

Findings from the Waterloo Wellington Virtual Care PDSA

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December 9, 2020

WW Virtual Care PDSA

Regional and Project Context

Plan-Do-Study-Act Approach
and Results

Stories of Success and
Opportunities to Improve

Virtual Care Toolkit

Conclusions

NLOT and BSO Leads

Carrie Heer, Provincial and WW
Nurse-Led Outreach Team Lead
St. Joseph's Health Centre, Guelph



Audrey Devitt, WW Behavioural
Supports Ontario Service System Lead
St. Joseph's Health Centre, Guelph



Regional Context



**Significant
virtual care
presence in
Waterloo
Wellington**



**36 LTC and
51
Retirement
homes
(87 homes)**



**4 Ontario
Health Teams
1 LHIN**



**NLOT working
directly in
LTC homes
10+ years**

**Promotes nursing
best practices**

Builds staff capacity

Promotes resident-
centred care

Reducing ED
transfers



**BSO working
directly in
LTC homes
and
community
10+ years**

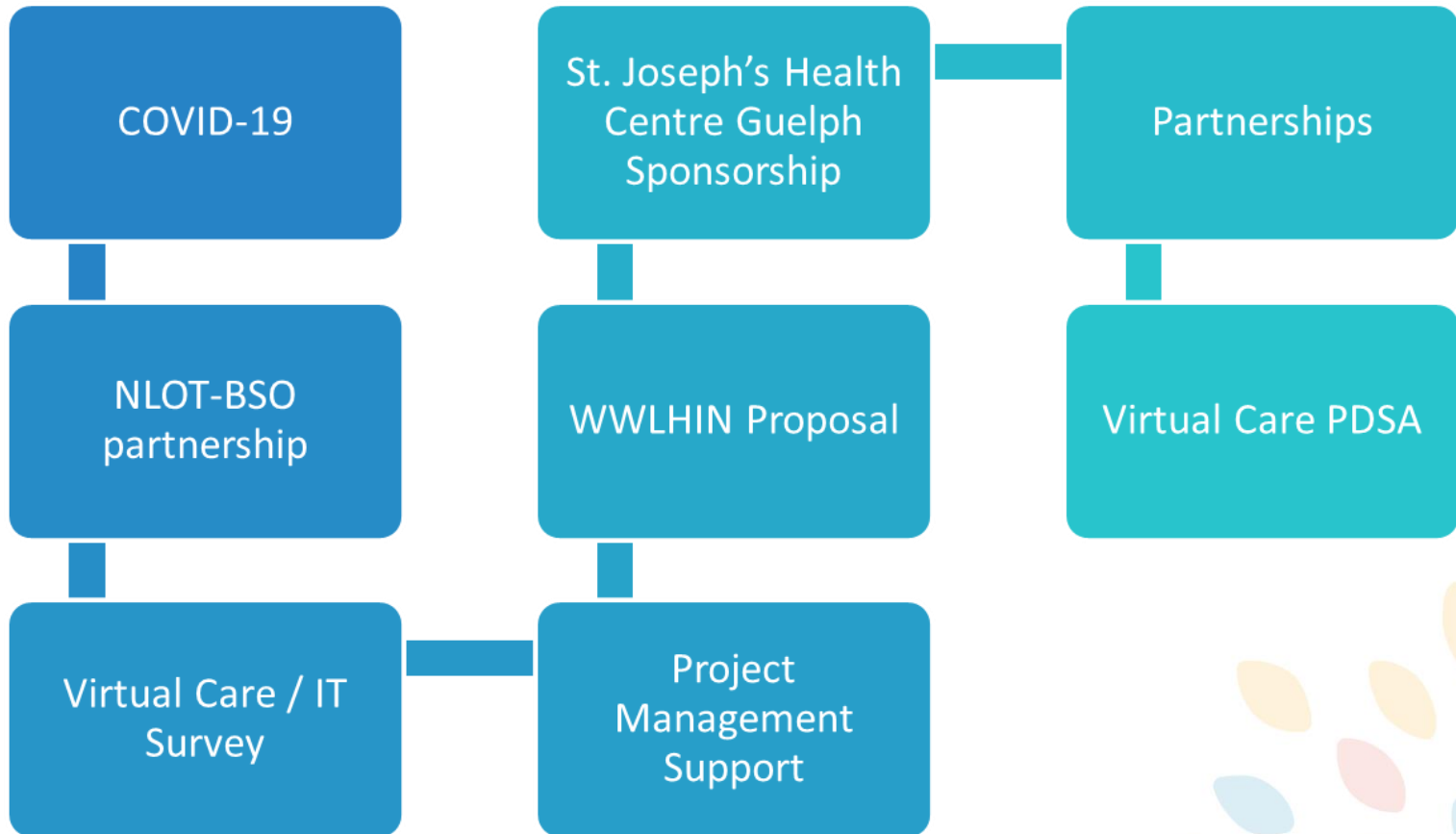
**Promotes
behavioural
support
interventions**

