

Adopting Innovation, Change in Action

*Identifying and responding to unmet need
with innovative products*

Canadian Home Care Association

2017 Home Care Summit - Edmonton



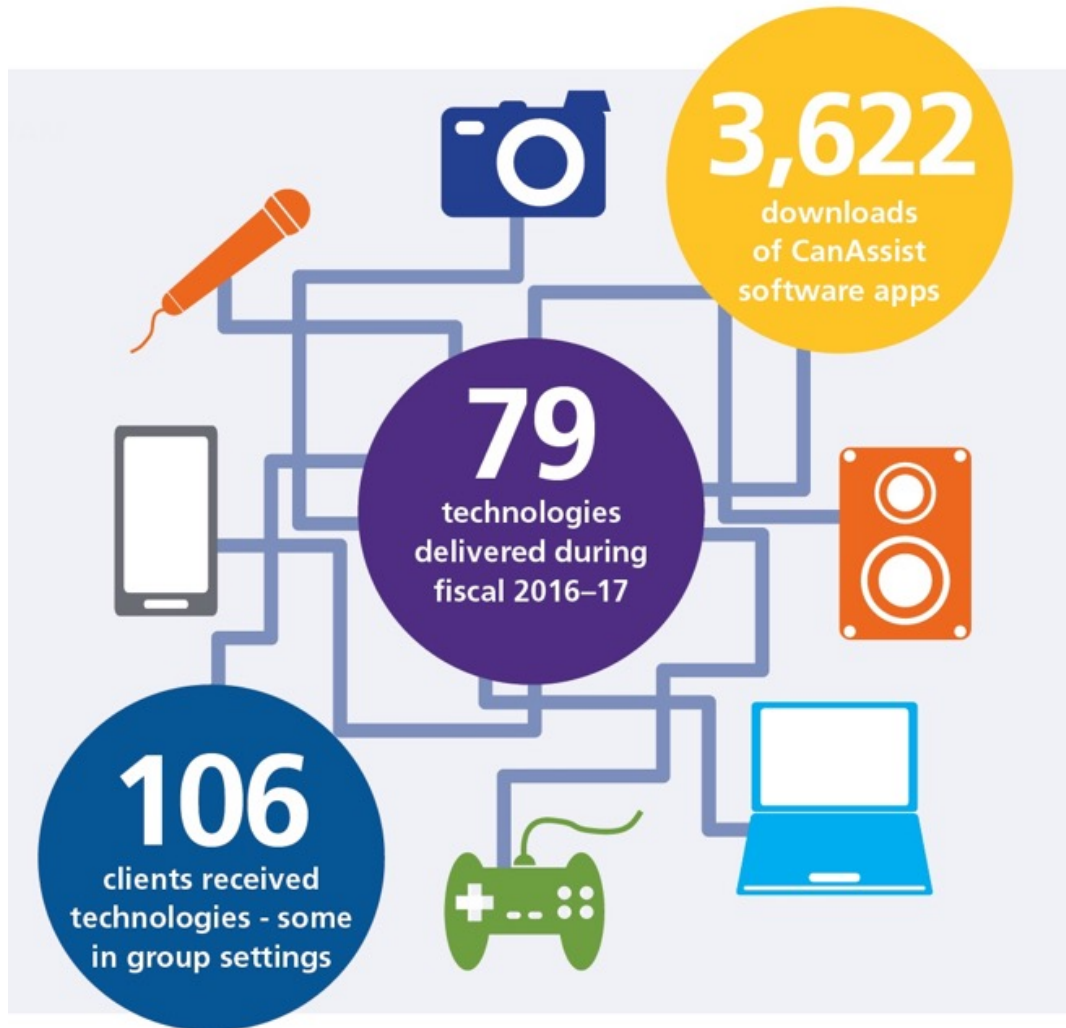
University
of Victoria

Who we are

- organization at the University of Victoria
- core team includes:
 - engineers
 - software developers
 - program coordinators



What we do



Last year's impact

- address gaps in existing services:
 - people with disabilities:
 - custom technology
 - programs
 - TeenWork
 - OneAbility
 - seniors:
 - broad-impact technology

