

Comprehensive Smart Technology Resource Guide for Therapists

Monitoring Daily Activities

Technology Type	Function	Example Applications	Resources/Providers
Sensors	Tracks daily and instrumental activities of living (ADLs/IADLs)	Monitoring cooking, cleaning, personal hygiene	Vayyar Care
Smart Home Devices	Automates and monitors household activities	Controlling lights, thermostats, and appliances	Google Nest, Amazon Echo
Wearable Health Monitors	Tracks health metrics and activities	Monitoring heart rate, steps, and sleep patterns	Fitbit , Apple Watch
Remote Monitoring Tools	Provides real-time health data to caregivers and professionals	Monitoring medication adherence, emergency alerts	GrandCare , Electronic Caregiver , CareLink360

Monitoring Abnormal Behaviors

Technology Type	Function	Example Applications	Resources/Providers
Activity Recognition Sensors	Identifies deviations from normal activity patterns	Detecting unusual nighttime activity, prolonged inactivity	CarePredict
Cognitive Monitoring	Monitors cognitive health through activity patterns	Identifying early signs of dementia through changes in routine	Cognifit
Behavioral Analysis	Uses algorithms to analyze behavior	Detecting signs of depression or anxiety	EllieGrid

Monitoring Cognitive Impairment

Technology Type	Function	Example Applications	Resources/Providers
Cognitive Assistance Tools	Supports memory and daily tasks	Providing reminders for medication and appointments	CareZone , Any.Do , ToDoIts
In-home AI Assistants	Assists with daily living and safety	Offering cognitive exercises, daily schedules	Amazon Echo , Carelink360
Health Monitoring Systems	Tracks health indicators relevant to cognitive health	Monitoring changes in gait, sleep, and daily activities	WellSky , QMedic , Electronic Caregiver

Monitoring Falls

Technology Type	Function	Example Applications	Resources/Providers
Vision-based Fall Detection	Uses cameras to detect falls	Capturing fall incidents through video monitoring	Wyze Cam
Non-vision-based Fall Detection	Uses sensors to detect falls without cameras	Monitoring falls using radar, pressure sensors	Vayyar Walabot Home , Nobi Fall Lamp
Wearable Fall Detectors	Alerts caregivers of falls	Detecting falls through wearable devices	Lively Mobile Plus , Apple Watch

Indoor Person Positioning

Technology Type	Function	Example Applications	Resources/Providers
GPS and Location Tracking	Provides real-time location within the home	Tracking indoor positioning for emergency response	Tile , SmartThings
Smart Flooring Systems	Monitors movement through pressure sensors in floors	Detecting movement patterns, fall detection	MariCare , Tarkett

Indoor Navigation Systems	Guides low vision or blind residents through the home	Assisting navigation for those with visual impairments	Wayfindr , Google Maps
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Monitoring Sleep Quality

Technology Type	Function	Example Applications	Resources/Providers
Sleep Monitors	Tracks sleep patterns and disturbances	Monitoring sleep quality, detecting sleep apnea	Beddit , Sleep Number
Smart Mattresses	Provides sleep analysis through embedded sensors	Offering insights into sleep quality, posture	Eight Sleep , Sleep Number
Wearable Sleep Trackers	Monitors sleep cycles through wearables	Tracking REM, deep sleep stages	Oura Ring , Fitbit

AI-Powered Analytics Tools

Technology Type	Function	Example Applications	Resources/Providers
Predictive Analytics	Uses AI to predict health trends and needs	Predicting falls, health deterioration	CarePredict
Behavioral Analysis	Analyzes behavioral data to provide insights	Identifying patterns, predicting changes	EllieGrid
Health Monitoring Systems	Provides comprehensive health data analysis	Integrating multiple health metrics	Electronic Caregiver

Quick Tips

- **Installation:** Ensure proper installation and setup of each device for accurate monitoring.
- **Training:** Provide training sessions for both patients and caregivers to maximize the effectiveness of the technology.
- **Regular Updates:** Keep all software and apps updated to ensure the best performance and security.

- **Troubleshooting:** Have a troubleshooting guide handy for common issues that may arise with each technology.

Resources and Further Reading

- [Vayyar Care](#)
- Google Nest
- [Amazon Echo](#)
- [Fitbit](#)
- [GrandCare](#)
- [CarePredict](#)
- Wyze Cam
- [Tile](#)
- [Beddit](#)
- [Oura Ring](#)
- [Electronic Caregiver](#)
- [WellSky](#)
- [EllieGrid](#)
- [SmartThings](#)
- [Wayfindr](#)
- [Sleep Number](#)
- [Eight Sleep](#)
- [Lively Mobile Plus](#)
- [Apple Watch](#)

Sensor Type	Environment	Function	Characteristics
Magnetic Switch	Ambient	Detects the opening of doors, windows, etc.	Binary-status, easy installation
Temperature Sensor	Ambient	Detects the temperature of the ambient environment	Continuous data
Photosensor	Ambient	Detects illuminance	Continuous data
Pressure Pad Sensor	Ambient	Measures continuous pressure at any surface	Continuous data
Water Flow Sensor	Ambient	Measures the flow of water in taps or showers	Continuous data

