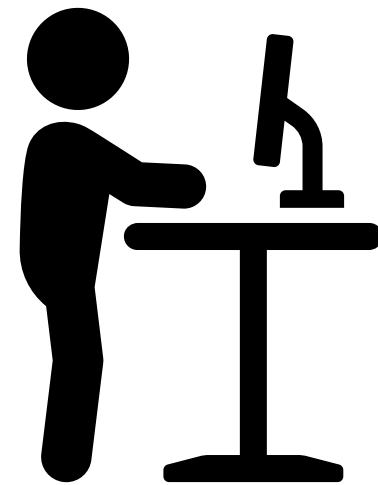
- Essentially, the AT Act established in 1988, helps states and territories establish programs that:
  - **Increase awareness** of AT
  - **Provide access** to AT devices through demonstrations, loans, and reutilization programs
  - **Help individuals acquire** AT through various financing options and support
  - **Offer training and technical assistance** on the use and benefits of AT to individuals with disabilities, their families, and professionals

# Core Services of AT Act Programs



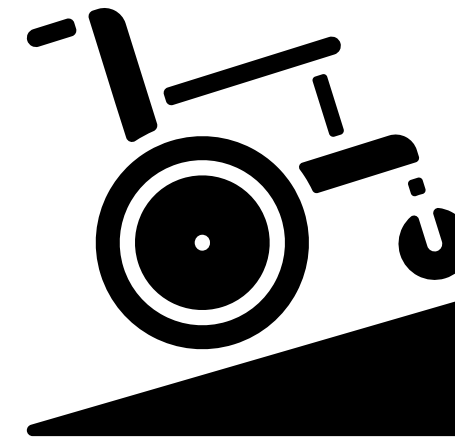
## AT Device Demonstration

See, touch, and try AT devices to help aid you in the decision-making process.



## Short-Term Device Loans

Borrow AT to determine if a device meets your needs before making a purchase.



## Device Reutilization

Receive gently used AT devices and durable medical equipment to use for as long as needed.



## Financing

Purchase your own AT device or equipment with various finance options

# All Activities of AT Act Programs

## State-Level Activities:

Device Demonstrations  
Device Short-Term Loans  
Device Reutilization  
Financing

## State-Leadership Activities:

Information & Assistance  
Training  
Public Awareness  
Technical Assistance



# Services Flow of the AT Act Programs

## Handout in Downloads

### Assistive Technology (AT) Act Services Flow

How do you access information about and acquire assistive technology devices for yourself, family members, or clients to enhance life, work, and play?



Find your local AT Act Program  
<https://www.at3center.net/stateprogram>





# North Dakota AT Act Program Demonstration Center-Fargo



# North Dakota AT Act Program Demonstration Center- Bismarck



# Online Libraries

# Scenarios

# Scenario 1

- 95-year-old woman at least 300 miles from nearest caregiver
- Mobility issues-uses a walker
- Can get up/downstairs but is a significant fall risk
- Still lives in her four-level home
- Mild cognitive impairment, depending on the day
- Great hearing, vision, speech, and fine motor

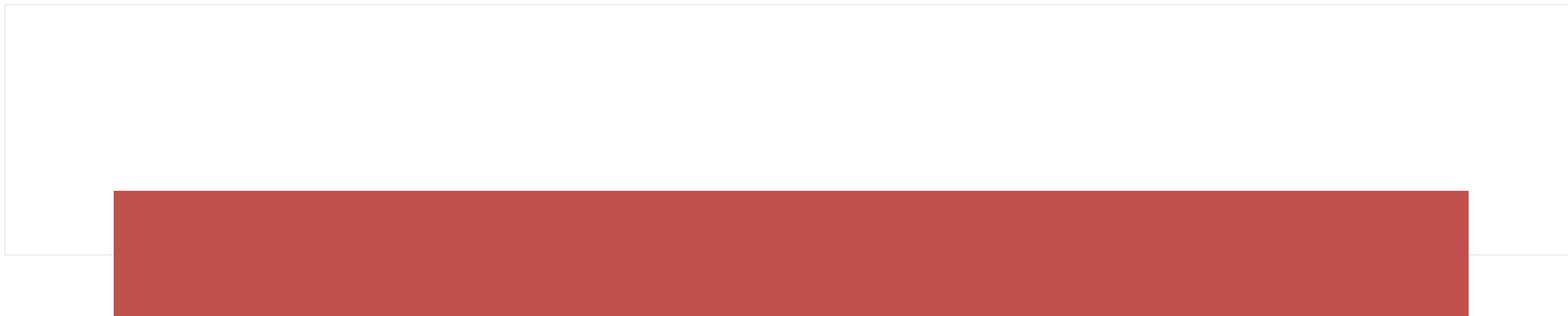


# Questions to Ask for Scenario 1

- What is it that she wants to be able to do?
- What is preventing her from doing that?
- How does she feel about devices that can help her?
- How does she feel about technology in general?
- What is her existing technology and what type of connectivity does she have at home?
- Who are the caregivers if any, what is their proximity and how often can they get there.
- What else should we ask?