Builds staff capacity

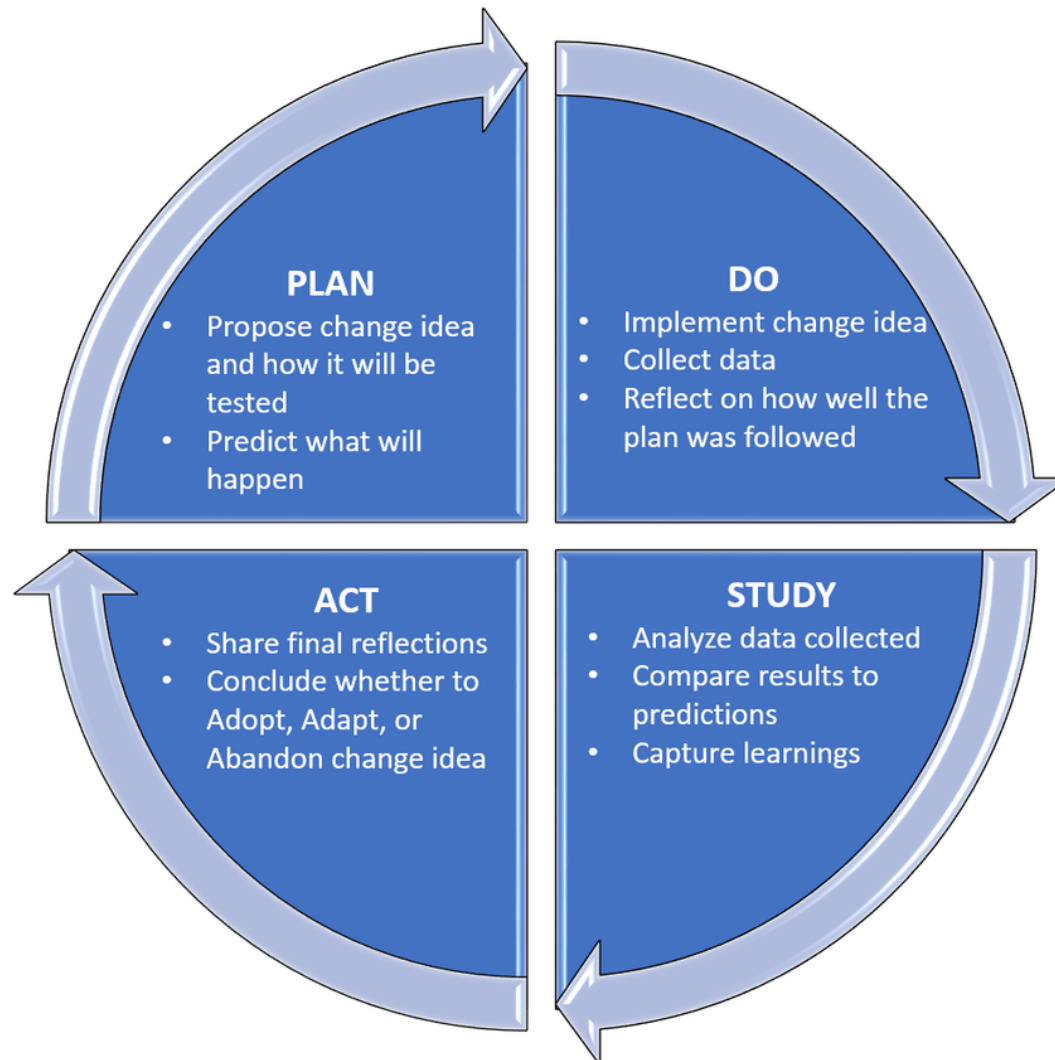
Promotes resident-
centred care

Reducing ED
transfers

Project Context



Plan-Do-Study-Act (PDSA) Approach



Source: Chris Hulleman, A Visual Diagram of a Plan-Do-Study-Act (PDSA) Cycle. Retrieved January 7, 2021 at https://www.researchgate.net/publication/319377456_Using_Improvement_Science_to_Design_and_Scale_Up_Social_Psychological_Interventions_in_Schools_The_Case_of_the_Growth_Mindset_App

Participating PDSA Homes

LTC Homes

- 1. Sunnyside
- 2. Fairview Mennonite Home
- 3. St. Luke's Place
- 4. LaPointe-Fisher
- 5. The Elliott
- 6. Cambridge Country Manor
- 7. Winston Park
- 8. Pinehaven
- 9. University Gates
- 10. Golden Years

Retirement Homes

- 1. The Elliott Community
- 2. Lanark Village
- 3. Caressant Care Arthur
- 4. Caressant Care Listowel
- 5. Caressant Care Harriston
- 6. Norfolk Manor
- 7. Countryview Retirement Residence
- 8. Queen's Square Terrace
- 9. Stone Lodge
- 10. Hamilton's Hometown Retirement Living

Virtual Care Platforms Used

Think Research's LTC VirtualCare™ Platform

- Integrated with PCC and MED e-care EHRs
- Ministry funded May 1-October 31; extended
- Required PCC Integration Package (approx. \$900/100 bed home/yr) for PCC homes only
- Available to allied health providers
- Training was very well received

Ontario Telemedicine Network

- Free
- Provides up to 18 parties on the call at once
- Band-width is sometimes a concern
- Takes time to set up but quick and easy to use
- Available to allied health providers
- Training was very well received

8 Measures of Success

of residents being transferred to ED in the last 90 days
(fewer is better)

of residents being admitted to the hospital in the last 90 days
(fewer is better)

of days spent in hospital (indicating early-repatriation to their previous care setting) in the last 90 days
(fewer is better)

% of residents who had same day/next day access to primary care
(higher is better)

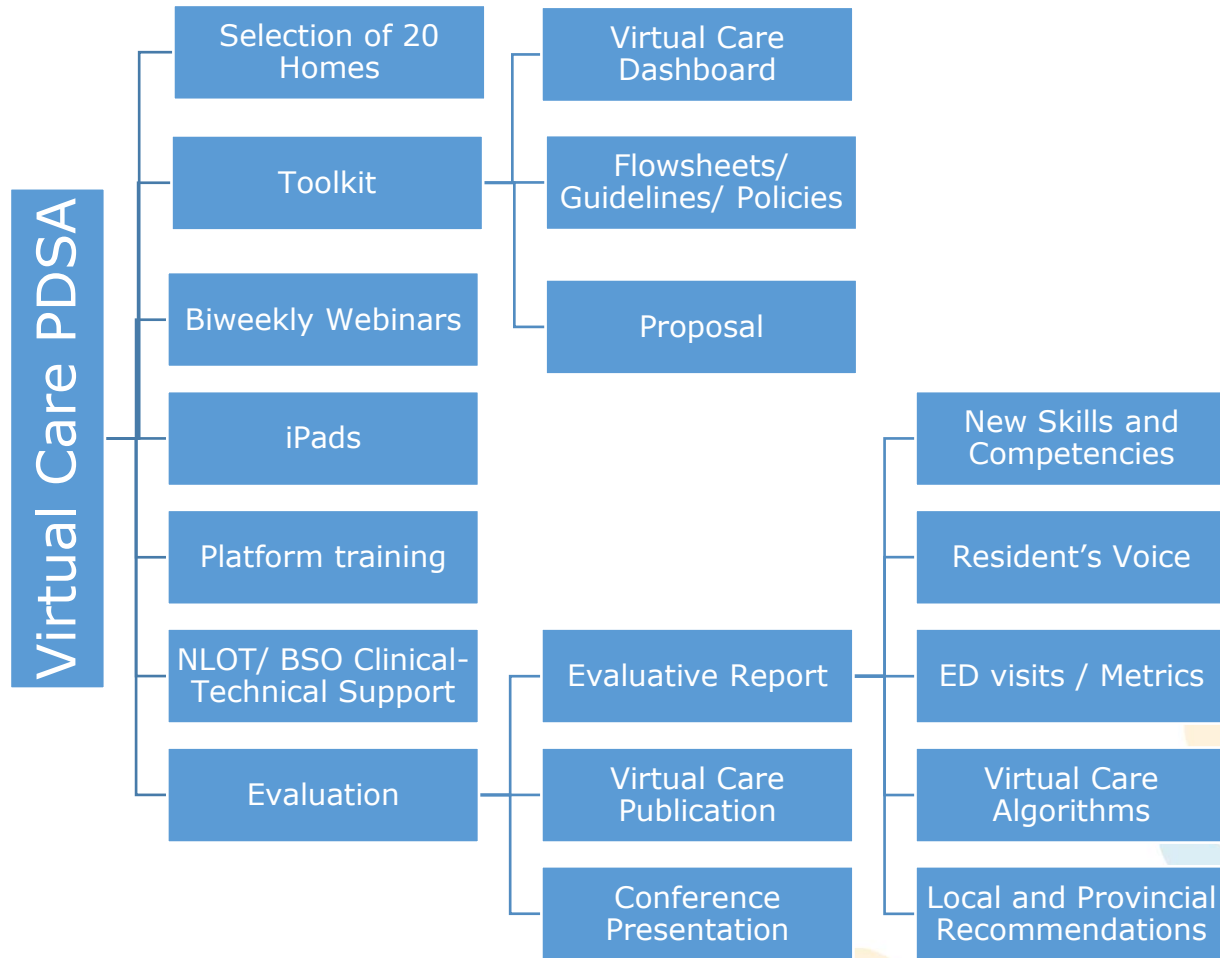
of ED transfers avoided due to primary care VV in the last 30 days
(higher is better)

of ED transfers avoided due to MD/NP/specialist VV consult in the last 30 days
(higher is better)

of residents supported by geriatric e-consults in the last 30 days
(higher is better)

% of homes stating they had sufficient technology to implement virtual care
(higher is better)

