# AI-Enabled Device Trials to Monitor Elderly Residents' Routines in Scotland



An AI-enabled device is being trialed to assist in monitoring the routines of elderly or vulnerable individuals living alone across 19 households in Glasgow, Dundee, and Buckie in Scotland. The device connects wirelessly to a home's smart meter or conventional electric meter and tracks the usage of high-power electrical items such as kettles, microwaves, and washing machines.

Machine learning algorithms help identify normal usage patterns, sending automated text alerts if there is a deviation from the usual behavior, suggesting that the person might need medical assistance. For example, if a kettle normally used by 8 a.m. remains unused by 9 a.m., the system sends a text alert to the householder. If unresponded, an alert is forwarded to nominated contacts like family, neighbors, or carers.

The device, developed by a consortium including Censis, University of Edinburgh, Mydex CIC, Carebuilder, and Blackwood Homes, processes all data onsite through a hub process algorithm, avoiding centralized data handling.

In one instance, a user named Evie, aged in her 80s, was aided when she fell unconscious at her home in Buckie. The device generated an alert when her routine dinner activities were missed, prompting her neighbor to check on her and call an ambulance. Evie recovered after an angina attack was promptly addressed.

Stephen Milne, director of strategic projects at Censis, emphasized that the project aims to repurpose energy data to support healthy aging and social care. The trials are expected to lead to a commercial deployment of the technology pending successful results and partnerships.