

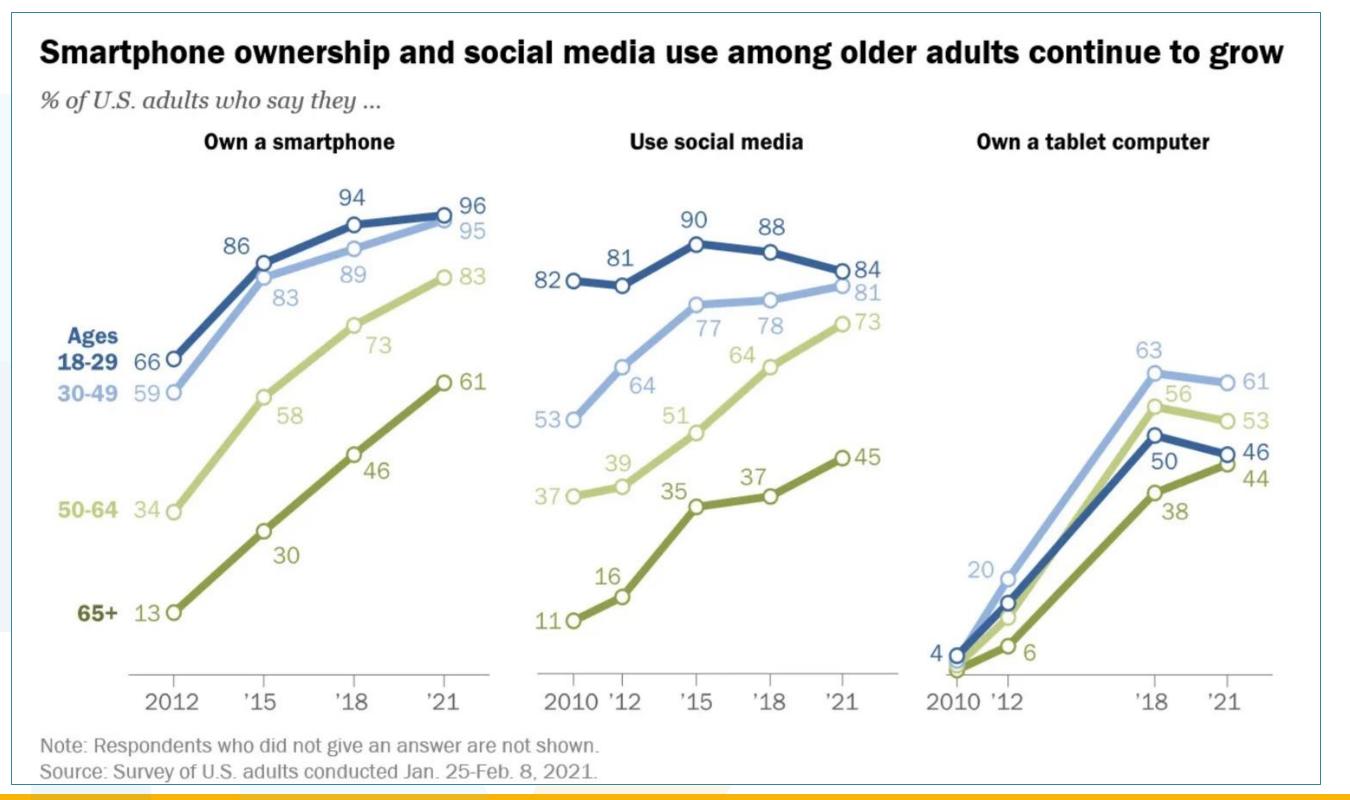
Emma Rossnagel Research Manager, CTAAN, UNBC



What is Age Tech?

AgeTech is a subset of the health technology industry that supports healthy aging to improve the quality of life for aging adults, as well as the caregivers and healthcare professionals that support them.