Infrared Motion Sensor	Ambient	Detects motion in the coverage area	Binary-status
Force Sensor	Ambient	Detects movement and falls	Continuous data
Smoke Sensor	Ambient	Detects smoke in the environment	Binary-status
Biosensor	Wearable	Monitors vital signs and requires professional adjustment	Continuous data, requires professional adjustment

Comprehensive Guide for Therapists: Smart and Age Technology Resources

Monitoring Daily Activities

Category	Technology	Description	Website
ADLs & IADLs	CarePredict	Monitors ADLs and IADLs through wearables	CarePredict
	Reminder Apps	Provides reminders for medication and appointments	CareZone , Any.Do , ToDoIts
	WellSky	Tracks health indicators relevant to cognitive health	WellSky
	Generation Connect	Connects families and caregivers for better care coordination	Generation Connect
	LewyCompass	Provides tools and resources for managing Lewy body dementia	LewyCompass

Monitoring Abnormal Behaviors

Category	Technology	Description	Website
Activity Recognition	EllieGrid	Uses algorithms to analyze behavior	EllieGrid

	Cognifit	Identifies deviations from normal activity patterns	Cognifit
Cognitive Monitoring	Cognifit	Monitors cognitive health through activity patterns	Cognifit
	Generation Connect	Connects families and caregivers for better care coordination	Generation Connect
Behavioral Analysis	BioBeats or WoeBots	Detects signs of depression or anxiety	BioBeats , WoeBots

Monitoring Cognitive Impairment

Category	Technology	Description	Website
Cognitive Assistance Tools	Amazon Echo	Assists with daily living and safety	Amazon Echo
	Reminders	Provides reminders for medication and appointments	CareZone , Any.Do , ToDoIt
In-home AI Assistants	Amazon Echo	Offers cognitive exercises, daily schedules	Amazon Echo
Health Monitoring Systems	WellSky	Tracks health indicators relevant to cognitive health	WellSky
	BrioCare	Supports memory and daily tasks	BrioCare

Monitoring Falls

Category	Technology	Description	Website
Vision-based Fall Detection	Wyze Cam	Captures fall incidents through video monitoring	Wyze Cam
Non-vision-based Fall Detection	Fall Detection	Monitors falls using radar, pressure sensors	Vayyar Walabot Home , Nobi Fall Lamp

Wearable Fall Detectors	Lively Mobile Plus	Detects falls through wearable devices	Lively Mobile Plus
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Indoor Person Positioning

Category	Technology	Description	Website
GPS and Location Tracking	Tile	Provides real-time location within the home	Tile
Smart Flooring Systems	SolePower	Detects movement patterns, fall detection	SolePower
	Future Shape	Tracks movement through pressure sensors in floors	Future Shape
Indoor Navigation Systems	Wayfindr	Guides residents through the home	Wayfindr
	Scan Analytics	Smart flooring system for movement detection	Scan Analytics

Monitoring Sleep Quality

Category	Technology	Description	Website
Sleep Monitors	Beddit	Tracks sleep patterns and disturbances	Beddit
Smart Mattresses	Eight Sleep	Offers insights into sleep quality, posture	Eight Sleep
Wearable Sleep Trackers	Oura Ring	Monitors sleep cycles through wearables	Oura Ring

Smart Home Devices

Category	Technology	Description	Website
Remote Monitoring Tools	TechLeft	Provides remote monitoring and health tracking	TechLeft
	CareLink 360	Dynamic care plans for caregivers	CareLink 360

Comprehensive Care Systems	Smart Caregiver Solutions	Comprehensive monitoring for elder care	Smart Caregiver Solutions
	Electronic Caregiver	Includes Addison Care for comprehensive elder care	Electronic Caregiver
	Caregiver Smart Solutions	Provides tools for monitoring and supporting caregivers	Caregiver Smart Solutions

Additional Resources

Category	Technology	Description	Website
Cognitive Health Tools	MapHabit	Provides tools for managing Alzheimer's and related dementias	MapHabit
Fall Detection Systems	Sami Alert	Provides fall detection and emergency alert systems	Sami Alert
Smart Care Systems	Nobi	Smart lamps for fall detection and assistance	Nobi
Health Monitoring Tools	Insight Timer	Meditation and sleep aid	Insight Timer
Medication Management	Medisafe	Medication management and reminders	Medisafe
	MyMeds App	Medication management tool	MyMeds App
Care Coordination	CareZone	Comprehensive care coordination	CareZone
Home Evaluation Tools	Home for Life	Home evaluation software for healthcare	Home for Life Design
Social Connectivity	Addio	Connects seniors with loved ones through easy-to-use interface	Addio
	Redapple	Provides tools for senior engagement and activity tracking	Redapple
Wearable Alert Systems	Trelawear	Stylish wearable medical alert devices	Trelawear

Health Behavior Monitoring	WellSky	Monitors and supports health behaviors	WellSky
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