## Determinants of Implementation of eHealth Solutions to Support Informal Dementia Care: An Umbrella Review

Bastoni, S.<sup>1</sup>, Wrede, C.<sup>1</sup>, Da Silva, M.C.<sup>1</sup>, Sanderman, R.<sup>1</sup>, Gaggioli, A.<sup>2</sup>, van Gemert-Pijnen, J.E.W.C.<sup>1</sup>

## **Abstract**

Introduction: Providing unpaid care for a loved one or a family member with dementia can have tremendous impact on caregivers' lives. eHealth technologies aim at relieving the burden of care, but often end up in unsuccessful implementation. Although literature is abundant with review studies about eHealth technologies in the dementia context and generic frameworks of the implementation process, a further synthesis and practical guidelines tailored to the context of informal dementia care are needed. The aims of this umbrella review are to (i) synthesize determinants of eHealth technology implementation aimed at supporting informal dementia care, and (ii) identify gaps between theory and practice. Methods: Medline, Cochrane, PyscInfo, PubmMed, and Scopus were searched and 23 reviews were included. Studies were included if they were review studies about eHealth technologies to support informal care of people with dementia. Results: The NASSS framework was used as analysis framework to interpret this review's findings. Main determinants of implementation identified in the analysis centered around the physical appearance of devices, the challenge of early-stage involvement of people with dementia and timing of technology introduction, the mismatch of perceived and expected benefits and ethical and privacy concerns. Surprisingly, determinants related to the wider context and embedding and adaptation over time were rarely found. Conclusions: This review identified a greater focus on development and adoption in the short term, thereby highlighting the lack of long term-oriented sustainable implementation strategies of eHealth technologies in the context of informal dementia care.

Keywords: Informal Care, eHealth, Dementia, Implementation, Technologies

<sup>&</sup>lt;sup>1</sup> Centre for eHealth & Wellbeing Research, University of Twente, Enschede, The Netherlands;

<sup>&</sup>lt;sup>2</sup> Department of Psychology, Universitá Cattolica del Sacro Cuore, Milan, Italy