

PhD Opportunity

Dementia and mental health: the use of artificial intelligence to support people living with dementia and/or care partners in rural areas

Supervisory Team

Director of Studies: Dr Shirley Evans

Supervisors: Dr Chris Bowers

Advisors: Researchers from the Rural Mental Health Research Unit (Thrive)

Research Groups:

[Association for Dementia Studies](#)

[Digital Innovation Research Group](#)

[Rural Mental Health Research Unit \(Thrive\)](#)

There are currently around 982,000 people with dementia in the UK with the number expected to rise to 1.4 million by 2040. With the number of people over 65 years old set to grow by around 50% in rural areas by 2039 (All Party Action Group on Dementia, 2023) a significant proportion will be affected by dementia.

There are a number of challenges in terms of accessing health and social care in rural areas largely relating to transport links and access to the internet for example. There is also an increased risk of dementia due to social isolation and loneliness. This can impact greatly on people living with dementia and care partners not least on their mental health. For people living with dementia lack of social connection, appropriate support and issues relating to stigma can impact on cognitive decline and mental health. For care partners there can be high levels of stress, anxiety, and depression (Evans et al, 2018). In addition, psychiatric disorders are associated with an increased risk of developing dementia (Baudouin, 2025) and people living with dementia and mental health conditions are at an increased risk of suicide outcomes (Medeisyte et al, 2025). It should be noted that there are perceived benefits of living in a rural area including support from extended family and the wider community as well as potential closer relationships with health and social care providers (Roberts et al, 2024).

Since there is no cure for dementia, early diagnosis and availability of personalized care and support are essential for people living with dementia of life and care partners to enjoy the best possible quality of life in their communities. There is a link between above-average rural living and underdiagnosis (All Party Action Group on Dementia, 2023) which means that many will not be receiving any support at all. Technology can play a vital role in pre- and post-diagnosis support for people affected by dementia as well as increasing the effectiveness of those working in health and social care who support them. This may be particularly important in rural areas notwithstanding the challenges around connectivity.

In-line with the findings from the recent systematic review of systematic reviews, technologies for community-dwelling people with dementia (Neal, Cross, Evans et al, 2025), future research in this area should prioritize emerging artificial intelligence applications. It also links closely to the recent launch of the Dementia Patient Flow Research and Innovation (R&I) Challenge (UK Government 2025).

This PhD is based on a broad landscape of people living with dementia and/or care partners living in rural areas, mental health issues and the use/potential use of artificial intelligence to support them. Applicants will have the opportunity to work with a multi-disciplinary team of supervisors to develop their own pathway through, and to contribute new knowledge to, this complex but crucial area of research.

References

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For further information or an informal discussion on this project, please contact Dr Shirley Evans shirley.evans@worc.ac.uk