PLAN



Sources of Qualitative Data

Weekly touchpoints
with homes by NLOT-
BSO Nurse
Consultants

Biweekly webinars
with homes (Q&A
Drop-Ins)

Midproject
touchpoint with
administrators /
nursing leadership

Multiple focus groups
with staff and
physicians

Interviews with
residents, families,
nursing leadership,
and allied health
providers

Predictions

- 1) Virtual care would make a difference to quality outcomes (e.g., ED visits, Hospitalizations, LOS) in LTC and retirement homes
- 2) Virtual care would increase access to primary care (e.g., same day / next day access) and in so doing reduce ED visits from LTC and retirement homes
- 3) Homes would increase their capacity to use virtual care (i.e., have adequate technology, reliable wifi and platforms to support virtual care in their homes)
- 4) Organizations that were more “ready” to implement virtual care would have better uptake of virtual care compared to homes that were less ready

Do

A matrix was created, containing:

A) Background information

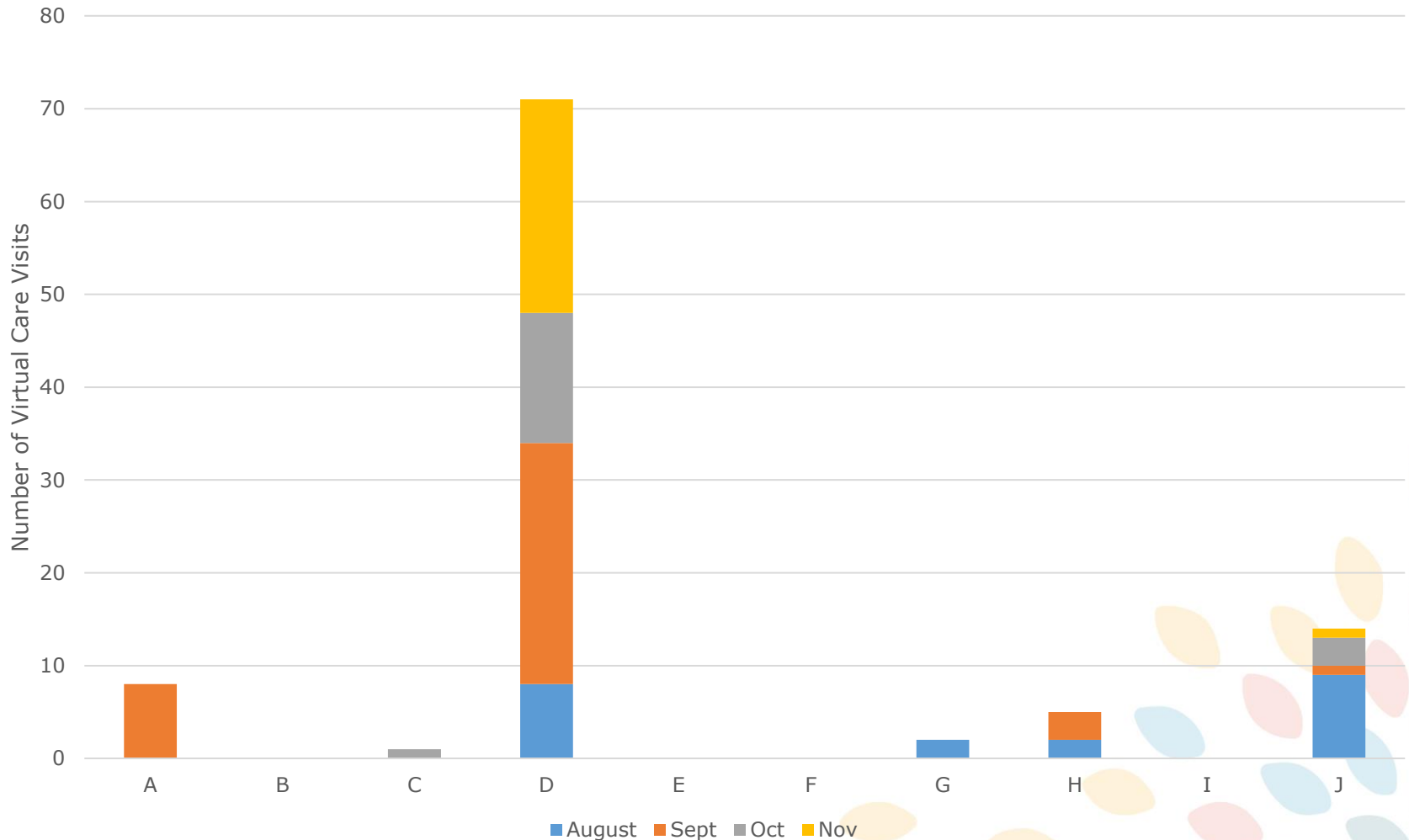
- PDSA home characteristics (e.g., number of beds, location, contact information, etc.)
- Start dates, training dates, weekly touchpoints, assigned NLOT consultant
- IT survey results (April and November)
- Home-level Readiness assessments
- QIP, performance and inspection data

B) Measures of Success

C) Status updates based on weekly touchpoints

Use Data from Think Research

Number of Virtual Care Visits, by LTC Home August-November, 2020



Study Results

RATE OF ED VISITS PER 100 BEDS

LTC PDSA VS CONTROLS, APRIL - SEPTEMBER

Rate of ED Visits per 100 Beds Q1&2 in LTC PDSA Homes, by Month (n=1179)



Rate of ED Visits per 100 beds Q1&2 in Control Homes, by Month (n=2838 beds)



Source: Government of Ontario, Health Analytics Branch, LTCHomes.net QIP Data

Study Results

RATE OF HOSPITALIZATIONS PER 100 BEDS

LTC PDSA VS CONTROL, APRIL - SEPTEMBER

Rate of Hospitalizations per 100 Beds in LTC PDSA Homes by Month (n=1179)



Rate of Hospitalizations per 100 beds Q1&2 in Control Homes, by Month (n=2838 beds)



Source: Government of Ontario, Health Analytics Branch, LTCHomes.net QIP Data

Study Results

RATE OF LENGTH OF STAY (# OF DAYS) PER 100 BEDS LTC PDSAVS CONTROL, APRIL - SEPTEMBER

Rate of LOS (# Days) per 100 Beds Q1&2 in LTC
PDSA Homes, by Month (n=1179)



Rate of LOS (# Days) per 100 beds Q1&2 in LTC
Control Homes, by Month (n=2838 beds)

