

Assistiva™

Automatic Healthcare Assistance Device (AHAD)

“Empowering Every Ability.”

Technology

The invention is a versatile healthcare assistance device designed to help individuals with vision, mobility, and speech impairments. It combines robotics, telemetry, advanced sensors, and voice-control features to provide flexible support. By merging multiple assistive functions into one device, it meets the varied needs of the aging population and people with physical, cognitive, and communication challenges. The device aims to improve independence, safety, and quality of life for users in both clinical and home settings.

Market need

The global population is aging quickly, with rising rates of chronic illness, disability, and age-related impairments. Current assistive devices are often specialised and disconnected, whereby separate tools are needed for speech, mobility, and vision impairments, which can be expensive and bulky. Healthcare systems and families both need affordable, integrated solutions that combine multiple assistive functions into one device. A device that offers multi-functional support can increase user adoption, lower healthcare costs, and improve patient outcomes.



Features

- Robotics integration for assisted movement and mobility support.
- Voice recognition and speech synthesis to enable communication.
- Smart sensors for environmental awareness (obstacle detection, fall alerts, navigation assistance).
- Telemetry and remote monitoring to track user activity, health data, and safety.
- Customisable interface adaptable to user needs and disability severity.
- Portable and user-friendly design for use across different care settings.



Benefits

- Empowers users to perform daily activities with minimal assistance.
- Reduces risks of accidents, falls, and health emergencies.
- Combines multiple assistive devices into one, lowering overall expense.
- Suitable for both institutional healthcare settings and personal use.
- Enables caregivers and healthcare professionals to monitor and assist patients more effectively.
- Improves user confidence, dignity, and communication abilities.



Industry

Manufacturing
Healthcare

Potential applications

- Assists elderly or disabled individuals with mobility, communication, and daily tasks.
- Provides multi-functional patient assistance for nursing staff and caregivers.
- Support physical therapy, mobility training, and cognitive exercises.
- Tracks health, activity, and safety data for telemedicine applications.
- Aids people with vision, speech, or mobility impairments in independent living.
- Enhance safety for high-risk patients in homes or care facilities.

Creator

Maria M Jakovljevic

Stage of development

Early stage

Intellectual property

Patent Protection

Desired relationship

Co-development, Investors