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An Integrated Solution for Sustainable Care for Multimorbid Elderly Patients with Dementia

WP5: CAREPATH Clinical Investigation

D5.5: Interim and final results report

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Executive Summary

This deliverable presents the interim and final results of the CAREPATH Technical Validation and Usability (TVU) study and Clinical Investigation (CI), studies designed to evaluate the usability, acceptability, and clinical impact of an integrated digital health platform for older adults living with multimorbidity and cognitive impairment. The investigation was implemented across two clinical sites, in Spain and Romania, and included a total of 8 participants—6 in Spain and 2 in Romania—supported by their informal caregivers.

The TVU phase, conducted prior to the clinical investigation, aimed to assess the technical operability, usability, and integration of the CAREPATH platform in real-world settings. It involved short-term interaction with the system by a limited number of participants in order to identify and address early-stage design or functionality issues. A total of 8 individuals, 4 in Spain and 4 in Romania, participated in the TVU providing valuable feedback that contributed to the optimisation of the platform before the full clinical protocol was launched.

Participants were followed over a three-month period during which they interacted with the CAREPATH system as part of their care routine. Standardised clinical and usability assessments were conducted at scheduled intervals to evaluate the evolution of cognitive and functional status, quality of life, and caregiver burden. Results indicate high levels of protocol adherence, successful platform engagement in most cases, and positive feedback from users and caregivers regarding core features of the system. At the same time, technical limitations and usability barriers were identified, particularly in relation to visual design, reminder management, and certain device integrations.

This report synthesises the findings from both clinical and technical perspectives, highlighting the added value of digital support tools in complex care scenarios, while also identifying key areas for future refinement. The insights gained contribute to the evidence base supporting the CAREPATH platform and will inform subsequent steps in its development and potential deployment at scale.

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