

POSTER ABSTRACT

Cognitive Inclusion through Digitally Supported Independent Living

18th International Conference on Integrated Care, Utrecht, 23-25 May 2018

Gabriel Vainstein, Dalia Idar, Nivi Chaimov, Rachelle Kaye

Maccabi Healthcare Services, Israel

Cognitive impairment and dementia in the elderly are among the greatest challenges that our society will face in the next fifty years. Mild to moderate Cognitive Impairment affects more than 30 million people worldwide, with an expected growth of up to 100% every 20 years.

Studies show that integrated care models with a person-centred approach benefit chronically ill patients. Economic evaluations indicate that these models are cost-effective HCM, 2013. Digital innovations provide new tools for redesigning treatment and supporting integrated care. However, there is still insufficient evidence on the use of these care models for patients with cognitive impairment

DECI is a European project aimed at improving the independent living for elderly people at home, affected by Mild Cognitive Impairment MCI or Mild Dementia MD, through use of digital technologies. It examines whether an ICT-based organisational model as well as ICT-supported cognitive and physical training improves cognitive function, quality of life and promotes independent living for these patients.

The DECI Solution is a digital integrated care management platform that supports coordination among all caregivers, the patient and his family. It has been populated by simple questionnaires and cognitive games. Interfaced with it is a platform for physical training/activity coaching and health monitoring as well as a smart watch system that measures distance, steps, falls and mobility. The patient has a dashboard that enables him to see his schedule of activities, send messages, access educational articles, activate the physical training module, activate the cognitive games and activate the activity monitoring module. Patients can contact clinical personnel through the DECI platform. Clinicians and Caregivers have their own dashboard that enables them to see and monitor the patient's activities.

Maccabi Healthcare Services, Israel's second largest Health Plan, is committed to early detection and prevention of cognitive decline of MCI patients. It is currently piloting the DECI solution along with consortium partners Skaraborg Hospital, Skaraborg, Sweden, Fondazione Don Carlo Gnocchi ONLUS, Milan, Italy and Hospital Universitario de Getafe, Getafe, Spain.

Maccabi has two intervention groups: one using the integrated care platform for care coordination alone and one combining the platform with cognitive and physical training including physical activity monitoring. The control group is receiving routine care. Assessment of the effectiveness of the solution includes improvement or at least maintenance of

functional ability including Activities of Daily Living ADL and Instrumental Activities of Daily Living IADL, Cognitive performance, patient satisfaction, patient perceived quality of life, and effect on the burden of the informal caregivers.

Recruitment of patients for the pilots began in September 2017. The study period will be six months for each participant. It is expected that some preliminary results will be available in the Spring 2018. Initial learnings from the first months of pilot implementation show that patients with MCI or MD are more difficult to recruit and teaching them to use a digital platform requires a significant amount of training. However, they are able to use the DECI platform and appear to enjoy the physical training module and the cognitive games.

Keywords: mild cognitive impairment; care coordination; ict supported cognitive and physical training
