LTC and Digital Technology

How system-wide investments can be a game changer for residents and their families

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Central

Introcductions

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Ontario Health (Central) engaged the community to better understand the experiences and lessons learned from wave 1 in LTC, so we could help in building solutions

Ontario Health (Central) LTC Resident and Family Experience Report (Part 1)
LINK

Ontario Health (Central) LTC Staff and Partner Experience Report (Part 2)
LINK

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Social isolation or "confinement syndrome" has been a traumatic reality for long-term care residents during the COVID-19 pandemic.

"...No family, no hugs or kisses. It was all taken away. Loneliness became my only friend. Fear was a close second. The laughter and humour in my life was gone." – Resident

"It was very challenging to be in my room the whole time. It reminded me of when I was in the prison camps." – Resident

Although nothing can replace human touch, we thought digital technology could help many residents feel less isolated and bored, as well as stay connected with family and friends.

"For seniors in long-term care homes, *digital access is a basic need.*" *– LTC Planning Table member*
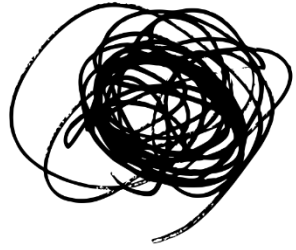
Wicked problem **+** **Diverse group** **=** **Innovative ideas**

PART 1: URGENT NEED
During this time of extreme isolation, how might we use digital technology in LTC homes to reduce resident social isolation?

PART 2: FUTURE VISION
How might the use of digital technology enrich the lives of residents overall in a post-pandemic world?

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LTC homes want to help residents digitally connect but are challenged to find resources and support

Our initial roadmap
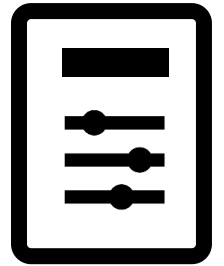
Survey LTC homes + Build relationships + Test products and services = Menu of options

Surveyed all LTC homes in Central Region to understand the individual digital needs of homes and their residents. Completed survey analysis, with survey still open (~40 responses).

Building relationships with digital technology companies to understand products and services that could be tailored for LTC homes (ongoing).

Testing different products, services, and pricing options with residents in a small number of homes.
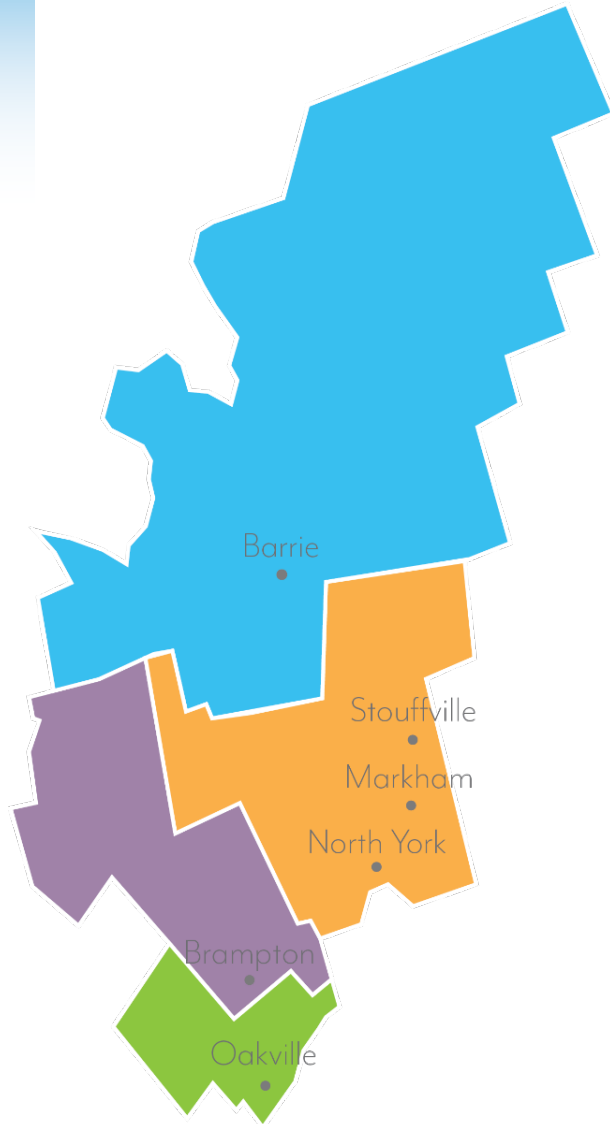
First study started early January with SE Health, Google, and BestBuy. Several more studies planned to start Mar-Apr.

Use learnings to provide all LTC homes in region with a menu of options for digital products, services, and pricing that work for them.

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Where we are today

 # Survey responses = 39 (at time of analysis)

Central is one of 5 Ontario Health regions and has 123 LTC homes

Barrie

Stouffville

Markham

North York

Brampton

Oakville

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Total number of LTC homes in Central region is 123, with up to 17,500 LTC residents.

LTC homes by legacy LHIN area

- 46
- 26
- 28
- 23

- Central
- CW
- MH
- NSM

LTC homes by size

- 30
- 38
- 54

- Small (<96)
- Medium (97-160)
- Large (>160)
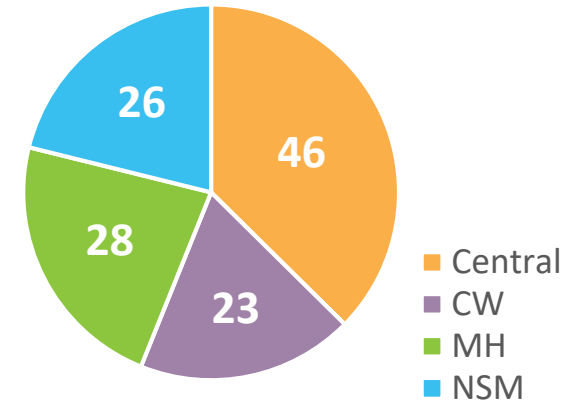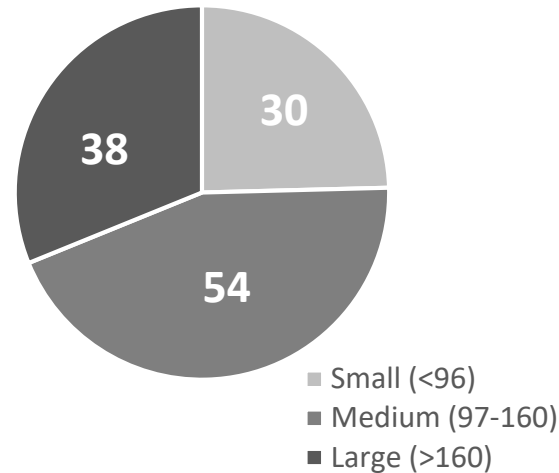
LTC homes by business model

