

Smart Home Technology for Innovative Living ^[1]



At the Coleman Institute for Cognitive Disabilities, we are committed to advancing technology solutions that improve the quality of life for people with cognitive disabilities. In 2024, we partnered with the state of Colorado on a groundbreaking project to introduce smart home technology in four group homes across the state. This initiative aims to enhance independence, safety, and well-being for residents with intellectual and developmental disabilities (IDD).

Our Smart Home Technology Solutions

We are implementing a variety of smart devices that offer practical benefits for individuals with disabilities. These include:

- **Smart Hubs:** Acting as the control center for all connected devices, smart hubs enable residents or caregivers to manage multiple devices from a single interface. This central control makes it easier for individuals with cognitive disabilities to operate lights, appliances, and other smart home features using simplified commands.
- **Smart Speakers:** Equipped with voice-activated assistants, these devices allow

residents to control their environment, play music, set reminders, and access hands-free information. For individuals with limited mobility or cognitive impairments, smart speakers can provide greater independence and reduce reliance on caregivers for simple tasks.

- **Smart Plugs:** These adaptable outlets allow standard devices to be controlled remotely. For example, residents can safely manage appliances like fans, heaters, or kitchen tools through voice commands or mobile apps, improving safety and convenience.
- **Smart Lamps:** With features such as dimmable lighting, color customization, and voice control, smart lamps help create comfortable environments. Residents can adjust lighting to support their routines, reduce anxiety, and improve sleep quality.
- **Smart TVs:** Designed with user-friendly interfaces and voice control options, smart TVs provide accessible entertainment and social connection. They can be used to access content, join video calls, or display reminders and schedules to help residents stay organized.
- **Motion Sensors:** These devices improve safety by detecting movement and triggering alerts. They can notify caregivers of unusual activity patterns, such as residents wandering at night, helping to prevent accidents and ensure prompt support.
- **Button Switches:** These large, customizable switches provide an accessible way to control devices like lights or appliances. For residents who struggle with traditional switches or remotes, these intuitive controls offer a simple and effective solution.

Partnering with the State of Colorado

We are deeply grateful for the opportunity to collaborate with the state of Colorado on this project. By integrating smart home technology into four group homes, we are creating environments that promote greater independence and improved quality of life for residents with IDD. This partnership reflects our commitment to leveraging technology to empower individuals of all abilities.

Through this initiative, we are proud to showcase our expertise in designing and implementing accessible smart home solutions. We look forward to continuing this important work and expanding the positive impact that smart home technology can have on the lives of people with cognitive disabilities.

Please reach out to leslie.emery@cu.edu^[2] if you would like more information about smart home technology.

Groups audience:

Coleman Institute for Cognitive Disabilities

Source URL:<https://www.cu.edu/coleman/resources/high-tech-resources/smart-home-technology-innovative-living>

Links

[1] <https://www.cu.edu/coleman/resources/high-tech-resources/smart-home-technology-innovative-living>

[2] <mailto:leslie.emery@cu.edu>