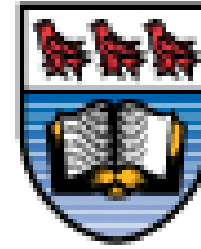
Who we help

- people of all ages with physical, cognitive or mental health barriers to improve:
 - independence
 - quality of life



What sets us apart

- unique in North America
- community requests are covered by philanthropy
- collaborative approach
- partnerships



**University
of Victoria**



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of Victoria**

Institute on Aging
& Lifelong Health

How we do it



Centre for Athletics, Recreation and Special Abilities (CARSA)

- University of Victoria support
 - physical space
 - access to faculty, students and research facilities
 - administrative support and expertise
- External funding
 - public-sector project funding
 - donations
 - grants
 - fee-for service agreements

Why we do it



- committed to:
 - making a vital impact in the community
 - creating learning opportunities
 - promoting inclusion
 - raising awareness about disability issues

Technology development

- Areas of focus
 - Independence in tasks of daily living
 - cognition and memory
 - education and employment
 - computer access
 - communication and social interaction
 - therapy, exercise, recreation and sport
 - mobility



Identifying client need

- Community requests
 - Individuals, groups or organizations approach us with problems/challenges
- Consultation with stakeholders
 - Individuals and families
 - Organizations
 - Health professionals/teams
 - Researchers



Creating innovative products

- Embedded innovation
 - General guiding principles
 - Interviews
 - Idea Generation
 - Design Considerations
 - Development



Development approach

- Technology needs assessment
- Determine if there are existing technology solutions
- Recommend existing technology solutions
- Explore new technology development
 - If some requirements are lacking in existing solutions
 - If new development is required

CanStayHome initiative

- funded by BC Ministry of Health since 2014
 - focuses on developing innovative yet practical technologies for BC seniors
 - suitable for implementation across the province
- first set of broad-impact technologies:
 - Phone-in Monitoring System
 - Wandering Redirect System
 - Hitch Lift

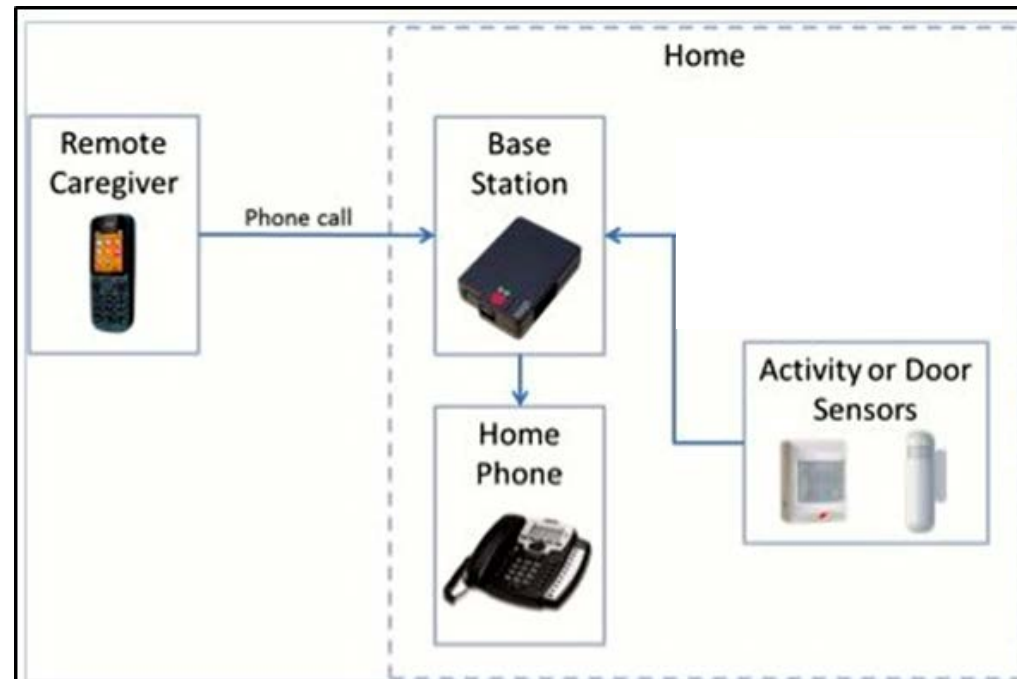
Technology outcomes

- improve independence
- reduce isolation and loneliness
- reduce stress for families and other care providers
- reduce the need for one-on-one care by families and paid caregivers
- help keep seniors at home for as long as safely possible
- improve general health of seniors and their families
- contribute to cost avoidance and cost containment, enabling staff to support more individuals

Phone-in Monitoring System

"The phone system provides peace of mind when I need to run errands and mom is at home alone."

