Building personalized virtual networks of care with the ADel electronic home assistant for older adults
A. Moreno, J. Bernier

Purpose Technologies to age in place must be personalized to meet the changing reality of aging and to respond to individual needs. A variety of technology applications can be used to help those with chronic conditions to remain at home, provide support to family caregivers at work or at a distant location, check on the status or activities of their loved ones, and enhance access to information and community resources including formal and informal support services (Czaja, 2016). ADel (Assistante Domestique électronique) is an Electronic Domestic Assistant developed in Quebec (Canada) by SoftBiomed to help older adults build personalized virtual networks of care including their family caregivers and healthcare professionals. ADel is an application provided in an electronic tablet with a locked mode (kiosk mode) to family caregivers and clinicians (Figure 1) and a cellphone application to be downloaded by family caregivers (Figure 2). With ADel, it is possible to customize contacts to make video calls, personalize medication and appointment reminders, and services (e.g., meal delivery and community services). With a panic button and a fall detector integrated into a watch, it provides peace of mind to older adults and their family caregivers. The objective of this pilot study is to explore the feasibility, usability, and user satisfaction of ADel from the perspectives of older adults returning home after a hospitalization, family caregivers, and clinicians being part of a personalized network of care. Methods Participants include 10 older adults without neurocognitive impairment returning home after a hospitalization, 10 family caregivers, and two clinicians. Data on feasibility (semi-structured interview), usability (System Usability Scale), and users’ satisfaction (Visual Analog Scale) are collected at one and two months of use of the technology at home. A steering committee with different stakeholders informs the project from the beginning to anticipate any technical, human, cultural, logistical barriers, and facilitators. Results and Discussion The pilot study will allow sharing of expertise between different stakeholders to inform the improvement of this technology across the continuum of care. ADel has the potential to be implemented in individuals with minor and major neurocognitive disorders, older adults living with chronic health conditions, and palliative care. The results will help to improve and adapt this technology according to the older adult’s cognitive and physical health status, provide a technological solution to support home care, and prevent social isolation during the current pandemic (Daly et al., 2021). As the degree of usefulness of these technologies impacts positively elderly people's intention to accept their usage (Etemad-Sajadi & Gomes Dos Santos, 2019), this pilot study will certainly provide insights into ADel’s positive impact.

References

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Address: Department of Psychology, Université de Montréal, Canada
Email: jhon.alexander.moreno.1@umontreal.ca

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Figure 1. ADel’s interface for older adults and clinicians
Figure 2. ADel’s interface for family caregivers