Webinar Discussion Series - Community Dementia Care and Support:

Innovations supporting people living with dementia and care partners closer to home

December 8, 2020, Webinar Discussion Summary

Dec 8, 2020, Webinar Synopsis:

This webinar provided an overview of CFHI's Community Dementia Care and Support webinar discussion series**. Participants discussed two** AGE-WELL funded **innovations:**

- AGE-WELL
- Winterlight labs
- Data Day

The moderators for the session were Mimi Lowi-Young (Chair of the Board of Directors: AGE-WELL Network Centre of Excellence INC.) and Mary Beth Wighton (Chair & Co-founder: Ontario Dementia Advisory Group (ODAG) and Dementia Advocacy Canada (DAC); Member - Federal Ministerial Advisory Board on Dementia), who provided insights throughout the session, including these two quotes:

"Compassion towards people with dementia is often suboptimal which can impact negatively on the clinical outcome and care. Compassion is particularly important in the delivery of good quality care for people living with dementia. I want respect and for providers to recognize me separately and as more than my dementia diagnosis. I want my healthcare providers to maintain my dignity and treat me with honesty, patience and hope."

- Mary Beth Wighton

"Technological tools can help bridge the digital divide across the world, especially in regions where the healthcare system might be weaker. Tools that are made in Canada for example can go worldwide. Healthcare services are not equal around the world and virtual tools can help communities that might not have local expertise and tools. Virtual solutions however should not be used alone, the best support that can be provided will be provided with a range of different degrees of supports, such as low tech solutions, human interaction, peer and community supports, policy improvements and other creative tactics to tackle all the challenges related to dementia."

- Ron Beleno

Dec 8, 2020, Discussion Highlights:

Presentation 1: AGE-WELL

- AGE-WELL recently conducted a study with Environics Research regarding the use of technology amongst the older adult population.
  - The use of technology amongst the older adult population increased due to COVID.
  - 66% of Canadians aged 50+ believe tech advances can help to lessen the impact of COVID-19 on daily life
  - 76% of Canadians aged 50+ are confident using current technology
  - 67% are willing to pay out-of-pocket for tech that allows them to stay at home as they age
- AGE-WELL works to develop a community of researchers, older adults, caregivers, partners and future leaders that accelerates the delivery of technology-based solutions that make a meaningful difference in the lives of Canadians.
- AGE-WELL by the numbers:
  - 760+ Highly Qualified Personnel (trainees)
  - 250+ Researchers
  - 43 Member Universities
  - 4,700+ Engaged Older Adults and Caregivers
  - 420+ Partners
  - 40 Startups
  - 4 National Innovation Hubs
  - 51 Technologies
  - 31 Policies/Practices
  - 36 Services
- The Future of Technology and Aging Research in Canada priorities
  - Supportive Homes and Communities
  - Health Care and Health Service Delivery
  - Autonomy and Independence
  - Mobility and Transportation
  - Healthy Lifestyles and Wellness
  - Staying Connected
  - Financial Wellness and Employment
- To learn more about AGE-WELL visit their webpage.

Presentation 2: Winterlight labs

- Using speech & artificial intelligence (AI) to revolutionize care for seniors
- Founded in 2015
- Experts in AI, computational linguistics, cognitive neuroscience and psychiatry
- The speech and AI based assessment can be administered by anyone, with minimal training.
- This assessment is comparable to standard cognitive tests, less time consuming and more objective and sensitive to subtle changes in cognitive and mental health function.
- The assessment has been validated through multiple studies across North America and Europe.
- The tool assesses 2-5 minutes of speech recording with artificial intelligence to check over 500 language markers and voice markers.
- Some symptoms of decline are pausing, incoherent speech, speaking slower or negativity
- The assessment can predict Alzheimer's disease with a 90% accuracy.
- Winterlight labs works with life science companies like Johnson & Johnson, Alector, Harvard University and Baycrest.
- Clinicians and scientists can monitor individuals who use the winterlight labs assessment to determine:
    - Who has early symptoms?
    - Is the disease getting worse?
    - Who is responding to therapy?
- Winterlight labs is partnering with senior care organizations in Canada and the U.S. to help seniors who live in their own homes or retirement facilities to use the winterlight assessment regularly which can help the care team (e.g. nurse, loved ones):
    - Identify cognitive or mental health issues earlier
    - Consult a doctor for further assessments, or a change in treatment plan
    - Determine if additional services or supports are needed
- The tool will be provided in French, Spanish and German soon.
- To learn more about Winterlight labs visit their webpage.