Donna Miller, daughter and caregiver of elderly mother, Ruth



Wandering Redirect System

"Overall I would say it's life changing! Mum is thrilled with it and it has made a huge difference in her self-confidence and hence her mood and ability to cope..."

Since it's been installed, we haven't had a single night-time incident."

Deb Currie, daughter and caregiver of elderly mother



Hitch Lift



“ We only left the house and went out when we had to. Now that we are not limited, we have been out almost every day since the installation, enjoying different activities.”

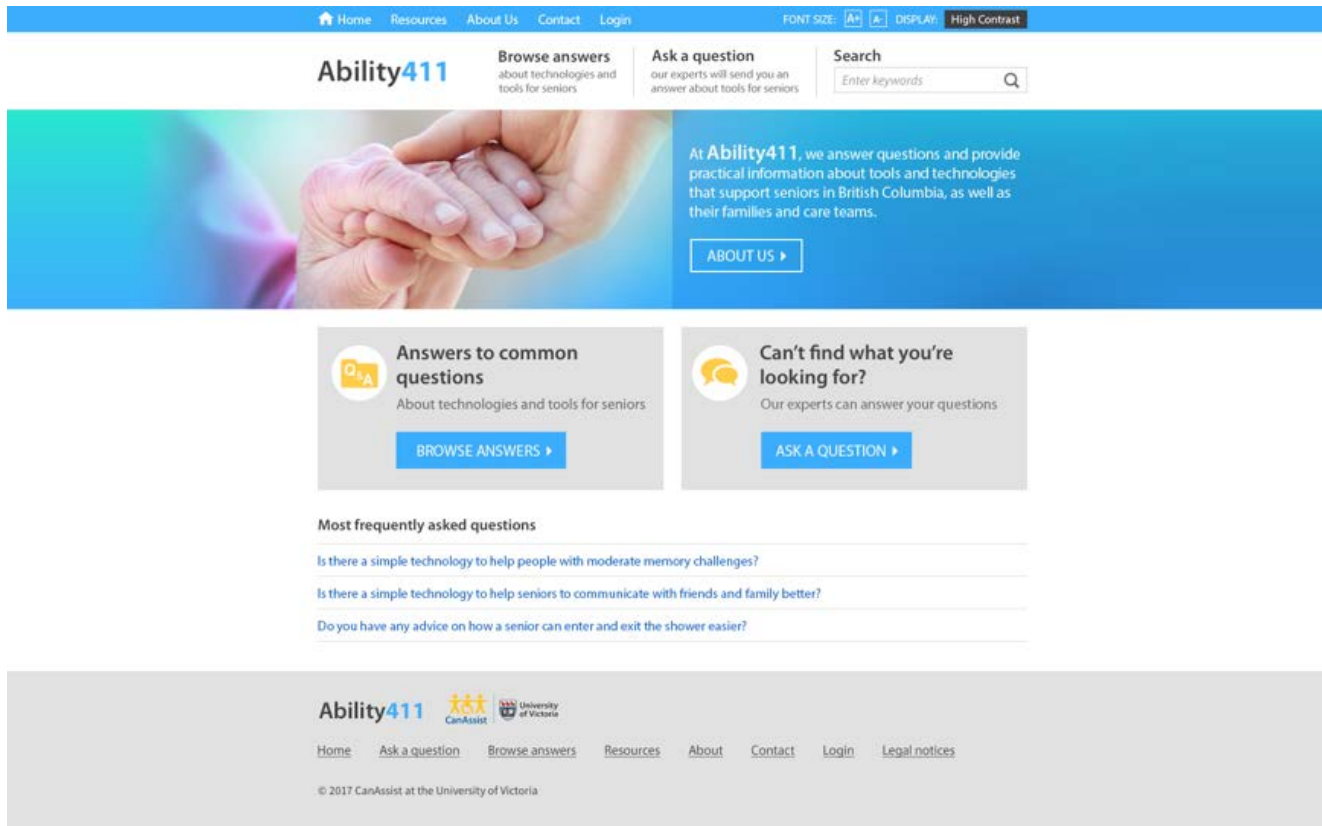
Susan Jensen
Wife of client, Ken

CanStayHome current development

- Funded by BC Ministry of Health in 2015
- Three new technologies under development:
 - Ability411.com
 - Caregiver Intercom
 - Caregiver Toolkit

Ability411

- practical information on assistive technologies for seniors, their family members and health providers
- web-based service



Please note: This is not the final design of the website

Ability411

- development status:
 - launch in early 2018

The screenshot shows the 'Ask a question' form on the Ability411 website. The form is divided into three numbered steps:

- 1 Tell us about the question and the situation**
 - Your question***
Type a question you'd like to ask an Ability411 professional.
Text area: "Are there any apps or electronic gadgets that I can use to create a memory box for a family member who has recently been diagnosed with dementia?"
 - Can you tell us more about your situation?**
Add any details that may help us address your needs.
Text area: "A family member was recently diagnosed with dementia and is having a really hard time. They are getting very frustrated about not being able to remember friends and certain memories. Someone mentioned we should create a memory box. Will this help?"
 - Who is the information for?**
Is this question regarding you, or someone you care for?
☐ Myself ☐ Family Member ☐ Patient
- 2 Which health concerns apply to your question?**
Please select all that apply.
 - ☐ Arthritis ☐ Frailty ☐ Memory
 - ☐ Breathing ☐ Hearing ☐ Mental Health
 - ☐ Diabetes ☐ Heart and stroke ☐ Sleep
 - ☐ Eyesight ☐ Incontinence ☐ Tremors