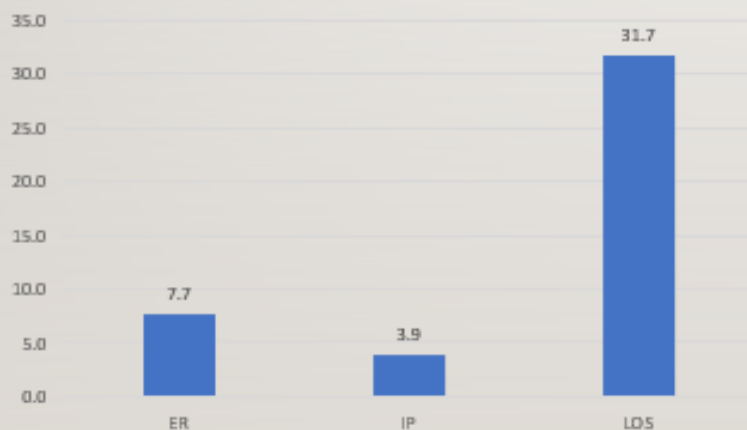


Source: Government of Ontario, Health Analytics Branch, LTC Homes.net QIP Data

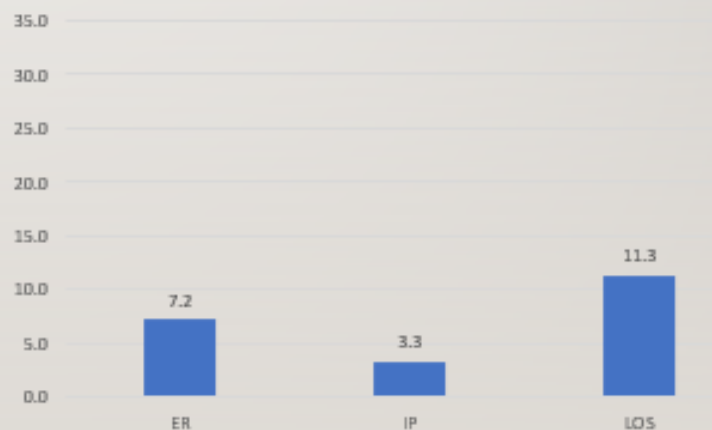
Study Results

RATE OF ED VISITS, HOSPITALIZATIONS AND LOS LTCVS RH PDSA HOMES, AUGUST - OCTOBER

Rate of ED Visits, Hospitalizations and LOS per 100
Beds in LTC PDSA Homes, Aug-Oct
(n=1179 beds)

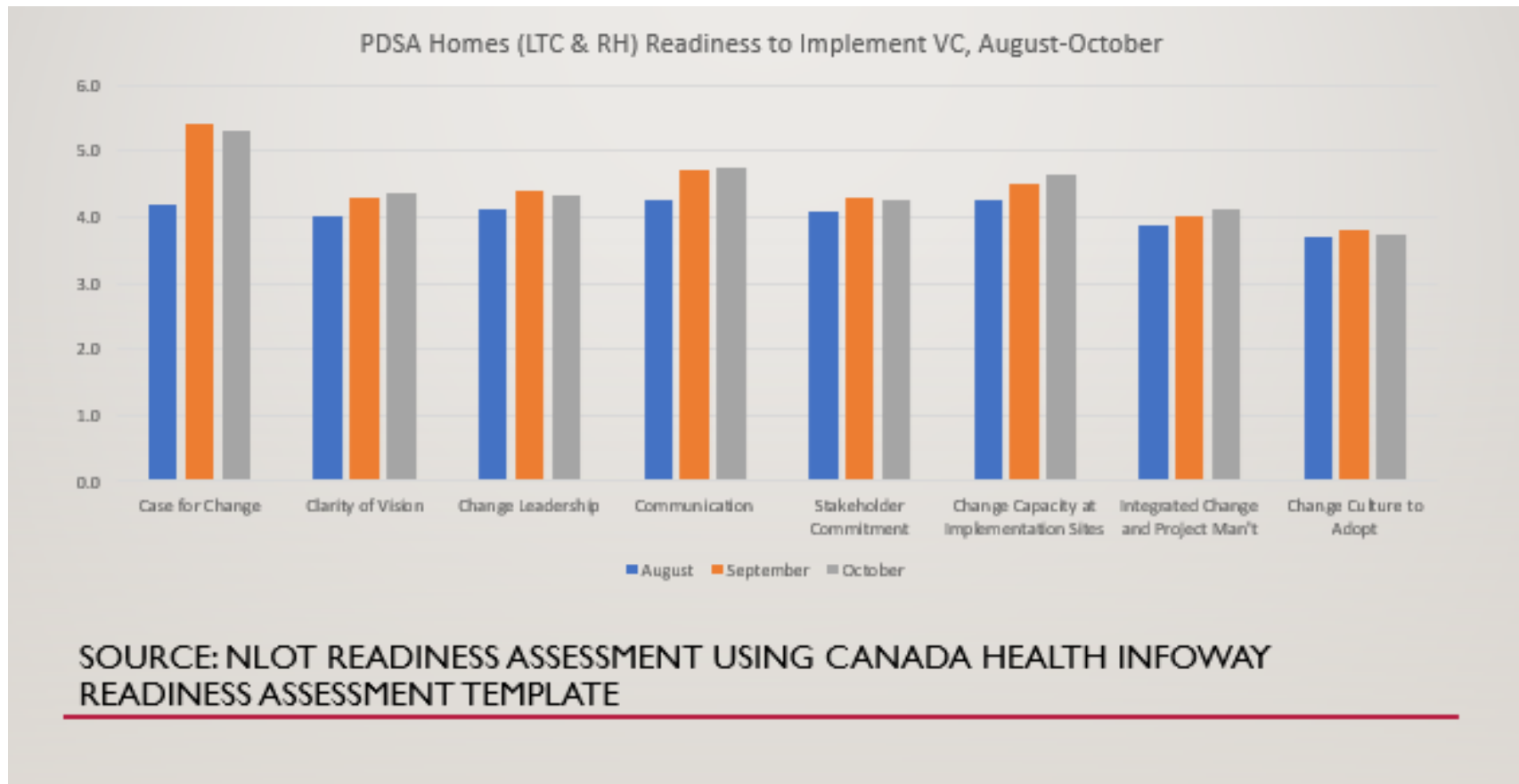


Rate of ED Visits, Hospitalizations and LOS per 100
Beds in RH PDSA Homes, Aug-Oct
(n=936 beds)