Use of technology by older adults continues to grow





Technology use by older Canadians increased significantly during the COVID-19 pandemic

- 88% of Canadians aged 65+ use the Internet daily
 - 30% of those 65+ are streaming
- 65% of Canadians aged 65+ own a smartphone
 - 83% use it daily
- 23% of older Canadians use video-calling on their smartphones

While Canada's population is aging – the availability and accessibility of health services is not keeping up, especially in rural and remote communities



Technology will be vital to support aging



The CTAAN National Innovation Hub supports aging in northern and rural communities by making technologies more available to older adults, caregivers, and the health care systems that support them.

Bridging the Technology Gap

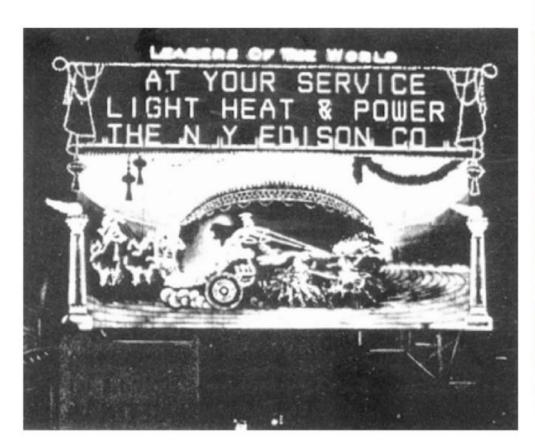
Aging in Place

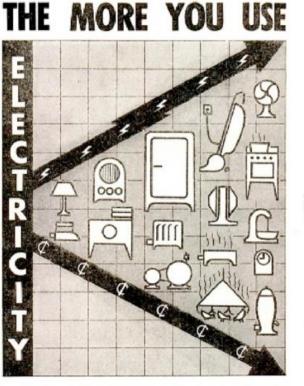
- By 2052, 1 in 4 Canadians will be 65+, living longer and healthier than previous generations¹
- 95% of Canadian adults 45+ agree that aging in place supports independence, comfort, & dignity²
- 92% of Canadian adults 45+ prefer in-home care over moving to LTC¹
- 96% of adults 65+ would do everything they could to avoid entering long-term care³
- In 2023, 475,000 Canadians (1.6%) reported unmet home care needs, mostly among the 65+ age group¹

Remote Monitoring Systems

Remote Monitoring or 'Smart Home' Technologies

The history of 'Smart Home Technologies' are not as new as you may think









Sovacool, B. K., & Del Rio, D. D. F. (2020). Smart home technologies in Europe: A critical review of concepts, benefits, risks and policies. *Renewable and sustainable energy reviews*, 120, 109663.



What are remote monitoring systems?

Remote monitoring systems use technology to help track health and safety from a distance, allowing older adults to stay independent while getting the support they need.

These systems can be implemented in various ways such as through health platforms, wearable technologies, motion sensor systems, and/or emergency notification systems

What can they do?

Reduce wait times, enhance coordination, and promote more equitable, high-quality care for older adults Deliver home-based, datadriven care through telecommunication and AI, connecting older adults, caregivers, and providers

Empower older adults to actively manage their health, supporting independence, safety, and aging in place

Remote Monitoring Systems

Smart home technologies can collect and analyse data on the domestic environment, relay information to users (and service providers), and enhance the potential for managing different domestic systems

