

Home Smart Home

Tech that supports independent living



New York Alliance for Inclusion & Innovation 2026

Introductions

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Agenda

- 1. Overview of YAI's Center for Innovation and Engagement**
- 2. Why An Independent Living Lab?**
- 3. Goals for the Smart Apartment**
- 4. Smart Home Technology Showcase**

Center for Innovation and Engagement

- Person-centered approach to support people with I/DD and their support networks to:
 - **Discover:** Learn how tech can improve independence, communication, and daily living
 - **Adapt:** Create personalized technology plans tailored to individual needs and goals
 - **Thrive:** Ongoing support from Person-Centered Technology Specialists
- We champion assistive tech that fits the person—not the other way around

Role of Person-Centered Technology Specialist

- Incorporates technology with person focused planning
- Acts as a consultant based on the needs and desires of people we support
- Researches innovative tech to support independence and to help people reach their goals
- Works with the people we support and their circle of support to use assistive and enabling technology
- Provides ongoing technical support

Supportive Res Hab Transformation Grant

- Tech assessments
- Created tech plans
- Need for space where tech could be explored
- Tech for independence – tech and teaching

Independent Living Lab

- Supportive Apartment try-out site
- Specialized “smart-home” respite
- Demonstration space for technology and independent living
- Space for meetings, classes, events and training for people supported

Barriers to Independence

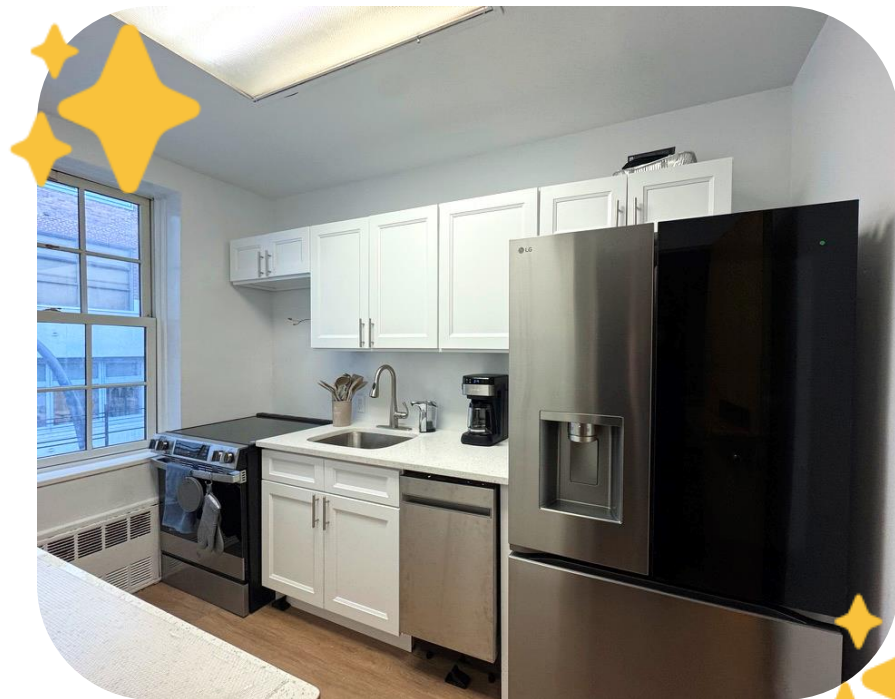
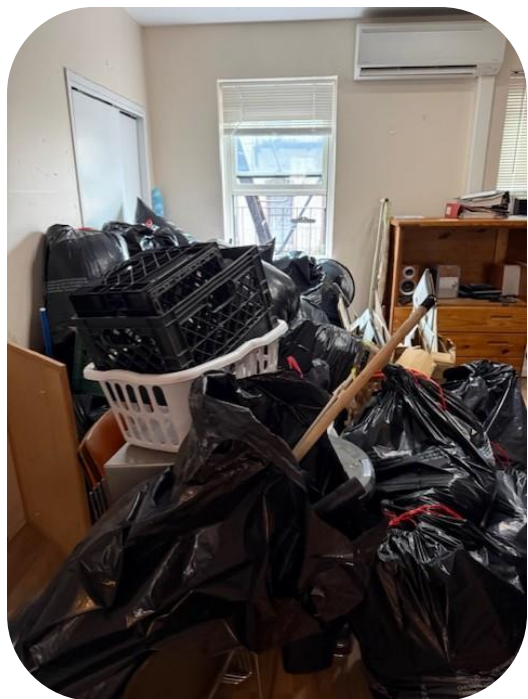
- Fears about taking the next step to more independent living
- Lack of opportunities to assess and train people in an actual apartment
- Barriers to adoption; Limited exposure to and awareness of incorporating technology into a person's services and life plan

