# Co-creation and Multidisciplinary Education as a Learning Framework for Developing ICT-Based Solutions for Informal Caregivers: Insights from a Pilot Experience in Higher Education

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## Abstract:

The rapid growth of the ageing population has highlighted the increasing need for informal caregiving, primarily supported by family members. Caregiving can be burdensome, and technology can play a crucial role in supporting the needs of informal caregivers throughout the caregiving journey. While technological solutions can assist older adults and their informal caregivers, these solutions must be tailored to meet their specific needs. Thus, future professionals should be trained with the necessary skills to develop and manage effective solutions that respond to those needs. The Co-Care project, co-funded by the European Commission under the Erasmus+ Knowledge Alliance program, addressed this need by developing a specialized training course for university students in Health Sciences and Computer Engineering. This course aimed to prepare students to create ICT-based solutions specifically designed for informal caregivers. The pilot course was implemented in Portugal, Spain, and England using the Living Lab approach based on design thinking methodology. In Portugal, the course brought together students from Health Sciences and Computer Science, informal caregivers of people with Alzheimer disease, health sector professionals, and ICT companies. These stakeholders collaborated throughout the five stages of design thinking, from empathy to testing. Students worked in multidisciplinary teams, with each team tasked with developing a mobile application (mApp) prototype specifically designed to support informal caregivers of people with Alzheimer disease, tailored to their unique needs. This innovative training course demonstrated the effectiveness of multidisciplinary collaboration and participatory methodologies in educational settings. In this presentation, we will