- 26
- 4
- 20
- 65
- 8

- Non-Profit
- Continuing Care Centres
- Municipal
- For-Profit (Single Site)
- For-Profit (Multiple Sites)
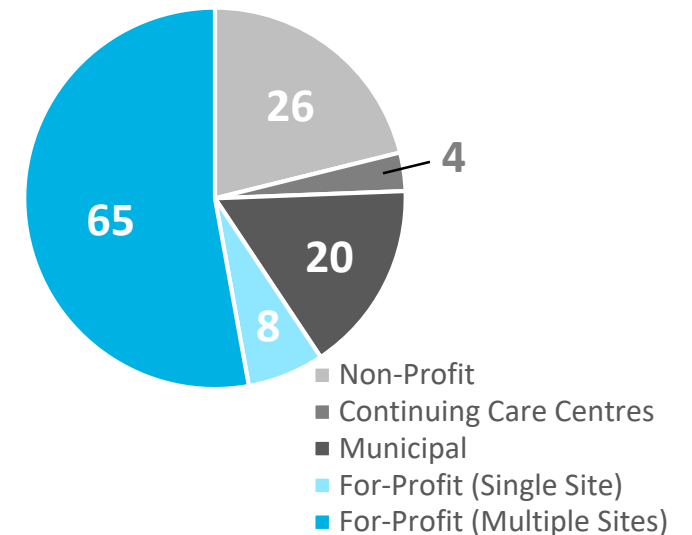
Through our survey, we heard that LTC residents face significant challenges, including…

1) **Internet connection**

2) **Access to devices**

3) **Device set-up and applications**

4) **Device training and IT support**

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Q. How many residents in your home are currently experiencing distress due to social isolation or confinement syndrome? Please select an approximate answer.
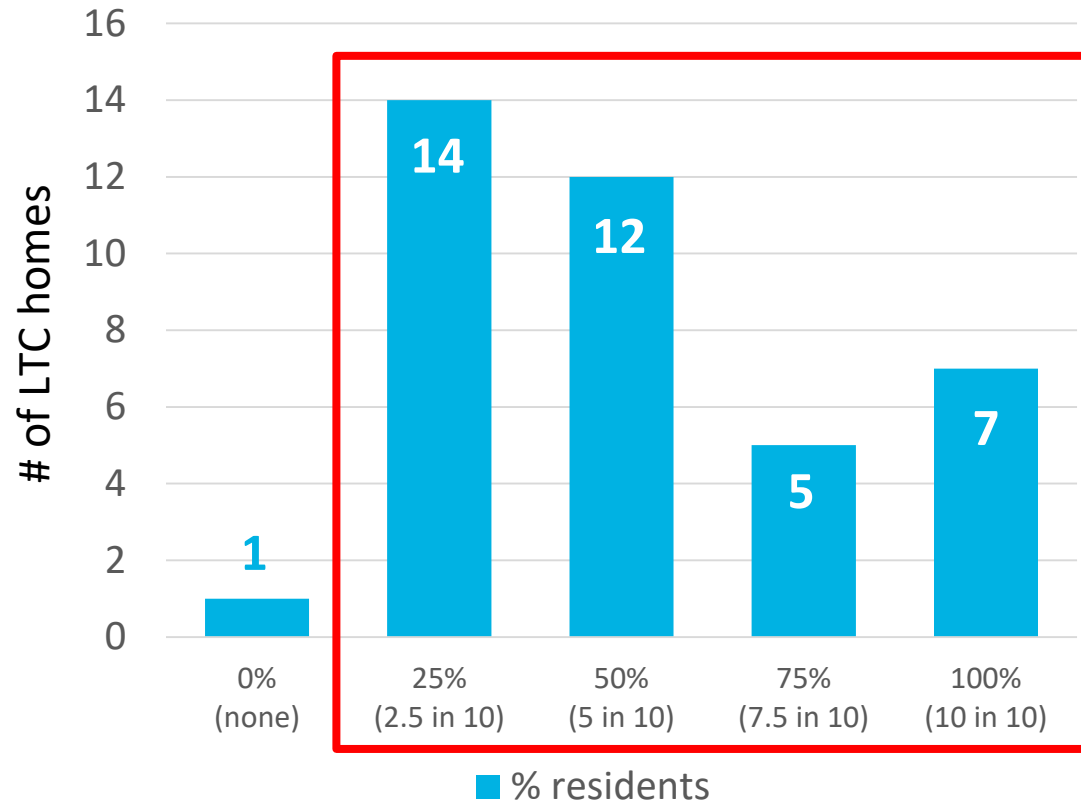
All homes, regardless of business model, appear to have similarly high self-reported resident distress due to social isolation or confinement syndrome.

This suggests that social isolation or confinement syndrome is an issue experienced across the LTC system, and not isolated to certain types of homes.

