

Evaluating the Use of Wearable Technology to Enable Vulnerable People to Continue Living Safely in their Own Homes

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Context and Approach:

My Bevan Commission Fellowship has focused on evaluating the role of wearable technology in supporting vulnerable individuals to live safely and independently in their own homes. The core objectives have been to understand the acceptability, usability, and potential for scale and spread of such technology within health and care settings.

Initially embedded within a UKRI-funded Knowledge Transfer Partnership (KTP), I worked as a Research Associate liaising between Swansea University and CPR Global Tech Ltd. (a Swansea-based SME) to deliver a full evaluation of the Guardian III smart alarm watch. This collaboration provided a platform to examine both the technological and cultural barriers to adoption within care systems.



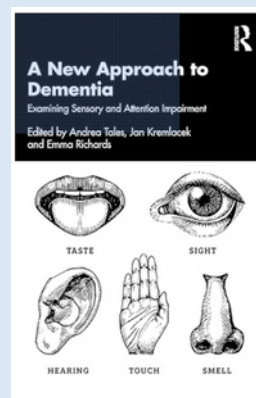
Progress to date:

Research :

Since completing the UKRI-funded Knowledge Transfer Partnership in January 2025, I have secured further funding through the prestigious UKRI Analysis for Innovators (A4I) programme. This has enabled a new collaboration with the National Physical Laboratory (the UK's leading measurement laboratory) to explore predictive analytics using wearable technology data to help identify risks such as falls. This marks a shift from evaluation to innovation and supporting the prudent healthcare agenda.

During this fellowship I have collaborated in publishing three book chapters in an under-researched area examining the sensory and perceptual impairments related to dementia: A New Approach to Dementia (<https://doi.org/10.4324/9781003464136>).

This includes one chapter as lead author on Environmental design and SMART technology for supporting people living with dementia and sensory changes <https://doi.org/10.4324/9781003464136-10>.



Leadership:

I have continued to coordinate grant applications such as UKRI Impact Acceleration and to foster further cross-sector partnerships between industry, academia and health and social care.

Education/teaching:

I contributed to the MSc Innovation in Health and Care programme, delivering several masterclasses at Swansea University on the challenges of scaling digital health solutions.

Future Activity:

As my Bevan Fellowship ends, I have started a new role as Programme Manager at NHS Wales, Performance and Improvement (hosted by Public Health Wales) supporting the implementation of the Strategic Plan for Mental Health. I'm applying the leadership and transformation skills developed during the Fellowship to manage workstreams focused on a stepped care approach for early and equitable access to mental health support. My priorities include enhancing the digital offer and amplifying the voices of older people and carers. I aim to make a strong contribution during this first phase of implementation.

Reflections:

During my Bevan Fellowship, my project has expanded from evaluating a single digital intervention to contributing to system-wide innovation. I've helped launch a new Bevan Exemplar involving an evaluation of the Guardian device in three health boards (Enhancing safety and independence for frail and dementia patients with personal alarm watches, Cohort 9) and established links with a Community of Practice in Delivering Inclusive Services in a Rural Area (Bevan Fellows, Cohort 2). Key enablers have been cross-sector collaboration and support from the Bevan network, while barriers include the complexity of scaling digital solutions and ensuring inclusive implementation. My objectives have shifted towards a stronger focus on implementation, leadership, and digital inclusion.