Presentation 3: DataDay

- DataDay is a self-management app for people with mild cognitive impairment (MCI) or dementia which tracks cognition, mood, diet, and activity over time.
- DataDay was developed in partnership with people with MCI and living with dementia and care partners.
- The app allows individuals to schedule reminders, as well as a speaking clock which will tell you what time it is.
- Individuals are encouraged to fill in the 4 different modules at least once per day.
- The cognition module includes a shopping list game which is validated against the gold standard measures that are used in cognitive assessments.
- The nutrition module allows you to select from a variety of items to track what you have eaten. The app allows you to see what you have eaten over time (e.g. that day, that week, in the last month).
- The mood module asks the individual a series of questions in which they rank their mood.
- The physical activity module asks the individual a series of questions to track how much activity they have been doing in a day.
- The app also has a dashboard which allows you to view statistics, settings and messages.
- Statistics can be accessed for each of the four modules which allows the individual to see the data they've entered over time.
- DataDay also has a clinician portal which allows clinicians to track the data regarding the patients in their care that use the DataDay app. Clinicians can receive messages or alerts if there is an area of concern with one of their patients which might prompt a visit or phone call. The data will only be shared with the clinician if the individual consents to this information sharing in the app.
- The app aims to reduce unplanned emergency visits and hospital admissions and support family care partners. Care partners who don't necessarily live in the same household as their loved one with MCI or dementia can keep an eye on them through the data that is being submitted through the app and follow-up if there is a concern.
- To learn more about DataDay visit their webpage.
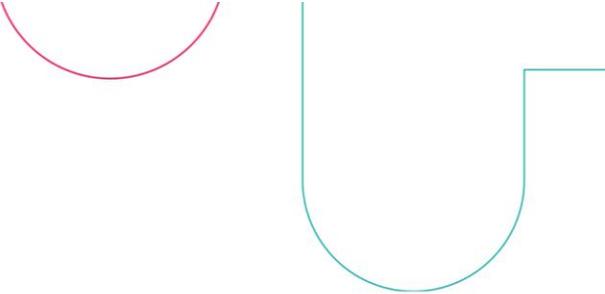
Discussion and Participation: Questions, Answers, and Comments/Suggestions.

Participants were invited to ask questions and engage in a discussion. Below is the list of questions asked and the responses.

Q: What is the cost for an assessment through Winterlight labs software?

A: In the primary care setting we offer a monthly subscription of $1-$3 per person requiring assessments.

Q: How are diagnostic methods being pushed out to primary care physicians and geriatricians?

A: The primary care solution is still being tested and developed. The solutions are HIPAA compliant. The software can provide push notifications of encrypted emails through the EHR system for the hospital or senior care facility.

Q: Can DataDay use data from a Fitbit or similar device?

A: It could, but it doesn't at the moment. During the development phase we acknowledge that we wanted to reduce the burden on the user and ensure only one device was needed instead of two. We are considering adding this functionality in the future given more people have adopted the use of the Fitbit in everyday life.

Q: Is this app currently available for use?

A: Yes, however it is not something that can currently be downloaded from the app store on your device. If you would like to have access to the app you need to contact the team at DataDay.

Q: Is Data Day app available in other languages?

A: The app has very minimal language in it as it is very visually based. The French version is currently being finalized.

Q: Have you tested this app in rural/remote locations with limited bandwidth?

A: We have done some testing outside of big cities. Most of the testing has taken place in different parts of Ontario. We had some users who did not have Wi-Fi to whom we provided cellular packages. We would be happy to accept users who would be willing to test this app in more rural and remote regions.
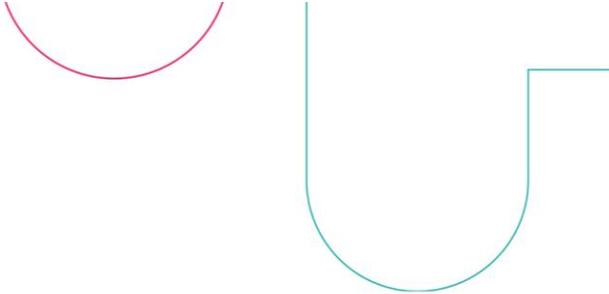
Q: Do you have traditional foods in the diet portion of the app?

A: The app was originally created in the UK and encompassed the dietary habits of older adults in that region. Over the years we continued to modify the dietary habits and created a new Canadian database. The app has a section for people to enter their own foods and can mark itas a favorite if it's food they eat regularly. The dietary database is image based and users can upload their own photographs of their food.