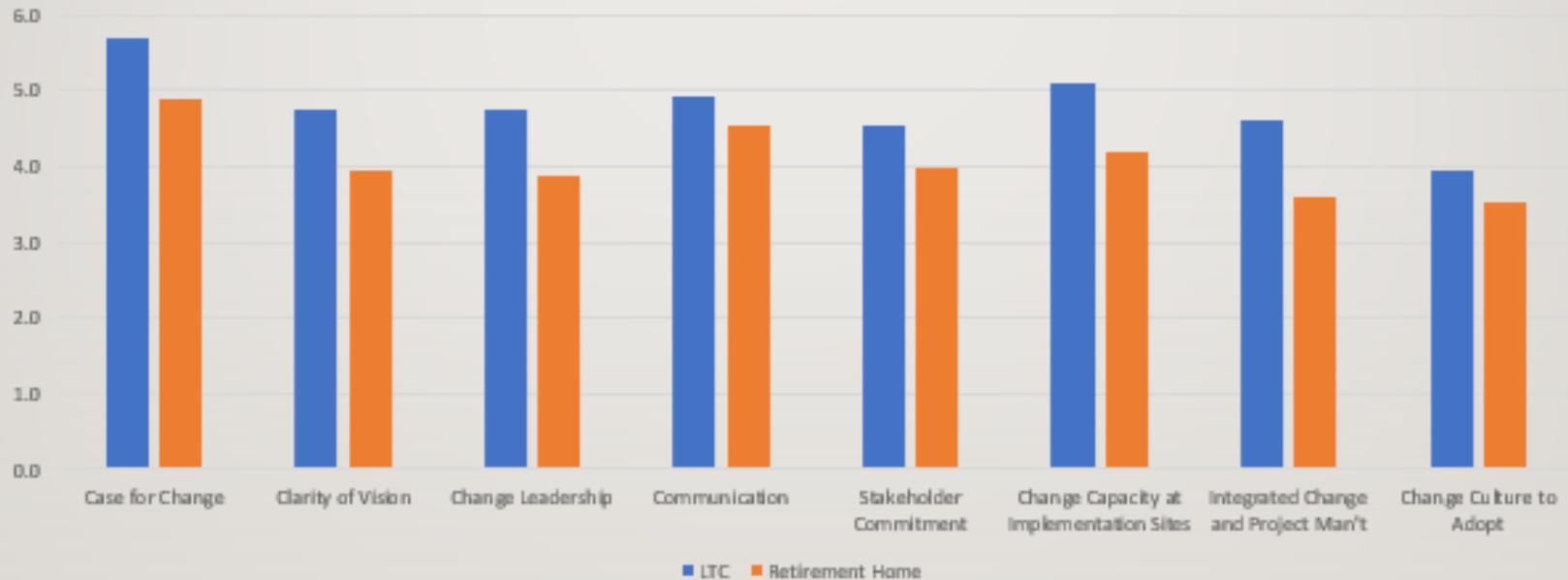
Source: NLOT Quarterly Template

Study Results



Study Results

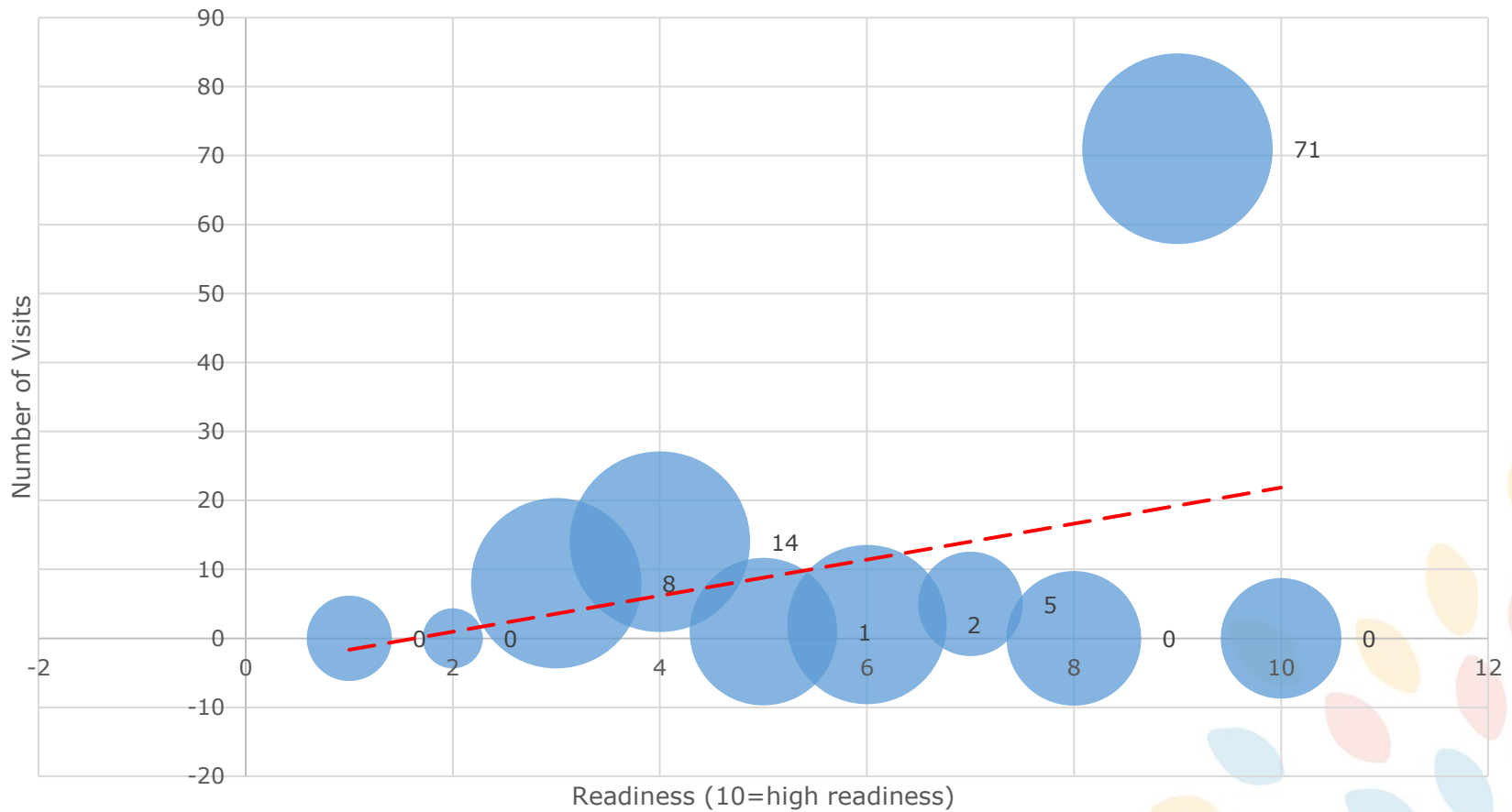
October PDSA LTC VS RH



SOURCE: NLOT READINESS ASSESSMENT USING CANADA HEALTH INFOWAY READINESS ASSESSMENT TEMPLATE

