

CASE STUDY

Avoiding Residential Care Through Insight into Daily Routines

Using Andi to support independence for a person living with Primary Progressive Aphasia

At a Glance

Technology used

Andi Hub, environmental sensors, smart plugs and Pacsana activity bracelet.

Focus

Understanding daily routines and activity patterns for a person living independently with PPA.

Outcome

Objective insight enabled professionals and family members to confidently support the individual to continue living safely at home rather than moving into residential care.

Background

A 56-year-old individual lives independently at home with Primary Progressive Aphasia (PPA), a neurological condition that progressively affects a person's ability to communicate.

Due to the progression of the condition, the individual is now non-verbal and receives a care package with three daily visits to support meal preparation and ensure food is cooked safely.

Although the individual's family provides regular support, concerns about their safety at home had been increasing. Family members felt that residential care might be the safest option.

However, the Occupational Therapist supporting the individual believed they may still be able to live safely at home, provided there was better insight into their daily routines and activity patterns.

To support this, an Andi hub and connected sensors were installed to provide objective insight into activity within the home.



Initial Monitoring Setup

To understand the individual's daily routines and activity patterns, a number of unobtrusive sensors were installed within the home.

- Front door contact to identify when the individual enters or leaves the home
- Hallway motion sensor to track movement through the centre of the property
- Bedroom motion sensor to understand sleep and night time activity
- Kitchen motion sensor to indicate food and drink preparation activity
- Bathroom motion sensor to provide insight into personal care routines

This setup created a clear overview of activity patterns within the home while remaining unobtrusive for the individual.

Early Insights

Within the first 24 hours, the system recorded 34 bathroom visits between 7am and the review time.

Initially this raised concerns about potential health or behavioural issues.

However, after reviewing the information with the family, it was discovered that a bathroom leak had occurred that day and the increased activity was linked to attempts to clean up the water. This provided an important reminder that activity data must always be interpreted alongside real world context from families and care teams.

Understanding Daily Activity

Over the following weeks, the OT used the activity data to better understand the individual's daily routine.

Insights included:

- Night time door activity showing the front door opening briefly during the early hours, with sensors confirming the individual remained safely inside the home
- Independent outings identified when the front door opened shortly before scheduled care visits
- On one occasion carers reported the individual was not at home, but sensor data confirmed they had left around 30 minutes earlier

These insights helped the OT build a clearer picture of the individual's daily routine and provided reassurance that they were continuing to manage many aspects of daily life independently.

Exploring Additional Questions

Family members had concerns that food supplies were being used quickly, yet the individual was not gaining weight.

To explore this further, the monitoring setup was expanded to provide additional insight.

This included:

- Repositioning the bedroom sensor to improve accuracy
- Adding an additional motion sensor in the living room to understand time spent in different areas of the home
- Smart plugs on the kettle and microwave to monitor food and drink preparation
- A Pacsana activity bracelet to track the individual's personal activity levels

Combining environmental sensors with the activity bracelet enabled the care team to cross reference movement within the home with the individual's personal activity, providing a deeper understanding of their daily routine.

Impact

Andi helped professionals move beyond assumptions and make evidence-based decisions about the individual's care.

The insights gathered provided:

- A clearer understanding of the individual's daily routine
- Reassurance for family members
- Objective evidence to support clinical decision making
- Greater confidence in supporting the individual to continue living independently

Rather than moving to residential care based on uncertainty, the evidence provided by Andi showed the individual could continue living safely in their own home with the right level of support.