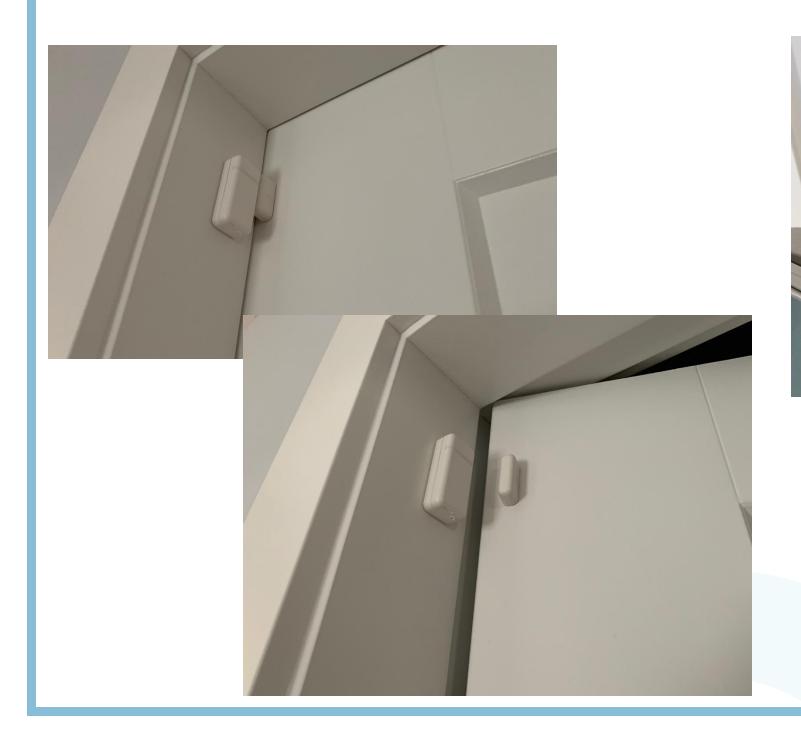


- Fall detection,
- Fall risk (gait analysis)
- Agitation prediction

- Wandering detection
- Wayfinding/Cuing
- Smart voice

- Health monitoring
- Social Engagement
- Lighting, Safety, Security

Contact Sensor Technologies

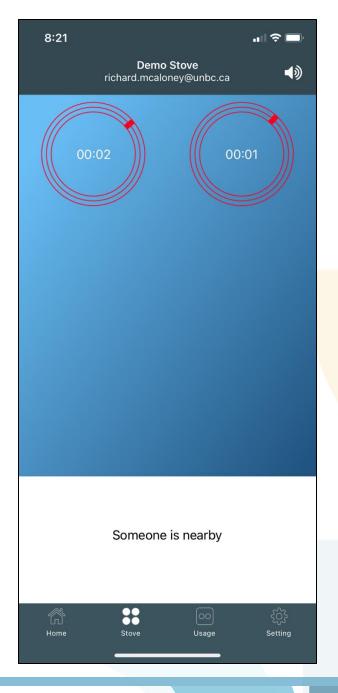


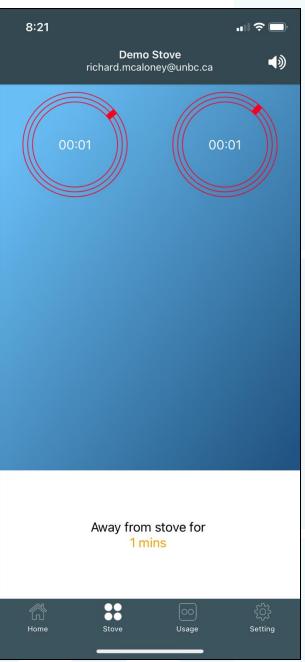


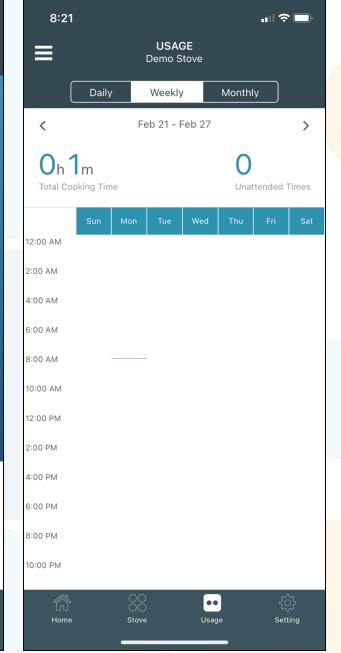
Safer Cooking – Smarturns - Tochtech Technologies













Research Study – we're recruiting!

Designed in collaboration with:













What is this study about?