Apartment Setting



- Building also contains 1 supportive apartment for a married couple
- Unit is a two-bedroom two-story apartment
- A block from Chelsea Market, next to a subway stop and a city park

Grant-Funded Site Upgrades



- Full Kitchen Remodel
- Appliances
- Flooring
- LED Lighting

- Furniture
- Professional Cleaning
- Technology
- Art from iHope and YAI Arts

Supportive Apartment Try-Out

- Secure, immersive environment that boosts independence
 - For people living in YAI 24-hour Supervised homes
 - For people in YAI Supportive Apartments who need more support
- Will develop procedures for
 - Assessment
 - Length of Stays, Try-Out Activities
 - Monitoring
 - Weaning Support

Long-term Goals

- Tech Demonstration Site
- High-tech Gathering Space
- Staff Training Site

Tech Demonstration Site

- Assessment space for CIE team
- Demonstration of items in intended spaces
- Training Lab for staff who will support people with I/DD using tech
- Collaboration with other agencies and OPWDD

High-Tech Gathering Space

- Meetings (Self-Advocacy Group)
- Skills Training
 - Independent Living Skills Classes
 - Cooking Skills Groups
 - Therapeutic Social Groups
- Events
- Training

Cooking



Brava Oven

- Common Barriers:
 - Limited confidence using oven unsupervised
 - Difficulty gauging when things are done cooking
 - Difficulty with multi-step recipes
- How Brava Oven Helps:
 - Ability for helper to remotely monitor and control oven from app
 - Step-by-step instructions for assembling recipes
 - Easy to select pre-programmed frozen foods from device
 - Can cook multiple things simultaneously that require different temperatures



Anthony Using the Brava



Instant Pot Duo Plus

- Common Barriers:
 - Multi-step cooking tasks
 - Timing and monitoring food
 - Stove and oven safety risks
- How Instant Pot Helps:
 - Preset, one-touch programs
 - Automatic timing & pressure control
 - Enclosed heating, auto shut-off



Totchop

- Common Barriers:
 - Fine motor control for knife use
 - Risk of cuts while chopping
 - Stabilizing food while cutting
- How Totchop Helps:
 - One-handed rocking chopping motion using concave cutting surface
 - Enclosed blade design
 - Sticky feet for countertop stability