- 3 What activities of daily living do you need help with?**
Please select all that apply.
 - ☐ Communication ☐ Housework ☐ Recreation and sport
 - ☐ Devices and appliances ☐ Managing medications ☐ Toileting
 - ☐ Dressing ☐ Meal preparation ☐ Transferring
 - ☐ Eating ☐ Mobility ☐ Transportation
 - ☐ Entertainment and hobbies ☐ Personal hygiene

The screenshot shows the 'How do we contact you?' form, step 4 of the process. It includes a section for finding similar questions and a contact form.

One moment, looks like we might have something similar
We have found similar questions, please take a look to see whether your question has already been answered.

Is there a simple technology to help people with moderate memory challenges?
Do you have any suggestions for products that could help with this aspect of memory deterioration?
Do you have any advice on how a senior can enter and exit the shower easier?

4 How do we contact you?

Name* Email*

Where are you?
Select City

Phone

SUBMIT

Please note: This is not the final design of the website

Caregiver Intercom

- provides caregivers with the ability to check in on people with dementia from a remote location
- device attaches to landline phone
- password access allows for connection into the intercom system in the senior's home
- development status:
 - first prototype complete
 - user testing starts Nov. 2017



Caregiver Toolkit

- support tool for families to communicate and share information about their loved ones to multiple care providers
- suite of applications on a dedicated device
- development status:
 - initial prototype development is underway

CanStayHome – next development

- Funded in 2017 by BC Ministry of Social Development and Social Innovation
- Innovative technologies scalable for use across BC
 - Address progressive stages of dementia
 - Increase independence and safety of seniors
 - Reduce stress on families
 - Enable seniors to live at home longer
- Enhance Ability411 to support seniors and their families affected by dementia

Other CanAssist technologies that support seniors

Motivational Cycle



"They loved it! One fellow arm-pedaled five kilometres in 15 minutes, slowing down for the sheep! "