This **1-year study** looks at how remote monitoring systems in homes of older adults may improve safety to age-in-place, delay need for long-term care, and enhance support and well-being for caregivers.

Remote Monitoring System Options:

Altumview Sentinare





CareLink Advantage





TochTech Vericare





Medisuivie CarePredict







The CTAAN Research Team will collect information around quality of life pre-/during/post-implementation of the chosen system



Altumview Sentinare is a non-wearable remote monitoring system which uses privacy preserving camera/sensors to detect a care recipient's movement and falls, recognize care recipient activity, and allow for voice calls between a care recipient and a caregiver partner.







CareLink Advantage is a wearable or non-wearable remote monitoring system that can be customized to deliver services which best meet the needs of the user. This can include motion, door, bed, and motion activated camera.



TochTech Vericare is a remote monitoring system which uses non-wearable, non-camera sensors to detect care recipient movement, movement of doors in the care recipient's home, and humidity and temperature in the bath and shower.







Medisuivie CarePredict is a remote monitoring system which uses both wearable (Tempo Wearable) and non-wearable (Context Beacons) sensors to detect care recipient movement, learn and predict their behaviour, and detect falls.

Who can participate?

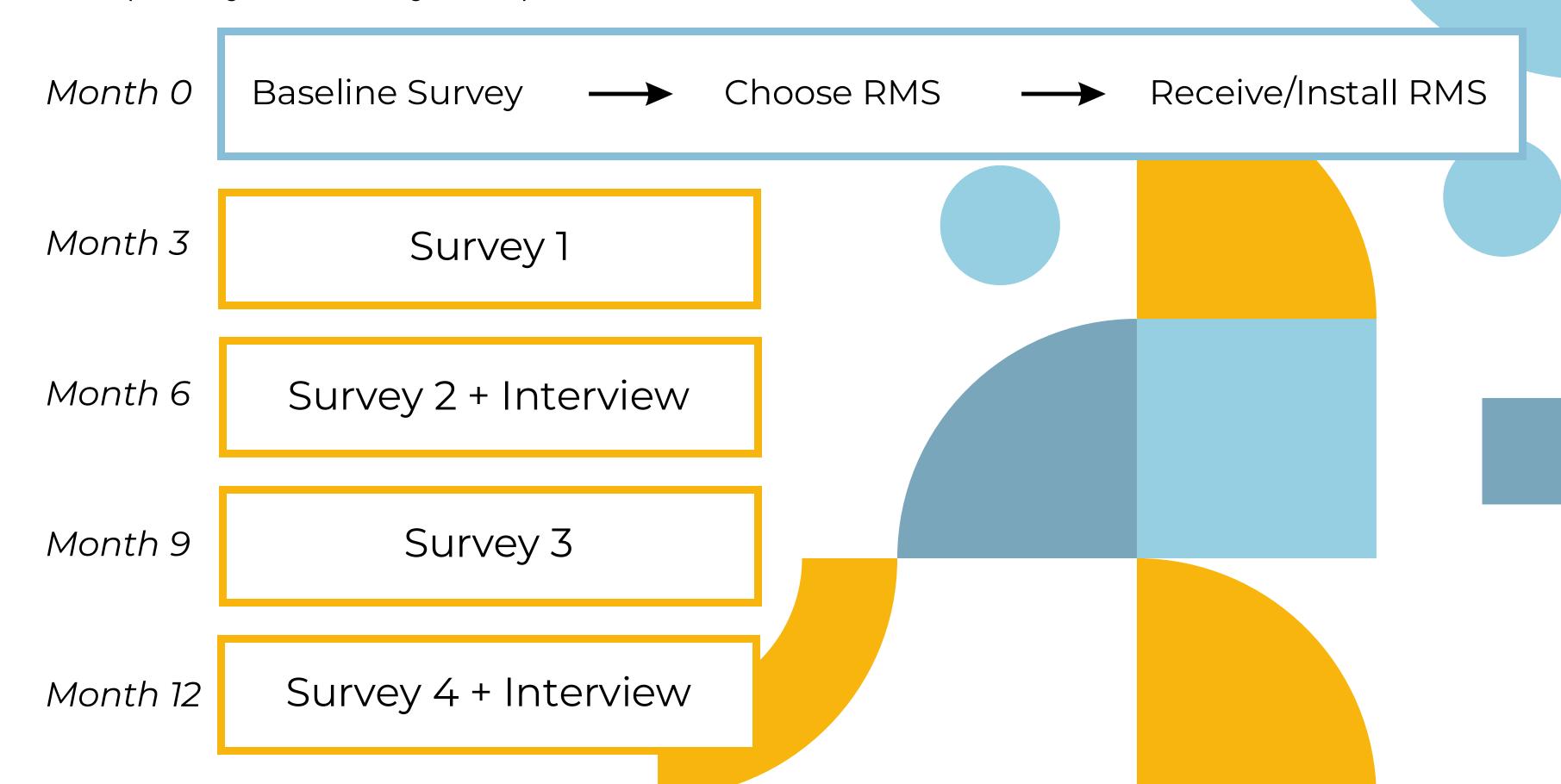
We are looking for pairs of people (care dyads)