Cooking Tool Suite



Smart Scale



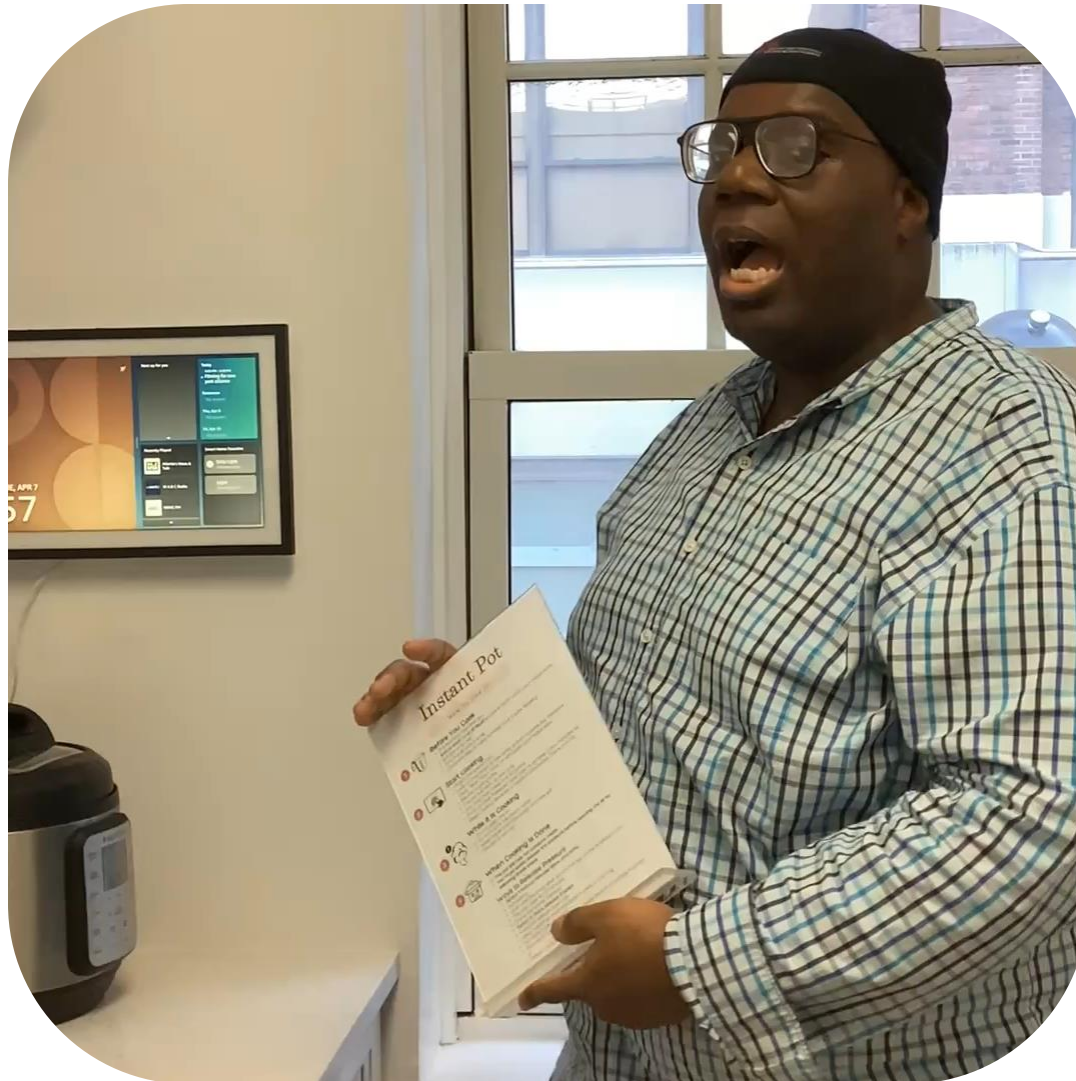
Electric Can Opener



Smart Coffee Maker



Corey in the Kitchen: A Tour



Cleaning

Motion-sensor Faucet and Soap Dispenser

- Common Barriers:
 - Turning handles with wet or soapy hands
 - Limited strength to push down on soap dispenser
 - Coordinating water and soap use
 - Soap spills or over-dispensing
- How Motion-sensors Help:
 - Hands-free, sensor-activated water and soap flow
 - Adjustable water temperature preset
 - Pre-measured amount of soap



Shark Matrix Clean Auto-Empty Smart Vacuum

- Common Barriers:
 - Pushing and maneuvering a vacuum
 - Remembering to vacuum regularly
 - Emptying dust bins and debris
- How the Shark Matrix Clean Helps:
 - Self-navigating robotic cleaning
 - Scheduled, automatic operation
 - Auto-empty base with sealed bin