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Q. If digital connectivity were improved in your home, how many residents (total) do you think might experience less social isolation or confinement syndrome? (e.g., better access to internet, digital devices, senior-specific applications, IT support)
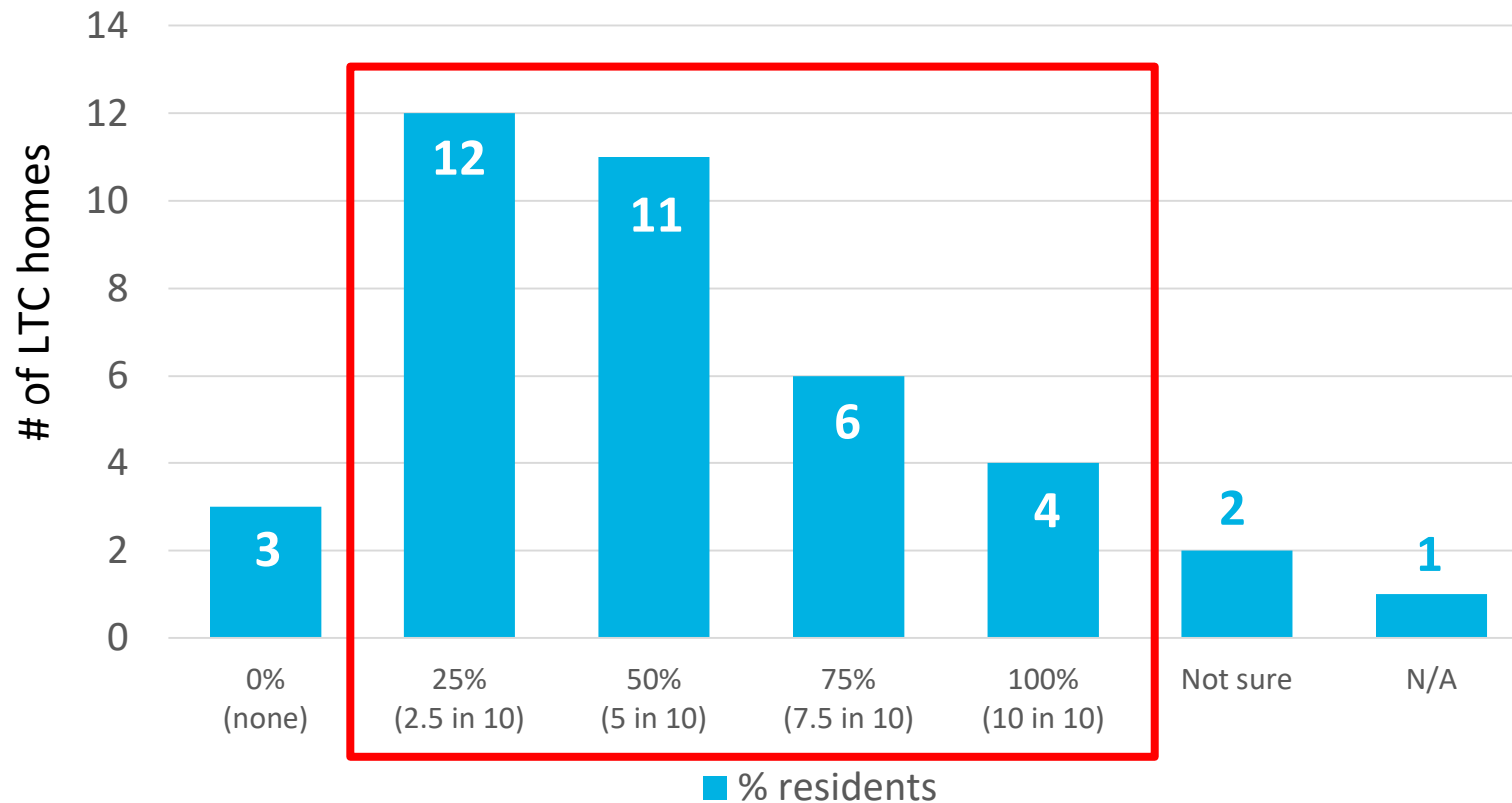
Most homes thought 25% or more residents would experience less social isolation or confinement syndrome if digital connectivity were improved.

Although most homes thought there was room for improvement, the data suggests there was skepticism on how much difference it would make.

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Q. To improve the digital connectivity of residents, which areas would be most important for your home in particular? Please rank from most [1] to least [4] important.
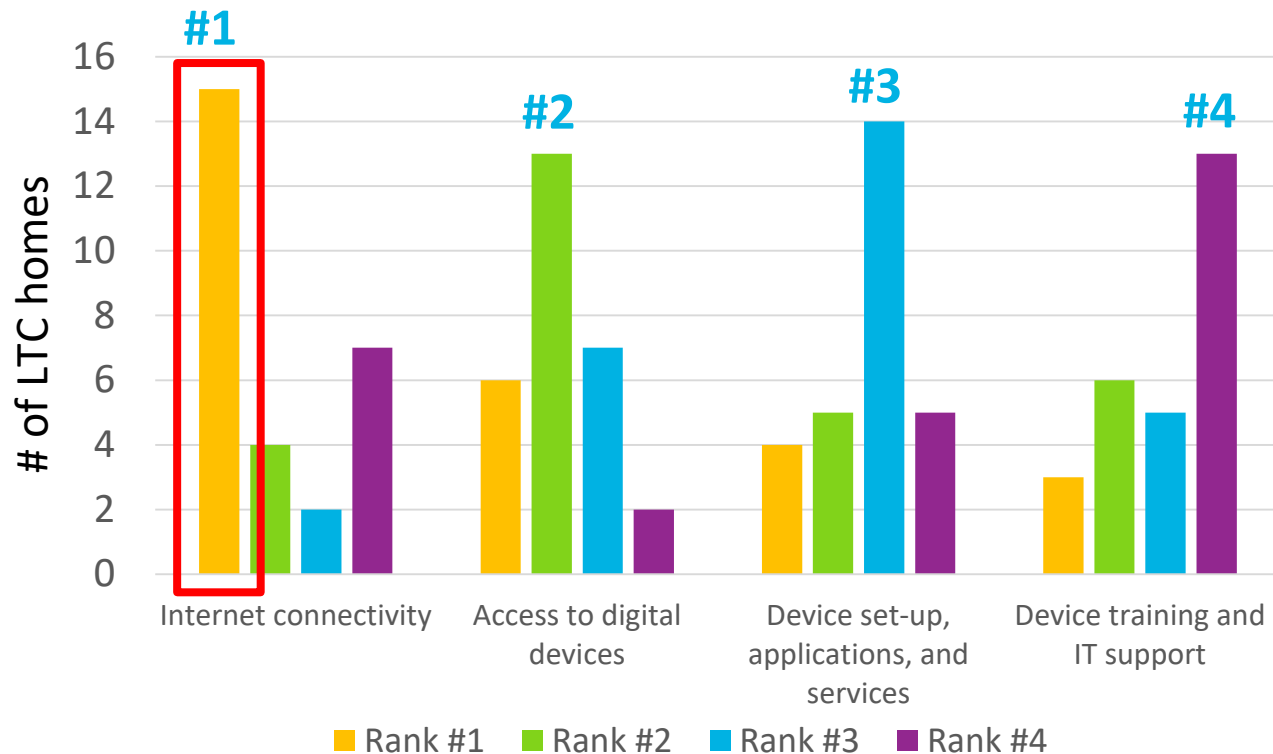
Most homes identified internet connectivity as the area that would be most important to improve. Internet was seen as a foundational piece to digital connectivity.