An older adult (65 years +)
who lives in the community
and needs/receives home
care or community care
support

Their caregiver, who is a spouse, partner, friend, adult child, or other individual who cares and supports the older adult

What would you be asked to do?

As a pair, you and your partner would be asked to:



PARTICIPANT PAIRS NEEDED!

STUDY: Examining the Impact of Remote Monitoring to Support Older Adults to Age-in-Place in B.C.

What is this study about?

This 1-year study looks at how remote monitoring systems in homes of older adults may improve safety to age-in-place, delay need for long-term care, and enhance support and well-being for caregivers.



Who can participate?

We are looking for pairs of people to participate:

- An older adult (65 years +) who lives in the community and needs/receives home care or community care support AND
- Their caregiver, who is a spouse, partner, friend, adult child, or other individual who cares and supports the older adult

*The older adult and caregiver do not need to live in the same household

What would you be asked to do?

As a pair, you and your partner would be asked to:

- Choose 1 of 4 remote monitoring technology options to be installed in your/older adults home
- Take part in 5 telephone surveys (~15 mins/survey) over the year
- Have 2 conversations about your experiences with the remote monitoring system with researchers

The technology chosen will **be free of charge** and there will be **no cost to participants**. The participant pair (older adult and caregiver) will receive a **\$200 honorarium** for taking part in the study.

If you would like to learn more, ask questions, or participate, please contact:

email: ctaabcp3@unbc.ca phone: 250.960.6143



THANK YOU!

Have questions? Want to participate?