Angry Mama Microwave Cleaner

- Common Barriers:
 - Scrubbing baked-on microwave messes
 - Reaching interior surfaces safely
 - Using harsh or complicated cleaners
- How Angry Mama Helps:
 - Steam-based cleaning method
 - No scrubbing required
 - Uses water and vinegar



Health and Wellness

Pill Drill

- Common Barriers
 - Difficulty remembering when to take medication or if it has already been taken
- How Pill Drill helps
 - Can be integrated to share medication usage and mood with family or staff
 - Bottle scanner for tracking medication usage
 - Provides visual and auditory alerts



Moonbird



- Common Barriers:
 - Difficulty calming down or controlling breathing while stressed
- How Moonbird helps:
 - Tactile breathing guidance
 - Can be used with or without an app (potential for instant start-up)
 - Provides physical biofeedback

Sensory Space



Smart LED Light Strip



Smart Essential Oil Diffuser



Meta Quest VR

Personal Hygiene

LED Shower head with Temperature Display

- Common Barriers:
 - Fear of judging water temperature by feel, potentially leading to burns
 - Sensory issues: water that is too hot or too cold
- How This Showerhead Helps:
 - Built-in temperature display
 - Color-changing LED by temperature range
 - Water-powered (no batteries)



Time Timer Hand Soap Dispenser

- Common Barriers:
 - Knowing how long to wash hands
 - Remembering to wash for a certain length of time
- How Time Timer Helps:
 - Built-in visual countdown timer
 - Soap dispense + timer start together
 - Clear, color-based time display doesn't require reading or number recognition



Sonic Brush V5

- Common Barriers:
 - Consistent brushing motion and pressure
 - Brushing for the recommended length of time
 - Remembering all mouth areas
- How Sonic Brush Helps:
 - Automatic sonic brushing motion
 - Built-in timed brushing cycles
 - Vibration feedback during use



Personal Hygiene Tool Suite



Motion-sensor
Bathroom Faucet

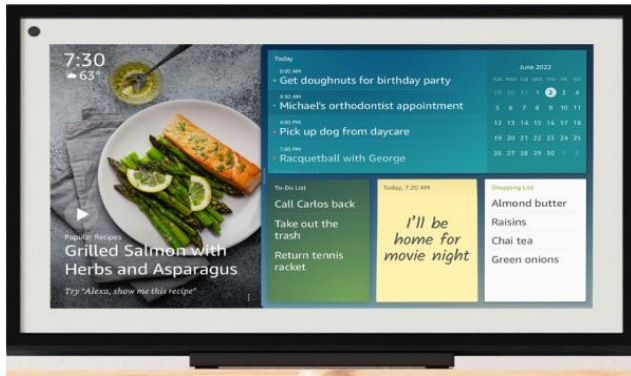


Warm water
bidet



Smart Assistants

Amazon Echo Devices



Common Barriers:

- Following recipes and schedules
- Accessing information
- Managing multiple home routines

How Echo Devices Help:

Amazon Echo Show (Kitchen)

- Visual recipe guidance and timers
- Voice-activated schedules and reminders
- Hands-free media (radio, TV, videos)

Amazon Echo Dot (Living Room and Bedroom)

- Voice-control for lights, blinds, and devices
- Music and audio
- Checking the weather



Samsung Smart TV with Alexa

- Common barriers:
 - Navigating TV with reading, visual, or motor challenges
- How a smart TV can help:
 - Voice search and control capabilities for finding content, changing volume, switching inputs
 - Casting from a mobile device (an interface which may be clearer and closer)



Meta Glasses



- Common barriers:
 - Not being able to see clearly or read (e.g. signs and menus) while in the community or at home
- How Meta Glasses help:
 - AI assistant for vision support (e.g. object identification, reading text)
 - Can take pictures, answer calls, and listen to music through voice or tactile control
 - Can share perspective remotely

Meta glasses



Skylight Calendar





- Common Barriers:
 - Keeping track of daily schedules
 - Understanding changes to routines
 - Accessing reminders without a device
 - Staying on top of chores
- How Skylight Calendar Helps:
 - Always-on visual daily and weekly schedule
 - Color-coded events and reminders for different housemates
 - Has a daily chore/routine checklist for each person



Plain Language One-Sheets

Instant Pot

How to Use It!