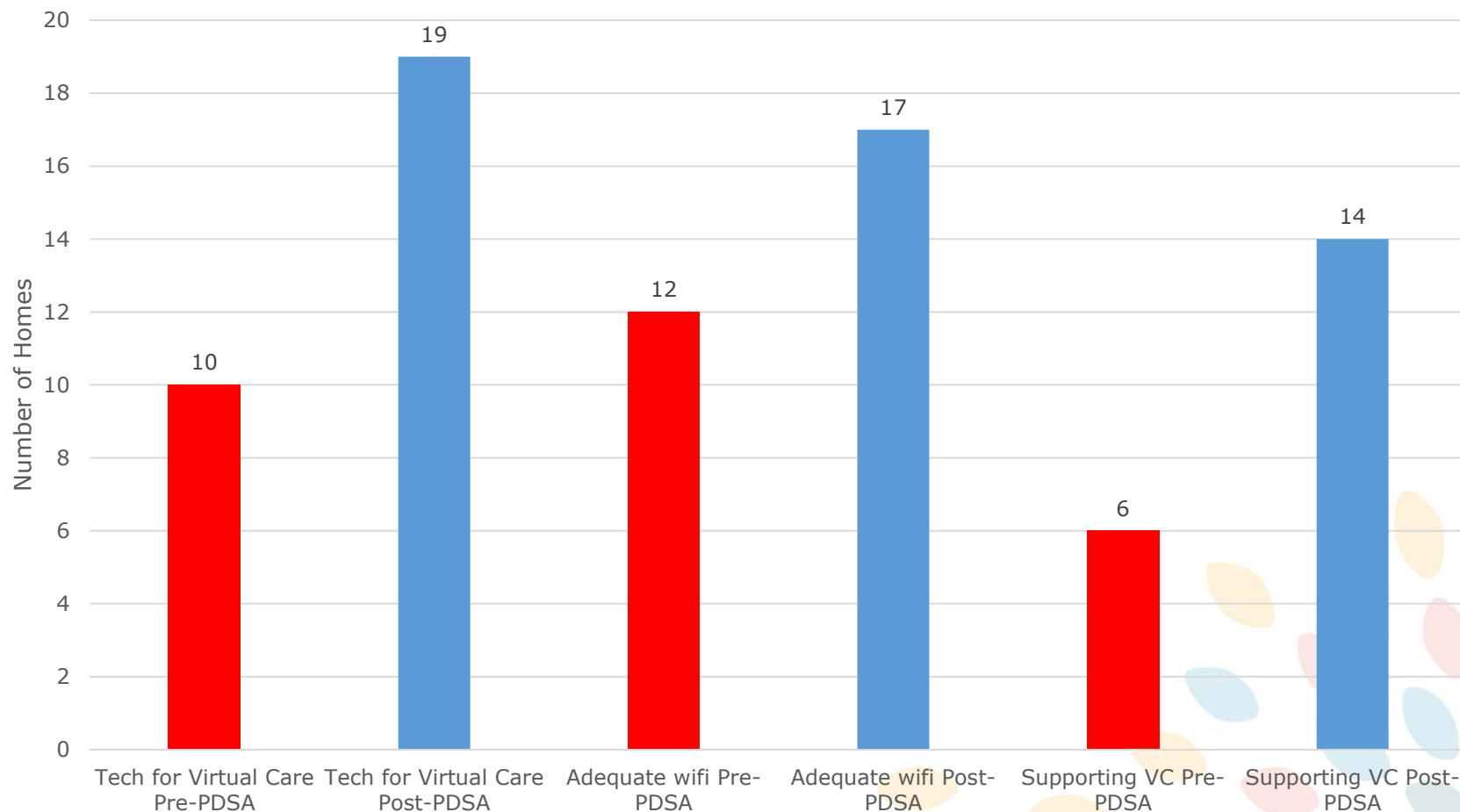
Study Results

Correlation between Readiness and Use of Virtual Care in LTC Homes
(October, 2020)



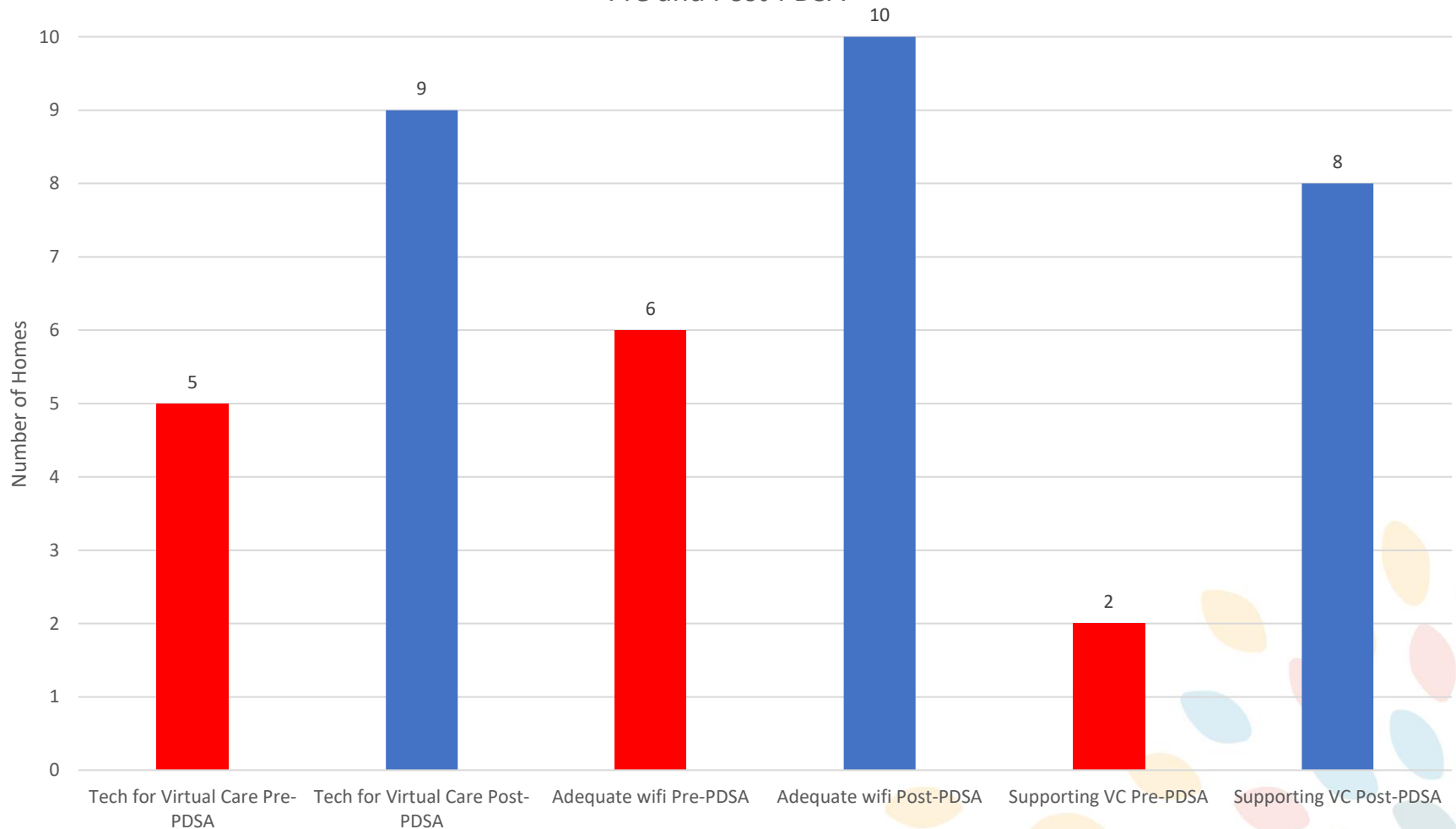
“IT Survey” Results (Pre-Post)