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Q. Would your home be interested or have capacity to participate in a study that would look at improving the digital connectivity of residents in the home?
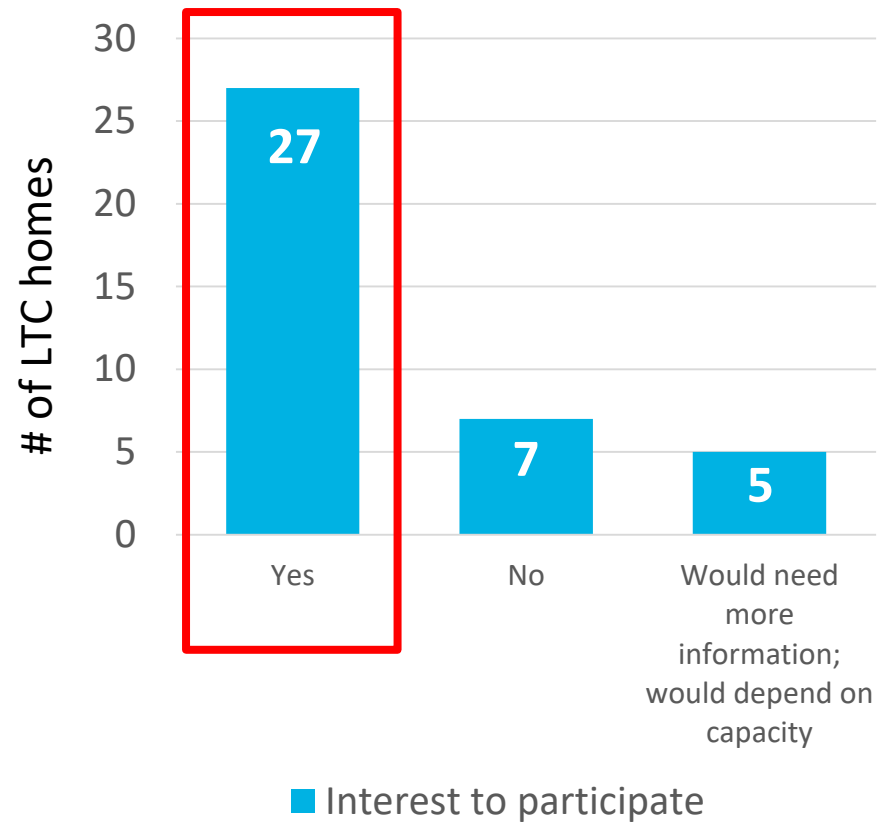
Most homes were interested or had capacity to participate in a study that would look at improving digital connectivity for residents.

# of LTC homes

- Yes: 27
- No: 7
- Would need more information; would depend on capacity: 5

■ Interest to participate

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Q. If the home provides digital devices for resident use, which applications are most used? Please rank from most [1] to least [10] often.

Video calling is the application that homes anticipated would be most used, followed by playing music, then videos, then games.

Legend: Rank #1, Rank #2, Rank #3, Rank #4, Rank #5, Rank #6, Rank #7, Rank #8, Rank #9, Rank #10, N/A

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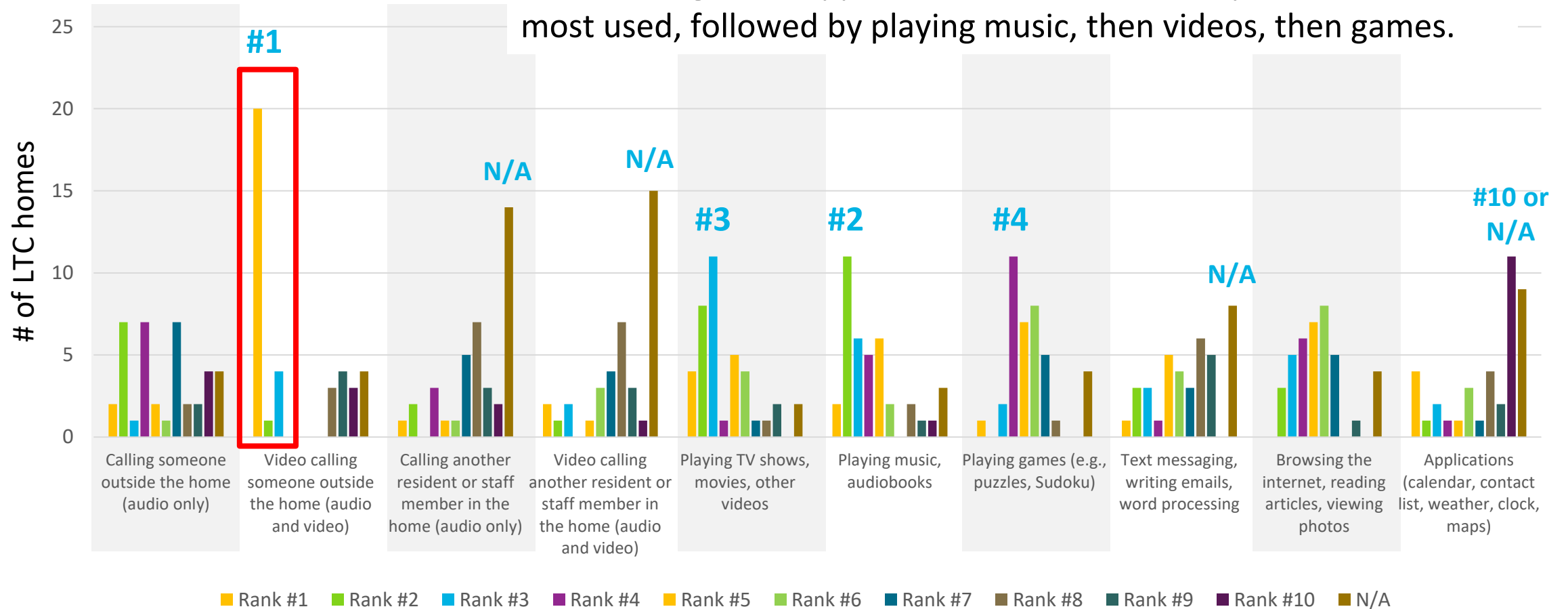
A possible future

For residents...

...we are exploring a future where each LTC home offers residents access to internet and a device...