-  **1 Before You Cook**
 - Put food into the inner pot.
 - Add at least 1 cup of liquid** (water or broth, what your recipe says).
 - Put the lid on top.
 - Turn the lid until it locks.
 - Check the steam valve to make sure it says "Sealing."
-  **2 Start Cooking**
 - Plug in the Instant Pot.
 - Look at your recipe to see what button to press, like "Pressure Cook," "Rice," "Slow Cook" or whatever your recipe says.
 - Set the cooking time.
 - The pot will heat up and cook.
 - You may hear noise. This is normal.
 - If you choose "Pressure cook," then it will take a few minutes to begin cooking because it needs to pressurize. This is normal.
-  **3 While It Is Cooking**
 - Do not open the lid.
 - Do not touch the steam valve.
 - Keep hands and face away from the pot.
 - The pot is very hot.
-  **4 When Cooking Is Done**
 - The pot still has hot pressure inside.
 - You must safely release the pressure before opening the lid by following these steps:**

Ways to Release Pressure

 - Option 1: Natural Release (Slow and Safe)**
 - Do nothing.
 - Wait until the small silver pin on the top of the lid drops down.
 - This may take 10-30 minutes.
 - This is the safest method.
 - Option 2: Quick Release (Faster)**
 - A support person may help.
 - Using a spatula, push the steam valve to "Venting."
 - Hot steam will come out.
 - Stay back from the steam and make sure that nothing touches it.
 - When the silver pin drops down, it is safe.

Brava One Oven

How to Use It!

-  **1 Plug In and Wi-Fi**
 - Plug in your Brava and connect it to Wi-Fi.
 - Follow the steps on the screen to login to your account.
-  **2 Choose a Cooking Mode**

Tap the screen to pick a mode:

 - Cook Programs** (recipes already set up)
 - Bake, Air Fry, Reheat, Sear, or Toast**
 - Pro Cook** (you choose the settings)
-  **3 Prep Your Food**
 - Pat meat dry with a paper towel.
 - Add salt or spices.
 - Use food that's cold **but not frozen**.
-  **4 Pick the Right Tray**
 - Metal Tray:** Best for searing and even cooking.
 - Glass Tray:** Good for baking or foods with different cook times.
 - Spread food out** so that it is not piled on top of each other.
-  **5 Use the Sensor**
 - Put the TempSensor into the thickest part of the meat.
 - Push it in all the way** – no metal showing.
 - Place it on the **left side** of the tray.
-  **6 Cooking Tips**
 - Top shelf** is hotter (good for thin foods).
 - Bottom shelf** is better for thick foods.
 - Only one area can heat at a time.
 - Watch the screen – it tells you what to do next!
-  **7 After Cooking**
 - Use oven mitts:** trays and food will be hot!
 - Let the oven cool down.
 - Wipe the trays and oven with a damp cloth.

What's next?

- Marketing space
- Evaluation
- Continuing to add tech
- Staff training sessions

Email us at:
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Full Tech List

Kitchen

- Brava Oven
- Induction Stovetop
- Motion Sensor Faucet
- Wifi-enabled Coffee Machine
- Instant Pot Duo Plus
- Electric Can Opener
- Smart Refrigerator
- Angry Mama Microwave Cleaner

Low Tech

- Grabber Tool
- Sock Aid

Bathrooms

- Bidets
- Smart Toothbrushes
- Touchless faucets
- LED Shower Heads
- Time Timer Soap Dispenser

General

- Smart Assistants (voice control and reminders)
- Motion-Sensor lighting
- Robot Vacuum
- Smart Blinds
- Pill Drill (med tracking)
- Sensory Space
- iPad and Android Tablets, VR headset
- Ring Doorbell