Capacity to use Virtual Care in LTC and Retirement Homes
Pre and Post-PDSA

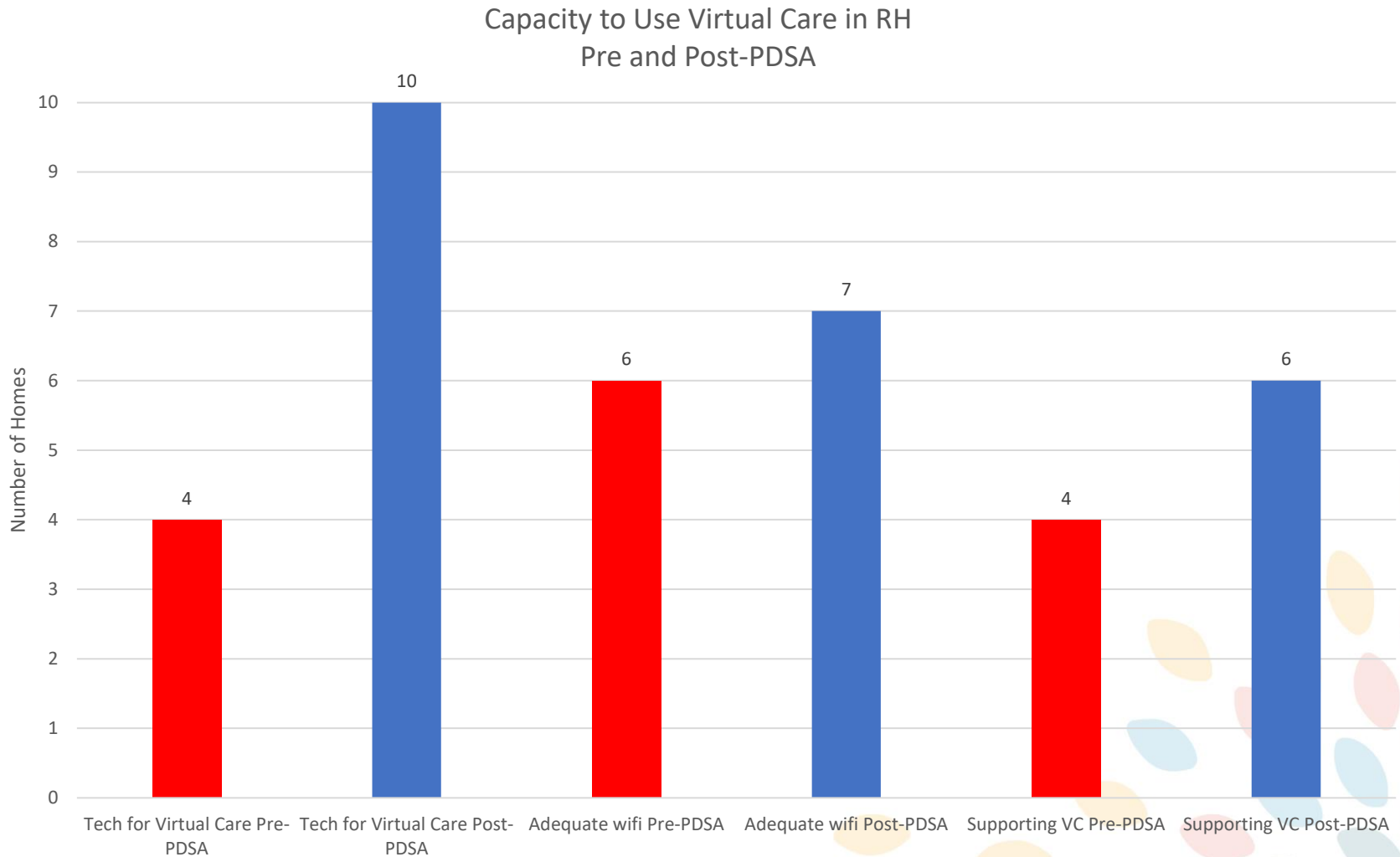


“IT Survey” Results in LTC (Pre-Post)

Capacity to use Virtual Care in LTC
Pre and Post-PDSA



“IT Survey” Results in RH (Pre-Post)



Qualitative Themes

Resident/family
Satisfaction

Physician
Engagement

Home
Environment

Privacy, Security
and Alternative
platforms

Vendor
Capacity to
support

Financial
Support and
Sustainability

Nursing
Workarounds



Stories of Success

Resident / Family Satisfaction

One ED transfer prevented with virtual care. Resident noted to be happy to speak with physician "face to face".

Major benefit is for those not being able to afford transportation. One round trip to hospital costs \$50, so OTN saved one resident \$50. Same resident has an (upcoming) appointment with a specialist via OTN (retirement home).



Stories of Success

Physician Engagement

This week used OTN with MD to discuss a resident's integumentary concern. MD able to assess using OTN and provided treatment in the home the next day (ED avoidance).

Think platform continues to be well utilized for physician rounds especially with doctor on the isolation unit.



Stories of Success

Home Environment (Retirement Home)

Received data for... measures of success. (Nursing leader) enjoyed participating in the PDSA. Thought the time commitment was good and request for data was easy to obtain as (Nursing leader) consistently tracks this data.



Stories of Success

Vendor Capacity to Support

Trial for OTN visit with iPad was very successful, no issue with connection, voice or camera. (Nurse) said very user-friendly. OTN set up confirmed as being successful and ready to use.

Continue to use Think Research VirtualCare. Likes that it speeds up medical follow up. Before nurses would need to wait for physician to be out of a meeting to write a prescription. With virtual care, physician writes script during meeting.



Stories of Success

Nursing Workarounds

RN (home's virtual care champion) to be given shifts to specifically support virtual care training with nurses. (NLOT) to provide resources to support her next week as she will be teaching nursing staff on evening and nights on the virtual care platforms.

(Nursing Leader) wants virtual care to be used for discharge planning from hospital to keep resident's family updated, as well as to be able to effectively discuss what care needs the home is able to manage.



Opportunities to Improve

Physician Engagement

Doctor could not log on to OTN account. Physicians not all interested in doing orders and requisitions in VirtualCare (Think because they generally complete these items in (alternative platform)).

Providers have requested to be contacted via fax - not accepting virtual care visits at this time.



Opportunities to Improve

Home Environment (Health Human Resources)

Not able to connect virtually this week because short 3 nurses.

Staff on evening and night shifts were not adequately qualified/trained to support virtual care visits, "not tech savvy". Home was focused on working through the pandemic, had to manage staffing shortages and did not have time to dedicate to training. Lack of time was biggest barrier to successful implementation.



Opportunities to Improve

Privacy, Security and Alternative Platforms

Easier for nurse to use (alternative platform) to speak with doctor because this is what they did before.

(Home leader) expects iPad will not work in resident's rooms very well because this is what occurs with medication carts.



Opportunities to Improve

Vendor Capacity to Support

Used Think Research in training but a few difficulties. First, one resident's name did not appear on the list of residents. Second, homes wanted to print the orders off rather than have them only available electronically... Third, the progress note is not under general progress notes, but rather it is placed within the virtual care tab; there is no way to pull the virtual care tab for shift report.

OTN eVisit not successful. (Nursing leader) clicked on the eVisit link sent by OTN – she could hear and see me but I could neither hear or see her. Nothing I did nor she did changed the outcome...Spoke over telephone for this event.



Opportunities to Improve

Financial Support and Sustainability

Asked by Think Research to continue with study until end of year but declined because of the integration fee that PointClickCare charges. Reported no change in success measure before / after virtual care; however, did not really use Think or OTN because physicians not adopters of virtual care technology.



Virtual Care PDSA Resources Produced

Virtual Care Toolkit



[Welcome](#) [Clients and Visitors](#) [Our Programs of Care](#)

[Home](#) / [Our Programs of Care](#) / [Geriatric Outreach Services](#) / **[Virtual Care Toolkit](#)**