...each device is chosen and set-up in a way that is tailored to the resident as an individual...

...residents, families, and staff are supported to use the device not only for social connection and entertainment, but eventually for wellness and person-centred care.

"In an ideal world, there would be a device per Resident."
— LTC Survey Respondent, January 2021

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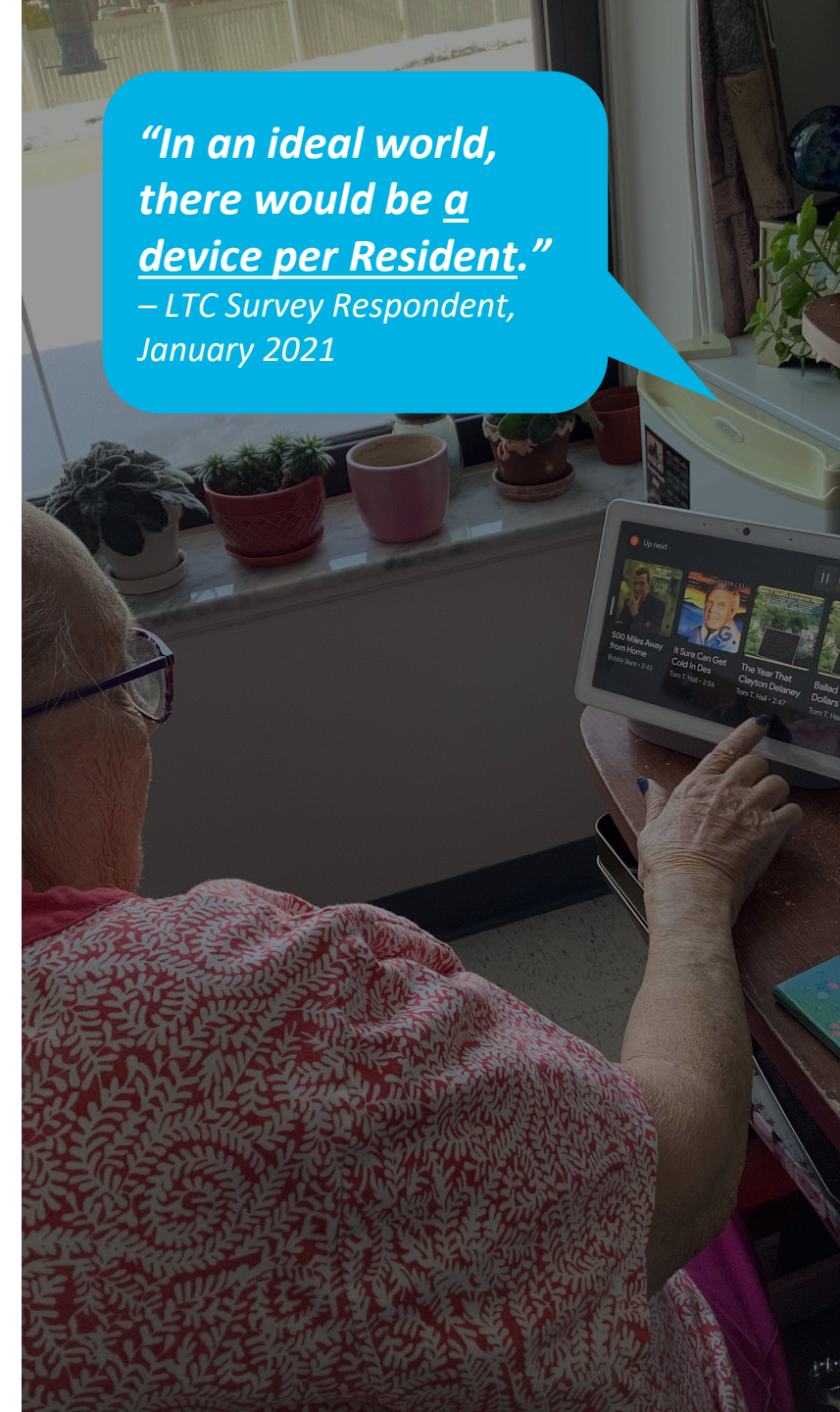
Study #1

Purpose: To understand how a device, such as the Google Nest Hub Max, could reduce social isolation in a LTC home setting.

By the numbers:

- 5 Long-Term Care homes
- 5 Tech Champions
- 50 FREE Google Nest Hub Max devices
- FREE 1 year subscription to Netflix
- FREE 1 year subscription to YouTube Premium
- FREE 1 year subscription to Geek Squad support
- 6-week onboarding and evaluation program

Google Nest Hub Max
https://store.google.com/ca/product/google_nest_hub_max
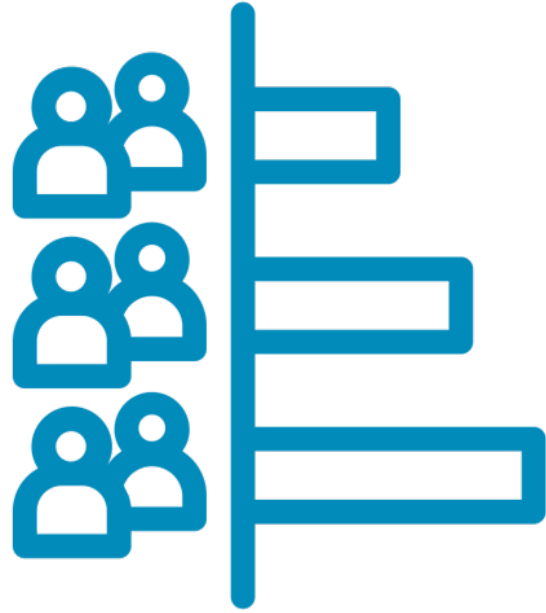
Activity: Myth Busters

Activity tool: Mentimeter

1

You will need your computer or smart phone
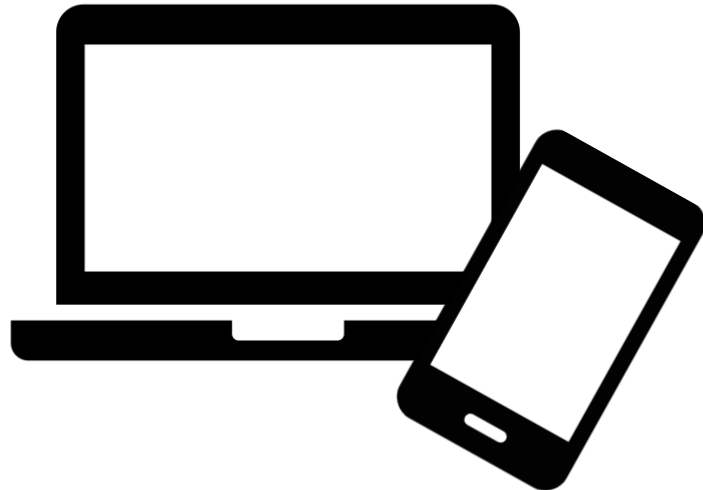
2

Go to www.menti.com

www.menti.com

3

Enter the code to vote!
7232 8972

Mentimeter

7232 8972

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Answer #1

Residents experienced social isolation...