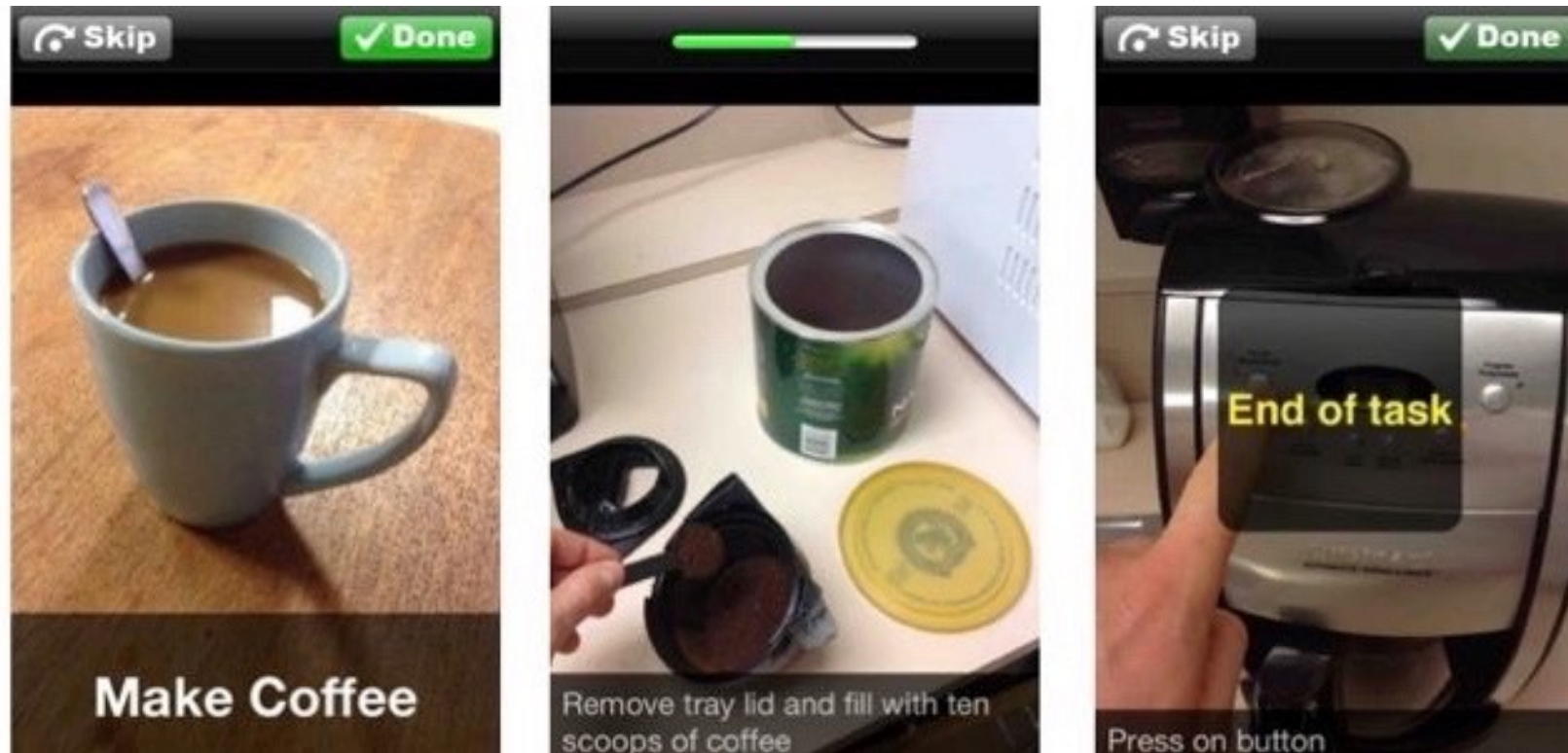
Debbie Heron
Occupational Therapist



CanPlan software app

“I have used this application to document more than 50 household tasks, including how to change my furnace filter.”

An ex-military man, diagnosed with early onset dementia



How to connect with CanAssist



- fill out a technology request form
- consider a fee-for-service arrangement for technology development
- participate in technology testing opportunities
- explore technology integration into facilities or innovation sites
- help us generate ideas:
info@canassist.ca

Contact information:

Marilyn Sing

Partnership Development

250-472-5330

msing@uvic.ca

www.canassist.ca



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