# Desired Activities Scenario 1

- Wants to be able to continue to live in home
- Want to go up and down stairs in her home safely and without pain
- Remember to take medications
- Falls prevention
- Fixing meals
- Grocery Shopping
- Bathroom-has walk-in shower-but showerhead is too high
- Paying bills
- Social Connection



# Possible Solutions for Scenario 1

- Stairlift
- Apple watch
- Amazon Echo Show and Dot-reminders, lights, video drop-in & more
- Smart plugs
- Smart Cameras and/or sensors
- Grocery shopping-delivery App and training
- New microwave with sensing tech and auto shutoff
- Meals-on-wheels
- Locked Medication Dispenser
- Finances-
  - Autopay bills
  - All accounts online accessible for caregiver access
- Tray and/or bag for walker-i.e. phone
- Phone-GPS, reminders, social connection
- And more!

# Device Examples for Scenario 1



## Scenario 2

- 88-year-old man with Parkinsons with minimal tremors
- Uses walker-short distances only then needs to sit
- Going to be moving into an apartment in town with his 84-year-old wife
- Significant fall risk
- Some tremors
- Some cognition issues
- Wife currently administering his meds
- Hearing is borderline and speech is still intelligible
- Many adult children and adult grand children in the town for support
- Not averse to technology but needs time to learn

# Questions to Ask - Scenario 2

- What is it that he wants to be able to do?
- What is preventing him from doing that?
- How does he feel about devices that can help him?
- How does he feel about technology in general?
- What is his existing technology and what type of connectivity does he have at home?
- Who are the caregivers if any, what is their proximity and how often can they get there.
- What else should we ask?

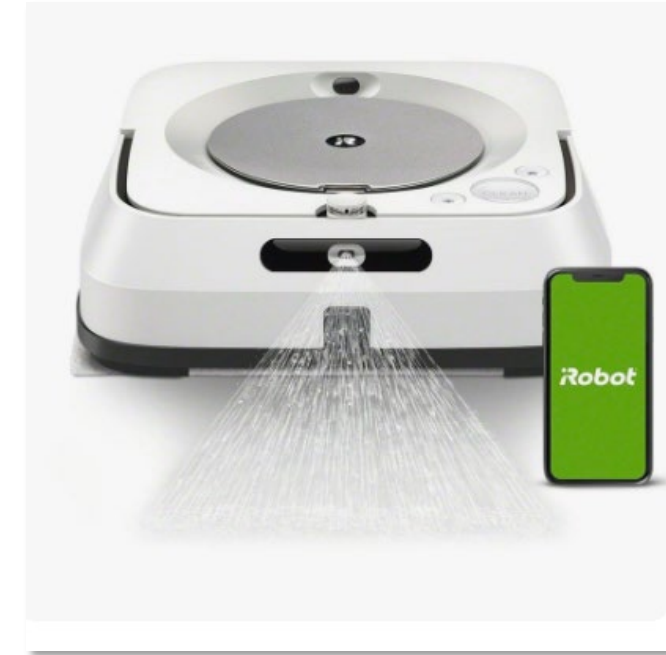
# Desired Activities- Scenario 2

- Live in an apartment as independently as he can with less dependence on his wife
- Want to continue to maintain their rural home
- Wants to be able to go out in the community again for longer walks and do events
- Want to be independent as possible in daily cares
- Wants to help with the meals, shopping, and cleaning
- Wants to manage his own meds or at least take them without his wife's help

# Solutions for Scenario 2

- Smart cameras and lights at rural home
- Walk-in shower, grab bars, shower chair, hand-held shower head
- Toilet frame and raised toilet seat
- Locked medication system with reminders-additional reminders on smartwatch, phone and or Alexa
- Samsung smart watch for a personal alerting system
- Online shopping apps & training
- Dycem for help with food prep
- Weighted & specialized food prep utensils or weighted universal cuff
- Cleaning services, Roomba or other robotic floor cleaners, long handled dusters
- And more!

# Device Examples for Scenario 2



# Scenarios from the Audience: GO!

# What Can We Achieve Together?



From North Dakota Assistive

Every person on the planet will either need assistive technology for themselves or they will walk alongside someone who needs it. The trick is to build AT awareness, so everyone knows about it before they need it, and NO ONE goes without!

This requires a collective effort from all of us who are already familiar with these life-changing solutions!





**assistive technology. everywhere. everyone.**

**Discover your [local AT Act Program.](#)**



# Questions?

Find Your AT Program



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