- ☐ Only in LTC homes experiencing an outbreak
- ☐ Only in larger LTC homes
- ☐ Only in non-profit LTC homes
- ☐ Only in for-profit LTC homes
- ☑ In all LTC homes

Myth #1

Residents experienced social isolation only in homes with outbreaks or fewer resources.

Fact!

Residents experienced social isolation across all types of LTC homes, regardless of location, size, and business model. Residents had many group and outdoor activities cancelled, visitors were not allowed except for essential caregivers, and they (and their roommates) had to be isolated during outbreaks and after transitioning from hospital or community to the home.

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Answer #2

In their rooms, all LTC residents have access to…

- ☐ Phone (landline or smart device)
- ☐ Television
- ☐ Personal computer
- ☐ Tablet
- ☐ WiFi internet
- ✔ None of the above

Myth #2

All residents have personal access to basic technology, such as landline phones and TVs. Internet is available for all residents, coordinated by the home. For residents who can benefit, they have access to computers or smart technology (smart phones, tablets).

Fact!

There is great inequity in digital technology access for residents in LTC homes. Many residents don't even have access to basic technology, such as landline phones and TVs. When digital technology is available, it is highly rationed (e.g., small # of shared tablets, WiFi available only for clinical use and not for residents).

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Q. How many residents have <u>personal</u> access (provided by the resident) to:

# of LTC homes (y-axis, values 0 to 25)

Legend: 0% (yellow), 25% (green), 50% (blue), 75% (purple), 100% (dark yellow/olive)

Categories: TV, Landline phone, Smart TV, Smart phone, Tablet, Personal Computer, WiFi internet

Notably, not all residents have personal access to a TV or landline phone in LTC homes.

None or only a few (~25%) residents have personal access to devices such as a smart TV, smart phone, tablet, or personal computer.

In most homes, none or only a few have personal access to WiFi internet.

Answer #3

Residents who would benefit from digital technology…

- ❑ Have no cognitive impairment
- ❑ Have end-stage dementia
- ❑ Are hearing-impaired
- ❑ Are visually-impaired
- ❑ Have responsive behaviours
- ✔ **All of the above**

Myth #3

Residents with cognitive decline, responsive behaviours, or hearing/vision impairments would not be able to benefit from digital technology.

Fact!

Residents of all abilities can benefit from digital technology. In fact, many residents are willing to learn and use something new. Helpful features include voice-activation, louder audio, picture-based interfaces, and personalized and language-specific apps.

One of the most surprising findings was how much concentration a resident with responsive behaviours had when watching a calming video. This helped the resident, but also freed up staff for other activities.

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Vignette #1

Meet Colin…

KEY THEME:
Autonomy and person-centredness

"When the Google device was first introduced in mid January, our resident was already excited about the device. He immediately asked us to play guitar music so he could play along. **He spent almost 1 hour playing along with his own guitar in his room. He became even emotional, which was surprising to see.**

I was overwhelmed with joy seeing the resident thoroughly enjoying himself, despite his physical limitations. It was a bittersweet moment for me to see him playing his guitar." – Tech Champion

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All names have ben changed to protect privacy.

Vignette #2

Meet Mi-jung…

"One of our residents is **non-verbal, and only knows Korean**. She usually would lay in bed, sleeping most of the time and not moving. When we brought the Google device into her room, her reaction was remarkable. We would play music and movies in Korean, and she visibly started looking more alert and awake, and make sounds. She even started wanting to go to the dining room for breakfast.

She is now using it every day and staff will check in on her to make sure her music or Korean shows are playing for her at all times."

KEY THEME:
Importance of culture and language

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Vignette #3

Meet John…

KEY THEME:
Independence and freedom

"One of our residents is a social butterfly but had a hard time hearing his phone ring and the volume on the phone. **When the Google device rang for the first time, he actually picked up the call by himself!** He talked for almost an hour with his daughter.

His family gave us an entire list of people to program into the device and is absolutely loving the video calling. **He uses the device independently and talks to his daughters daily now. He even met his great grandchild on one of the calls.**"

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Myth #4

In LTC homes, residents are happy to share devices or have a private room where residents can go to access shared digital technology.

Fact!

Residents preferred having their own individual digital devices compared to having them in common spaces (to the surprise of the Recreation Directors in our first study).

Individual devices allowed features and applications (e.g., YouTube playlists of church services in Italian) to be personalized for the resident. It provided information privacy and freedom to use the device on the resident's own schedule, as well as could support in-room wellness and health care in the future. Individual devices also reduced the need to clean for shared use.

Devices had much more limited use in common spaces (e.g., mostly for music).

"Imagine sharing one smart phone with your whole family!"

– LTC Planning Table Member

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Myth #5

**Having residents use digital technology in homes is an added burden for LTC staff.**

Fact!

Staff feedback reflected that they did not feel more burdened by the introduction and use of the digital devices. Initial set up new devices did take some time, but at scale, this could be done in a more structured way with greater support for staff. Staff actually enjoyed using the digital devices to spark conversation with residents, and to create a more lively atmosphere. As residents learn to use devices independently, the amount of staff time needed for assistance could be reduced in some cases.

Vignette

"Staff say it is boosting morale within the home and they have said it has even changed their mood throughout the day. A resident was listening to her hub in the hallway by herself and a housekeeper came up the hall dancing to her music and the resident stood up out of her chair and began shaking her hips and swaying along with the staff member."

