**Appendix 2: Questionnaire about Technology Use by Family Caregivers**

In this questionnaire, we provided participants with the following list of technologies. For each item, we asked participants to report how often they or care recipients used the item (“daily”, “weekly”, “monthly”, “every 6 months”, “every 12 months”, “have it but don’t use it”, or “don’t have it”) and how useful each item is (from 0 “not at all useful” to 10 “extremely useful” ).

1) Orientation devices that help the care recipient to remember who they are, where they are, and what is the date/time;

 e.g., reminder clock, wall calendar, smartphone app

2) Medication organizers or reminders to provide support for managing medications;

 e.g., pill boxes or automatic pill dispensers

3) Reminder systems that help the care recipient to carry out tasks or remember to stop a task;

 e.g., a stove minder, timer, or reminder from a tablet/smartphone app

4) Environmental aids that are simple visual aids;

 e.g., labels on drawers/cabinets, whiteboards, pictures

5) A phone with modifications for the care recipient to communicate with family members;

 e.g., landline phone with large or photo buttons or smartphone with bigger screen

6) Alarm or pager units that alert you or community monitoring centre if the care recipient needs help;

 e.g., Personal emergency response system like Lifeline, community alarm, or system linked to mobile phone

7) Movement or fall detectors that sense if a person is getting out of bed, rising from a chair, or if they have fallen;

 e.g., pressure sensors or mats

8) Environment detectors or manipulators that detect environmental changes and can either alter the environment or alert the caregiver;

 e.g., gas detector or extreme water temperature monitor

9) “Wandering” technologies that can detect if the care recipient is wandering from home;

 e.g.. door alarm, other sensors, tracking app on smartphone, GPS

10) Remote visits with a doctor or other health care professionals over the Internet;

 e.g., videoconferencing from a local health care centre or from your own home computer

11) Supervision systems;

 e.g., video camera or Webcam monitoring the care recipient’s activities

12) In-home monitoring of vital signs and other health indicators; may involve a follow-up call from a health care professional;

 e.g., devices to measure blood pressure, blood glucose

13) Psychotherapy or counseling delivered remotely;

 e.g., telephone or Internet-based counseling, support groups

14) Internet-based delivery of leisure and social activities;

 e.g., online exercise program, fitness app, arts or music app

15) Internet-based social media to keep in touch with friends, family, and acquaintances;

 e.g., Facebook, Twitter

16) Smartphone or tablet apps that help with managing health;

 e.g., app that tracks glucose levels, relaxation, or meditation training app

17) Brain training games or cognitive strategy training on a smartphone, tablet, TV or computer;

 e.g., Lumosity, BrainAge

18) Internet-based tests of memory or other cognitive skills;

 e.g., Cambridge Brain Sciences

19) Voice-activated intelligent personal assistants;

 e.g., Amazon Echo and Alexa, Apple Siri

20) Virtual reality technology

 e.g., Virtual reality to ease distress

21) Video calls to communicate with family and friends;

 e.g., Skype, FaceTime

Here is an example of the first page of the questionnaire for family caregivers.

*We are interested in the care recipient's and your use of different technologies that may help in daily life. These include assistive technology, which is any item or piece of equipment that can help a person with a physical or cognitive disability to complete various activities. Other technologies we are interested in help you take care of your health or provide a fun activity. Please answer these questions even if you or the care recipient rarely uses technology.*

|   | **How often?** | **How useful?** |
| --- | --- | --- |
| 1. Orientation devices that help the care recipient to remember who they are, where they are, and what is the date/time;e.g., reminder clock, wall calendar, smartphone app
 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Daily | Weekly | Monthly | Every 6 months | Every 12 months | Have it, but don’t use it | Don’t have it |

 |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Not at alluseful | Extremelyuseful |

 |
| 1. Medication organizers or reminders to provide support for managing medications;e.g., pill boxes or automatic pill dispensers
 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Daily | Weekly | Monthly | Every 6 months | Every 12 months | Have it, but don’t use it | Don’t have it |

 |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Not at alluseful | Extremelyuseful |

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