Chapter 15

Use of a Mobile App by Older People in an Integrated Care Setting

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ABSTRACT
The current study analyzes the information collected and the lessons learned during the first six months of the CONNECARE project in Israel, in order to assess the use of the mobile technology by patients, their motivations and obstacles; as well as their satisfaction. As of the middle of February 2019, 59 patients were recruited and 18 discharged from the project and completed the feedback questionnaires. Based on preliminary data presented in this chapter, as measured against the McGaughey et al. Research Framework, it can be concluded that the usage of the CONNECARE mobile platform can be rated as moderate. The analysis together with insights from the literature, suggest that usage of the CONNECARE app could be improved by introducing additional features that would increase patients’ motivation to use the system as well as its full integration into usual healthcare processes.

INTRODUCTION
The use of mobile apps by the elderly is receiving increasing attention and there are an increasing number of apps on the market targeting this population, particularly in the area of health care. These include apps for monitoring such as iBP Blood Pressure and Instant Heart Rate: Heart Rate and Pulse Monitor; provision of medical health care advice such as My Medical, WebMD and AskMD; and medication reminders such as Pill Reminder Pro, Pillboxie, MedCoach, and MediSafe (Hurst, 2018; iYogi, 2018). These apps are intended to be used by the patient for self-care at home. Several studies have investigated motivation as well as design issues. Among these, there is a growing conviction and preliminary evidence that mobile apps can support chronic disease management (Quinn et al., 2011; Bexelius et al., 2010; Carrasco et al., 2008; Lester et al., 2010). However, chronic disease management (CDM) apps have not lived up to their potential because relatively few patients are willing to pay for the digital tools. Huckman and Stern maintain that the more likely customers are health care organizations (Huckman & Stern, 2018). Despite this, there have been relatively fewer studies done specifically on the use of mobile apps by complex chronically ill older adults within an organizational based-integrated health care setting as an aid to treatment adherence, self-management and interaction with healthcare professionals. CONNECARE, a project funded by the European Commission’s HORIZON 2020 program, is currently being conducted in Ashdod, Israel by Samson Assuta Ashdod Hospital and Maccabi Healthcare Services. The project focuses on digitally enabled integrated care for complex, chronically ill older adults. The digital platform being comprises a mobile app accompanied by a wearable device for the patients that is interfaced with a computerized case management platform operated by the health professionals.

The purpose of this chapter is to analyze the information collected and the lessons learned during the course of the CONNECARE project to date, in order to: assess the use of the mobile technology by the patients in the project in Israel including their motivations and obstacles as well as satisfaction; its effects on patient – healthcare professional interaction; and, the extent to which the use of the mobile technology contributed to patient empowerment and self-management, patient quality of life and care integration. The McGaughey, Zeltman, and McMurtey (2013) research framework was used to guide analysis in this study. It delineates the relationships between motivation, obstacles, ease of use, adoption and actual usage. The objective was to better understand the best use of mobile technology for the elderly in a healthcare setting, address all factors in our research model, and investigate implications related to appropriate technology design for this population.