

P102: Supporting Informal Carers to Undertake Regular Physical Activity from Home: a Co-design and Prototype Development Study of a novel app, "CareFit"

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Background: Informal carers (unpaid family members and friends), are critical to millions worldwide for the ongoing delivery of health and well-being needs. However, the physical and mental wellbeing of caregivers is often poor including low levels of physical activity, frequently owed to contributing factors such as lack of time, lack of support and motivation. Thus, accessible evidence-based tools to facilitate physical activity for carers are urgently needed.

Objective: The aim of this study was to co-design and develop a novel mobile app to educate and support carers in the undertaking of regular physical activity. This is achieved via integration of the transtheoretical model of behaviour change and UK physical activity guidelines across 8 weeks of use.

Methods: We co-designed a mobile app, "CareFit," by directly involving caregivers, health care professionals, and social care professionals in the requirements, capturing, and evaluation phases across a number of Agile Scrum development sprints. Requirements for CareFit were grounded in a combination of behavioural change science and UK government physical activity guidelines.

Results: Participants identified different barriers and enablers to physical activity, such as a lack of time, recognition of existing activities, and concerns regarding safely undertaking physical activity. Requirements analysis highlighted the importance of simplicity in design and a need to anchor development around the everyday needs of caregivers (eg, easy-to-use video instructions, reducing text). Our final prototype app integrated guidance for undertaking physical activity at home through educational, physical activity, and communication components.

Conclusions: Integrating government guidelines with models of behavioural change into a mobile app to support the physical activity of carers is novel and holds future promise. Integrating core physical activity guidelines into a co-designed smartphone app with functionality such as a weekly planner and educational material for users is feasible acceptable and usable. Here we will document the latest developments on the project including an ongoing national study currently taking place in Scotland to test the prototype with 50 carers.

P106: Palliative care for people with advanced dementia

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