

Digitally Connect Caregivers and Family to Older Adult Well-Being

Personal care for a loved one can be one of the most difficult decisions many families face. However, concerns can also be compounded when the care of older adults isn't a one-time decision. Older adults typically progress through a spectrum of care as they age from independent living to in-home care to assisted living.

Smart devices in the Internet of Things (IoT) can be an unobtrusive lifeline between senior adults and their children and caregivers. No matter where seniors are on the care spectrum, remote monitoring solutions can help their loved ones and care providers know if they need attention or added care.

Read how a system of IoT sensors from us can give children and caregivers of older adults a better way to know the status of their parents and patients and environmental conditions 24/7.

Spoiler alert: The ROI is significant by managing home temperatures, detecting motion and occupancy, avoiding water leak damage, responding to falls, and optimizing older adult care. It's all easily managed using an online dashboard on a mobile device or computer. Plus, alerts via email, text, or call from a wide variety of fast-install IoT sensors and meters.

Challenges

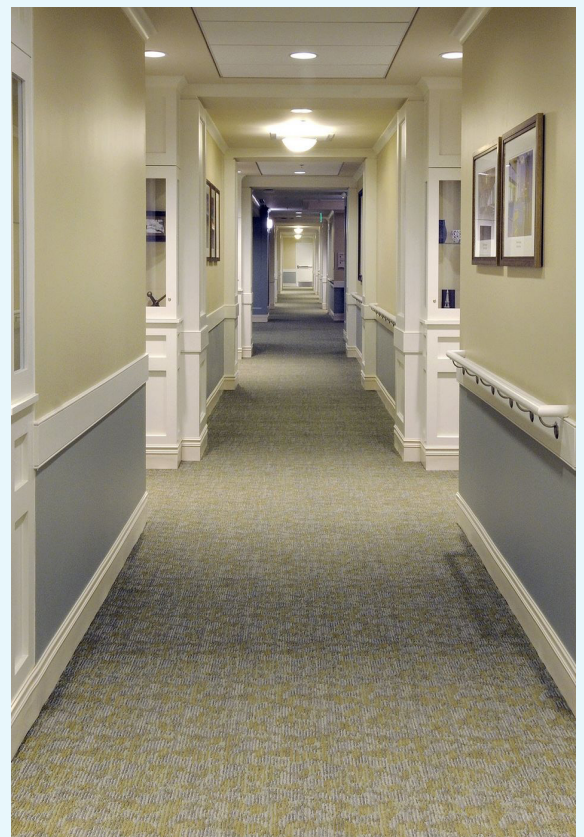
A partner—an original equipment manufacturer (OEM)—wanted to develop a solution using Wireless Sensors and 4G LTE Cellular Gateways. The goal was to offer children and care providers of older adults a remote monitoring solution. In addition, they needed the solution to avoid getting in the way of a senior adult's daily life and be easy for their children or care providers to set up and operate.

Overall, the OEM needed a solution that could easily monitor older adult in-home activities, help improve their quality of life, and be a fraction of the cost of an assisted living facility. Most senior adults prefer to live an independent lifestyle despite aging and related health issues. So the company decided to focus mainly on five common life maintenance concerns children and caregivers have about their parents and patients.

After some research, the five concerns the company decided to help with are:

- Heating, ventilation, and air conditioning (HVAC) performance
- Non-video motion and door and window monitoring
- Medication storage and use tracking
- Alerts about falls and other assistance requests
- Water leaks from sprinkling systems, water heaters, and plumbing

The manufacturer soon found that Remote Monitoring Solutions are perfect for integrating into custom-built solutions for the care of older adults.



Solution

The OEM company integrated Wireless Sensors in a remote monitoring offering. The solution included Wireless Temperature, Water Detection, Open-Closed, Motion and Occupancy, Push Button, and a custom pillbox sensor. The solution is an effective, affordable means of remotely monitoring senior adult activities, routines, and movement.

Adult children and caregivers can self-install:

- Temperature Sensors in various rooms of homes to monitor HVAC system performance, indoor climate conditions, and older adult comfort
- Open-Closed Sensors on doors and windows and Motion and Occupancy Sensors strategically placed to monitor in-home movement and entry and exit
- Button Press Sensors for older adults to send alerts and custom pillbox sensors to ensure medication is taken on time
- Wireless Water Detection Sensors—Water Rope and Water Detection Puck—to monitor for leaks from water heaters, sprinkling systems, and in bathrooms, laundry rooms, and kitchens
- The Wireless Sensor Management and Remote Monitoring Software on adult children and caregiver smartphones, tablets, and computers
- Gateways in older adult homes to protect and communicate data sent from every Wireless Sensor in the custom remote monitoring system

The Sensors sent data wirelessly to Wireless Gateways in each home. Gateways then sent aggregated sensor data to the OEM's version of the software. Children and caregivers can upload a graphic showing a home's layout of the monitored areas using the white-label software.

This allowed them to drag and drop sensor tags onto the design or map with live data. Then, they could see the performance of the home's plumbing, doors, HVAC systems, and more from an aerial view. Children and caregivers of older adults set up notifications to alert them if readings or assessments fell outside of set ranges and signified any potential issues, allowing them to respond immediately.

Results

In millions of instances, older parents are still active and capable of taking care of themselves through the majority of their later years. However, adult children want the peace of mind knowing important information like:

- When their older parents woke up
- When they left and returned home
- If a stove, space heater, or oven was left on
- If a window or door was left open
- When medicine was taken

The customized solution answers all of these concerns and many more while allowing older adults dignity and freedom. For the OEM, we made it easy to realize an immediate ROI. The company can offer a complete and reliable solution without spending time and money on development costs. As a result, they produced an entire remote monitoring product portfolio with a privately labeled online monitoring system. They entered the market within two months of their initial business idea.

Using Remote Monitoring Solutions, the OEM can:

- Offer a simple yet comprehensive wireless monitoring solution for older adult care.
- Privately brand and sell IoT products and services as their own.
- Expand their offering with other Wireless Sensors, Gateways, and Accessories.

ROI: A couple of months after the company's idea of providing a comprehensive older adult remote monitoring solution, the OEM started selling it. The fast go-to-market ability gave them the momentum they needed to deliver on customer preorders and meet growing market demand.

Remote Monitoring Delivers Peace of Mind When Caring for Seniors



1

Temperature Sensors

Monitor room and HVAC systems' fluctuating environmental conditions to keep older adults comfortable and safe. The Wireless Standard Temperature Sensor can be tailored to a variety of specific application needs.

2

Water Detection Sensors

An Wireless Water Detection Puck Sensor is ideal around toilets, sinks, boilers, and water heaters. Place an Wireless Water Rope Sensor along walkways, walls, and pipes to detect water and help prevent damage from leaks.

3

Motion / Occupancy Sensors

Know where an older parent is in their home immediately with an Motion Detection Sensor. Monitor movement in virtually any room, entryway, or area in and around homes using passive infrared technology.

4

Button Press Sensors

Give older adults a critical sensor to use in an emergency or when they need help. They can push an on-sensor button to trigger an alert via text, email, or call and see the on-unit LED light up, letting them know help is on its way.

5

Open / Closed Sensors

Maintain safety in and around a home by monitoring doors and windows. Wireless Open-Closed Sensors use a switch and trigger magnet to detect status. Be alerted when the status changes from a threshold in the software.

08/2021