Email: ctaabcp3@unbc.ca

Phone: 250.960.6143

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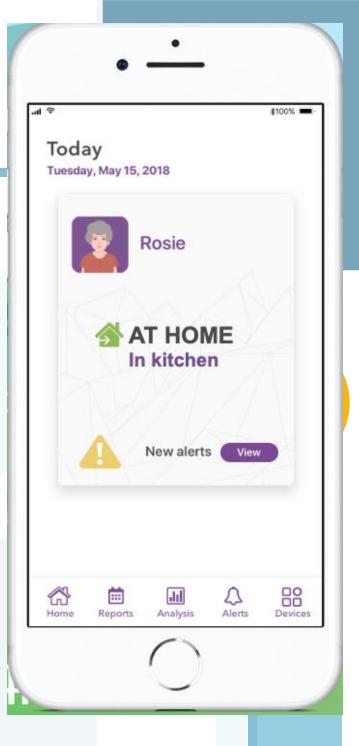
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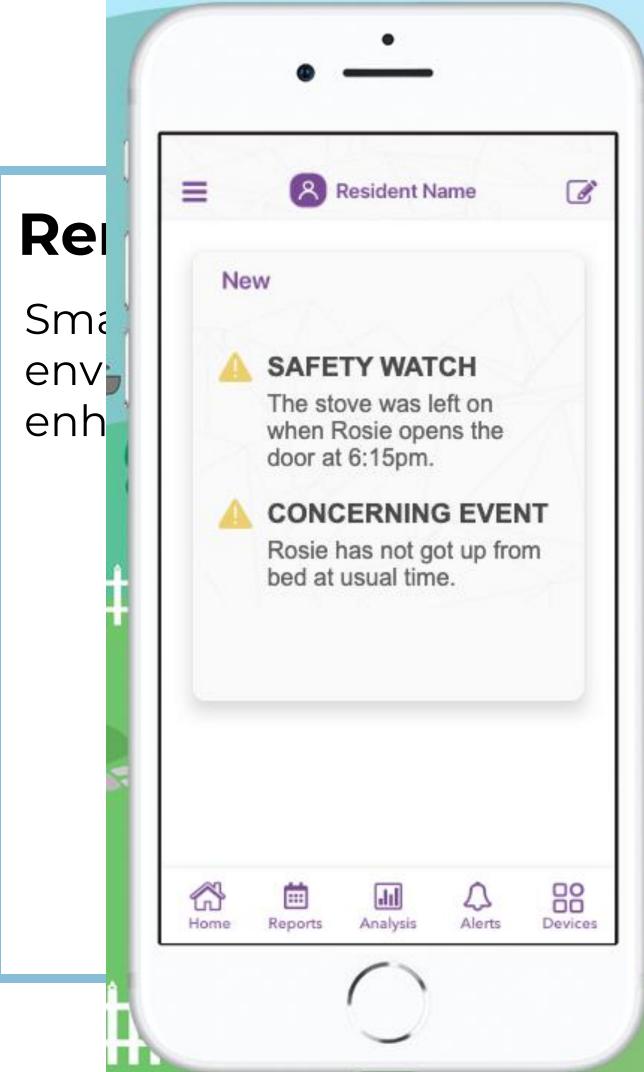
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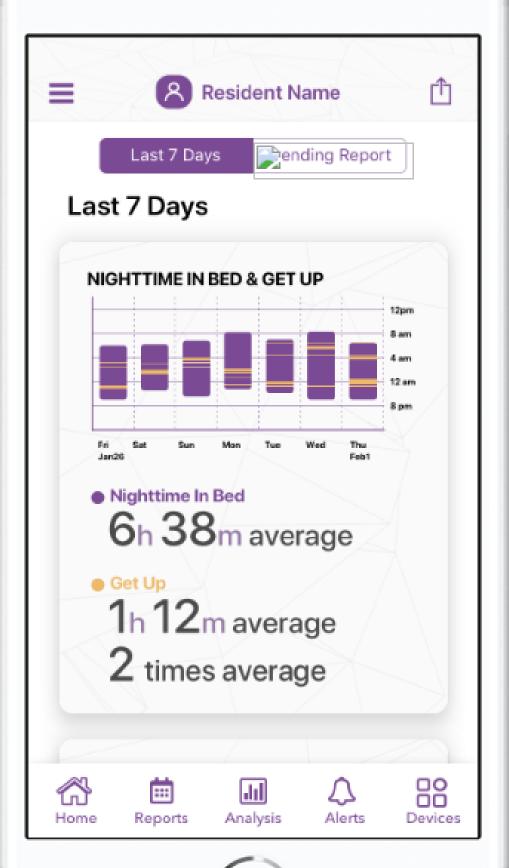






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What is Age Tech?

Housing, healthcare, autonomy, mobility, mental health, well-being, financial health, communication, and preserving social ties are all impacted aspects by AgeTech. Common categories are:

Remote Monitoring Technologies that support independent living Technologies for assisting persons living with cognitive decline and their caregivers

Technologies for maintaining and managing health

Technology to support care givers and care facilities Technologies for a happy, connected, and fit lifestyle

Technologies for the home or care facility to enhance quality of life and safety

What does Age Tech look like?