– Tech Champion
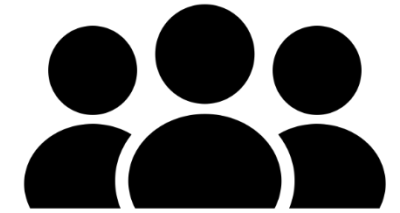
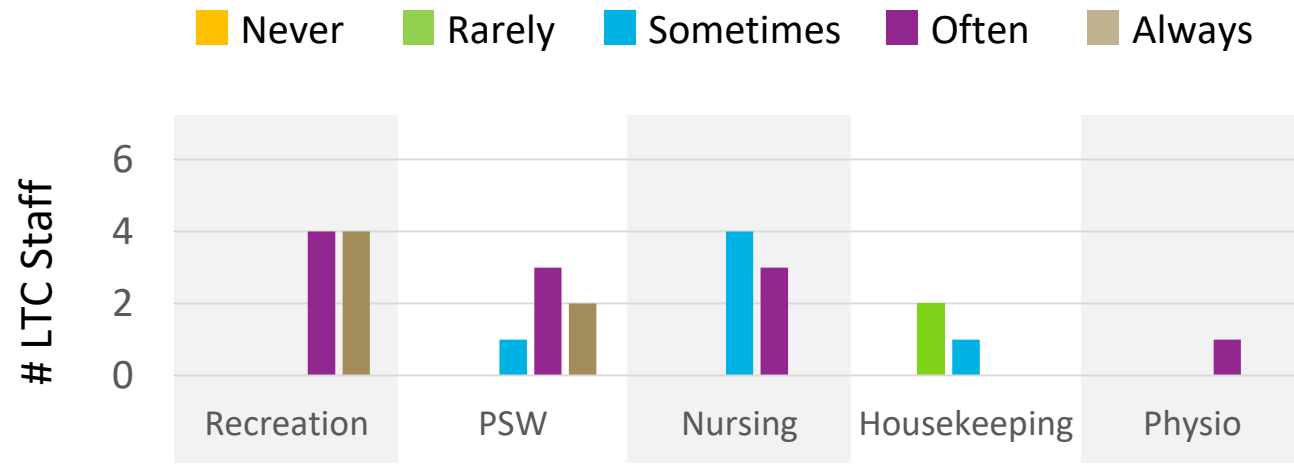*"Digital devices help remove the boringness and also helps you feel more fresh, awake, and comfortable."*
– PSW Response in Study #1

"A surprise for me was that our housekeeping staff used the device the most." – Tech Champion
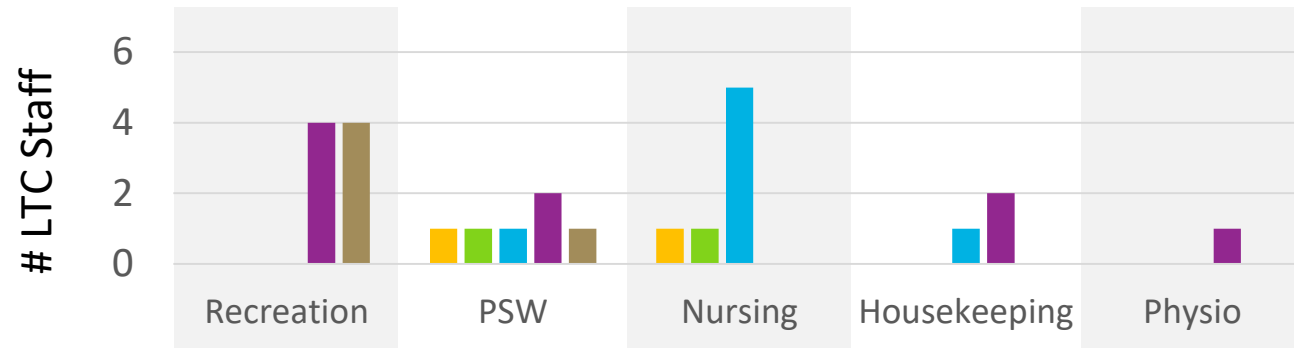
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Staff survey

Q. How often do you feel comfortable using digital devices?

Q. How often do you provide assistance to residents in the use of digital devices?

Q. How often does providing assistance to residents using digital devices affect your level of burnout?
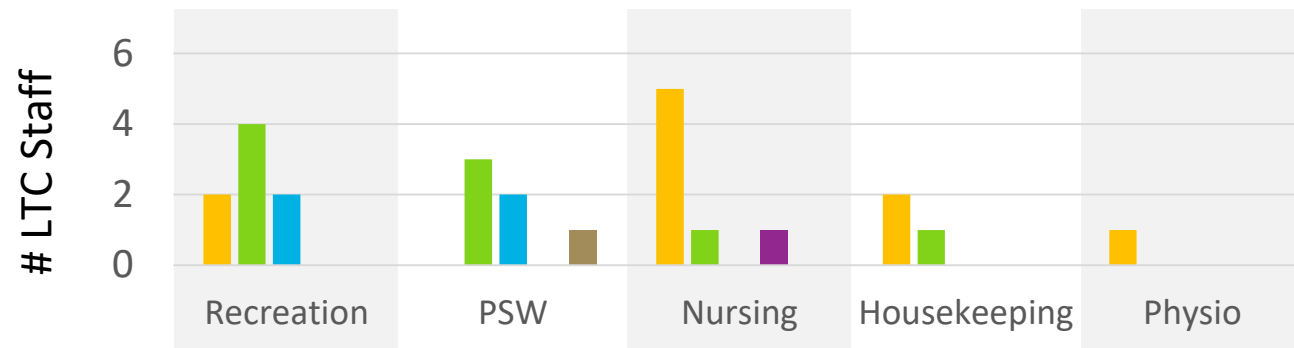

Most staff often or always felt comfortable using digital devices.

How often staff assisted residents in the use of digital devices heavily depended on their role.

Most staff did not feel assisting with digital devices affected their level of burnout.

Myth #6
LTC residents use digital devices mostly for making calls to family and friends outside the home.

Fact!
Residents primarily used digital devices for playing music and videos, with a focus on those in their own language. The translation feature was also used on the devices to help residents and staff communicate. Personal preference was a big factor in which applications were most used, with virtual church services being very popular. Staff also used the devices for group or individual fitness classes. Importantly, homes in our first study had an established process for helping residents do video calls with families, and didn't want to disrupt this.

Vignettes

"She is LOVING the device. She listens to music almost all day, and **has begun doing research on it and writing things down**.

