Disruption Ahead

TRANSFORMING TECHNOLOGY TO SUPPORT OLDER ADULTS WITH DEMENTIA
## Using Technology

### Stage of dementia

<table>
<thead>
<tr>
<th>Early</th>
<th>Middle</th>
<th>Late</th>
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### Examples of Need

- Reduce isolation and depression
- Identify dementia early
- Compensate for loss of abilities
- Stimulate memory and cognition
- Home safety
- Reduce disorientation
- Addressing more severe short term memory loss
- Enhance engagement
- Enhance stimulation

### Examples of Assistive Technology

- Medication management, cognitive training, telephone and internet based help
- Sensors, alarm navigation equipment and communication devices
- Various applications for communications, visual and auditory stimulations

UK Alzheimer’s Society (2014)
Changing Demographics, Changing Expectations

Older adults (and their caregivers) are becoming more tech savvy

They have changing expectations on how and where they will receive care and access to services

There are growing expectations on the integration of technologies into their daily lives
Disruption

NEXT EXIT
Emerging Areas

New promising areas of research and leading edge technologies are starting to emerge:

- Smart Homes
- Robotics
- Big Data
Smart Homes
Robotics

Caring Robots

Cognitive Robots
Roboticics - Driverless Cars

“The self-driving car — a godsend for older Americans — is now on the horizon” – AARP (2015)
Big Data – Big Opportunities?
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Activity Monitoring in the Home

Sensor Events
Residential Facility

Bedroom
Bathroom
Living Rm
Front Door
Kitchen
Big Data – Big Opportunities?

3 months

85% accuracy
Canada at the Leading Edge

Recently we have made significant investments in the field to ensure Canada remains competitive

◦ AGE-WELL
◦ CCNA
◦ CC-ABHI
Key Messages

There is significant research in Canada in the field of technology and dementia, with significant resources recently being provided.

The needs and expectations of older adults and their caregivers are changing.

New potential innovations could have significant impact, however, need to be explored in more depth.