neural network

face recognition

hyperbolic function layer

x_1

x_2 input

x_3

x_4

gender

y_i

personal id

Ensuring the safety of Alzheimer's and dementia patients through **IoT-driven tracking technology**

SENSORS   **GATEWAYS**

CONNECTIVITY   **PLATFORM**

EXECUTIVE SUMMARY

The owner of several senior care and assisted living facilities in the Northeast was looking for a better way to address a frequent problem: the tendency of patients with memory-related issues to wander. Several recent incidents had raised red flags among the nursing staff, who were concerned about individuals leaving the facility altogether.

Challenges

Wandering is a common symptom of Alzheimer's and dementia even at the early stages (60% of Alzheimer's patients will wander off and become lost at some point). These diseases kill brain cells and destroy people's memories, most notably short-term recall. Patients forget the last thing they did, so their first impulse is to stand and start moving with the intention of doing something. This is compounded by the fact that individuals with dementia are easily disoriented and become confused in crowded or unknown situations, and they have a strong tendency to want to escape.

At the recommendation of an Ingram Micro reseller, the company implemented an IoT-driven patient tracking system to prevent patients from wandering outside controlled areas.

The solution

The patient tracking system combines facial recognition, GPS location tracking technology and surveillance cameras. Built-in risk mitigation with automated notifications, risk alerts and visual cues help ensure that patients can't wander past safe zones.

With the system doing the patient monitoring—and sending warnings when patients stray—the nursing staff can devote more time and resources to caring for the residents. And with surveillance cameras helping to ensure patients aren't being abused, neglected or inflicting self-harm, the liability associated with patient safety is reduced significantly.

AT A GLANCE

Wandering is a common problem among elderly patients with Alzheimer's disease or other types of dementia. An IoT-enabled patient tracking system recently implemented by a chain of senior care facilities in the Northeast keeps patients from wandering outside controlled areas.

INGRAM MICRO IoT

With the system doing the patient monitoring—and sending warnings when patients stray—the nursing staff can devote more time and resources to caring for the residents.

Solution components

The tracking solution is comprised of:

- Sensors
- Gateways
- Connectivity
- Video cameras
- Video recorder
- Video hard drives
- Cloud
- Analytics

OUTCOMES

As a result of implementing the patient monitoring equipment in all of its facilities, the company believes it will be able to reduce patient safety issues significantly.

Staff morale has already improved substantially, and families of residents have expressed their appreciation.

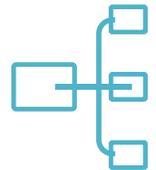**To learn more about the tracking solutions Ingram Micro has to offer your healthcare customers, visit IoT marketplace.**

If you have a customer who's interested in a patient tracking solution right now, contact our IoT experts.

SENSORS

GATEWAYS

CONNECTIVITY

PLATFORM

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DETECTING...

INGRAM MICRO® IoT