Her family brought her in old photos of her siblings and she has been looking up information on the locations the photos were taken at. I put some photos of her on the device which she enjoys." – Tech Champion

"The device has become a conversation piece. We have residents that gather in the lobby after breakfast and **spend their time requesting what the weather is in Toronto, other parts of Canada, and around the world.**

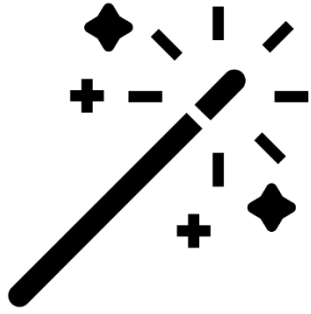It has become a daily routine to check out the weather in Calgary, Vancouver, Newfoundland, California, England, parts of Italy, etc." – Tech Champion

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Our next steps

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To achieve this possible future, we need…

System-wide investments can be a game changer for residents and their families

- Provincial/regional government to **evaluate, coordinate, and fund discounted service packages** (e.g., internet, devices, IT support) with technology providers focused on improving the resident experience and making digital connectivity as easy, consistent, and cost effective as possible

- LTC homes to connect to centralized supports (e.g., provincial/ regional government) that will help all homes achieve a **minimum digital technology standard** for residents

- LTC homes to put in place a **reliable internet network** accessed by all residents and provide **digital devices** that are tailored to the individual LTC resident and fully integrated into their daily experience

- LTC homes to **invest in recreation teams and volunteers** to enhance digital literacy, training, and programming

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What could be done today

- **Encourage your local LTC home to complete our survey and participate in one of our studies**

  https://www.surveymonkey.com/r/LTC_Resident_Digital_Connectivity_2021

- **Encourage your Ontario Health region to get in touch with us to expand this approach beyond Central region**

- **Help us build momentum and advocate through your communities! (Family Councils, Resident Councils)**

- **Family Councils can work together to write a position paper on this topic that can be published and shared**

where **all residents** in long-term care

have reliable **internet**, access to a **device**, have **easy-to-use** applications, and digital **support**.

Video link: https://youtu.be/y81eDaHA2fw
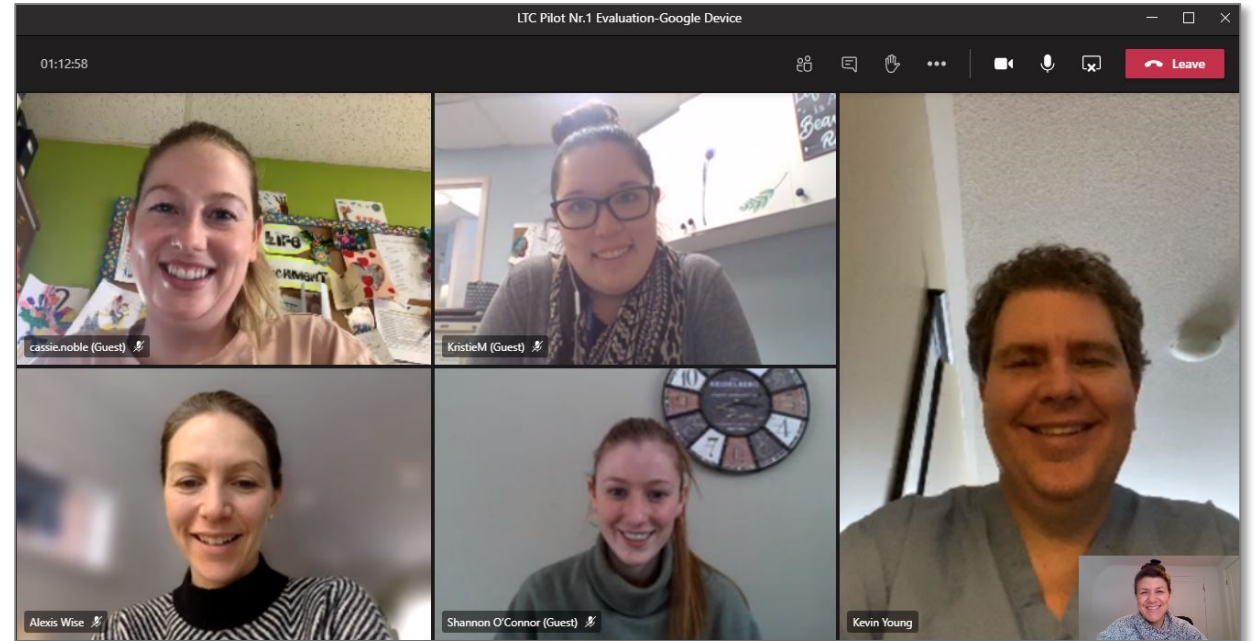
Acknowledgments

Study #1

STUDY TEAM
- **Bonnie Scott** | ONTARIO HEALTH (CENTRAL)
- **Alexis Wise** | SE HEALTH, FORMERLY AT SIDEWALK LABS
- **Kevin Young** | WAYPOINT CENTRE FOR MENTAL HEALTH CARE & PGLO

LONG-TERM CARE HOMES
- **Cassie Noble** | KING CITY LODGE NURSING HOME
- **Kristie Marsh** | GOOD SAMARITAN NURSING HOME
- **Shannon O'Connor** | MARIANN HOME
- **Sonia Fedele** | BENNETT VILLAGE
- **Daireen Encomio, Arti Shah, and Tina Afram-Babalola** | NORTH PARK NURSING HOME

Acknowledgments

LTC Planning Table

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- Candace Chartier | SOUTHBRIDGE CARE HOMES
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- Cindy McDonell | HALTON HEALTHCARE
- Dee Lender | ONTARIO ASSOCIATION OF RESIDENTS' COUNCIL
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- Nataly Farshait | HUMBER RIVER HOSPITAL
- Nicholas Brandon | PEEL PUBLIC HEALTH
- Paula Chidwick | WILLIAM OSLER HEALTH SYSTEM
- Ruth McFarlane | DURHAM CHRISTIAN HOMES
- Samantha Peck | FAMILY COUNCILS OF ONTARIO
- Sarah Morris | ROYAL VICTORIA HOSPITAL
- Sharron Cooke | YORK REGION NEWMARKET HEALTH CENTRE
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- Melissa Mei
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- Veena Syan
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Thank You

We would love to take your questions!

- Do you support this?

- What else can we do?