Virtual Care Toolkit

Introduction

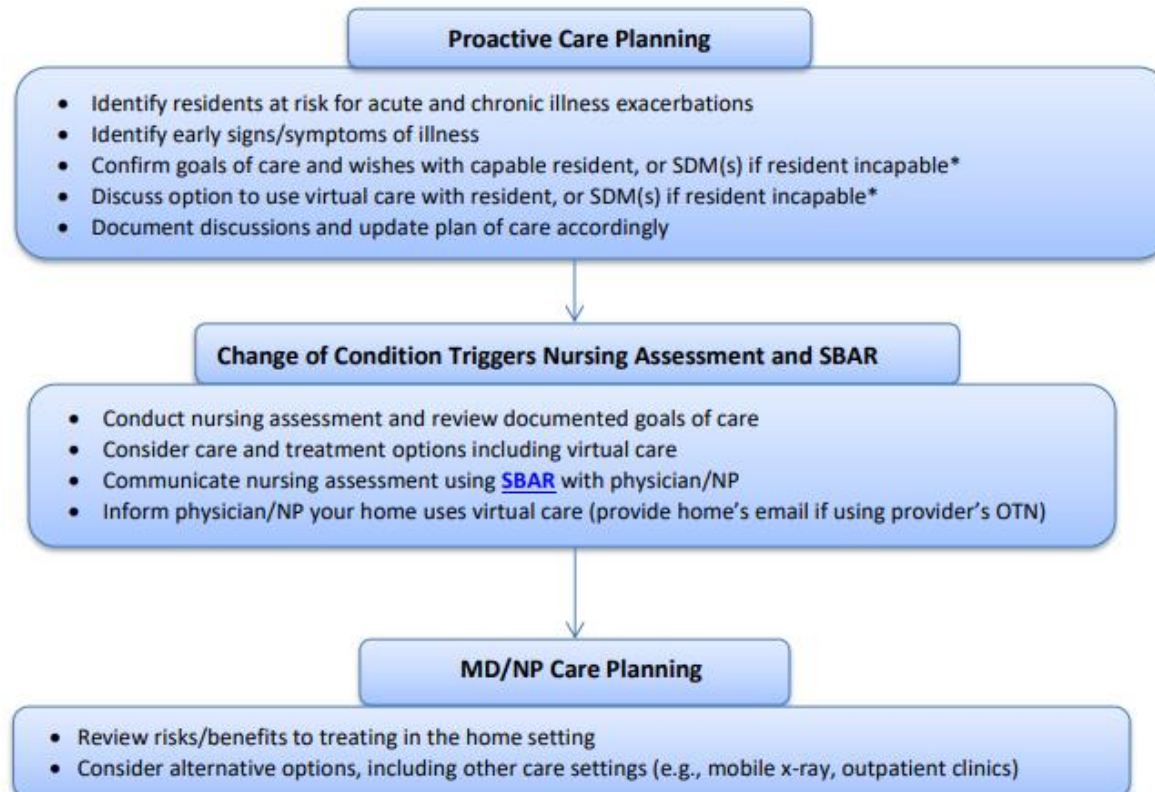
In response to the current COVID-19 pandemic, long-term care (LTC) and retirement homes are required to observe strict infection prevention and control measures to contain and prevent virus transmission. As a result, many residents are no longer receiving face-to-face visits with their physician or nurse practitioner (NP). There is now a tremendous need to use virtual care, which is simply the use of chat, audio and/or video, to obtain clinical advice and support from a physician / NP working offsite.



Virtual Care Flowsheets



Using Virtual Care in LTC and Retirement Homes



Virtual Care Policy Templates

 Region of Waterloo		 SUNNYSIDE Seniors' Services	Section # Master Manual	Policy # ??
Seniors' Services			Approval Date: June 26, 2020	Revision Date:
Title:	Virtual Care (Secure Platform)			
Applies to:	All Employees			

Guiding Principle

Sunnyside supports the use of virtual care (i.e., messaging chats, audio and video) by authorized users (e.g., registered staff, physicians and nurse practitioners) to provide residents/clients access to primary, emergency and specialist care in a manner that supports high quality, integrated, collaborative and timely care in the most appropriate care setting.

Sunnyside supports the exclusive use of virtual care platforms that fully comply with all legal privacy and security requirements to protect residents, Sunnyside home, and the Region from liability associated with a privacy breach.

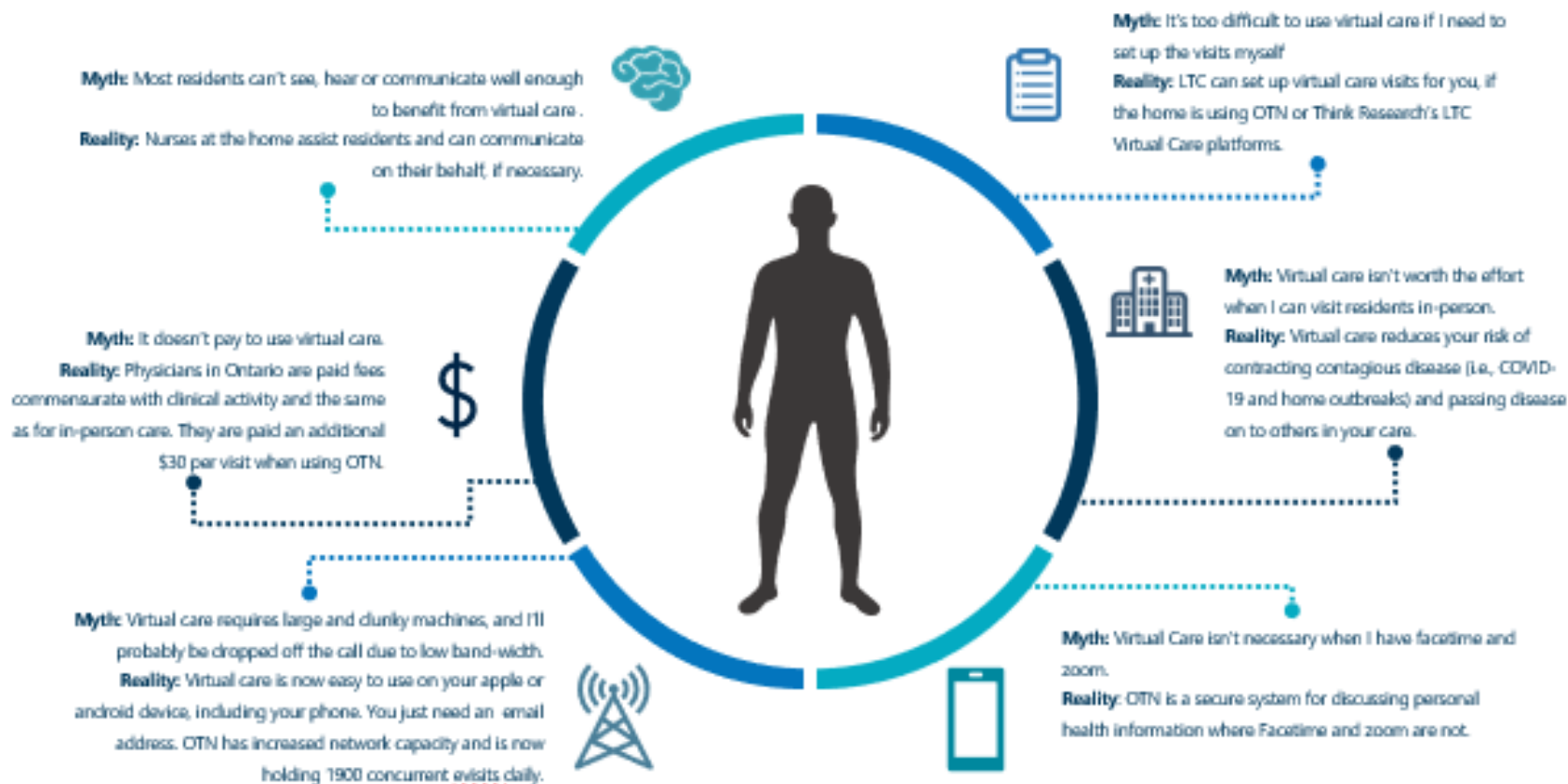
Policy Statement:

Residents/clients requiring access to primary, emergency and specialist care shall be given the opportunity to use virtual care technology, including but not limited to e-consults, assessments and e-fax prescriptions, when face-to-face contact with physicians / nurse practitioners (NP) is unavailable.

Virtual Care Provider Guide



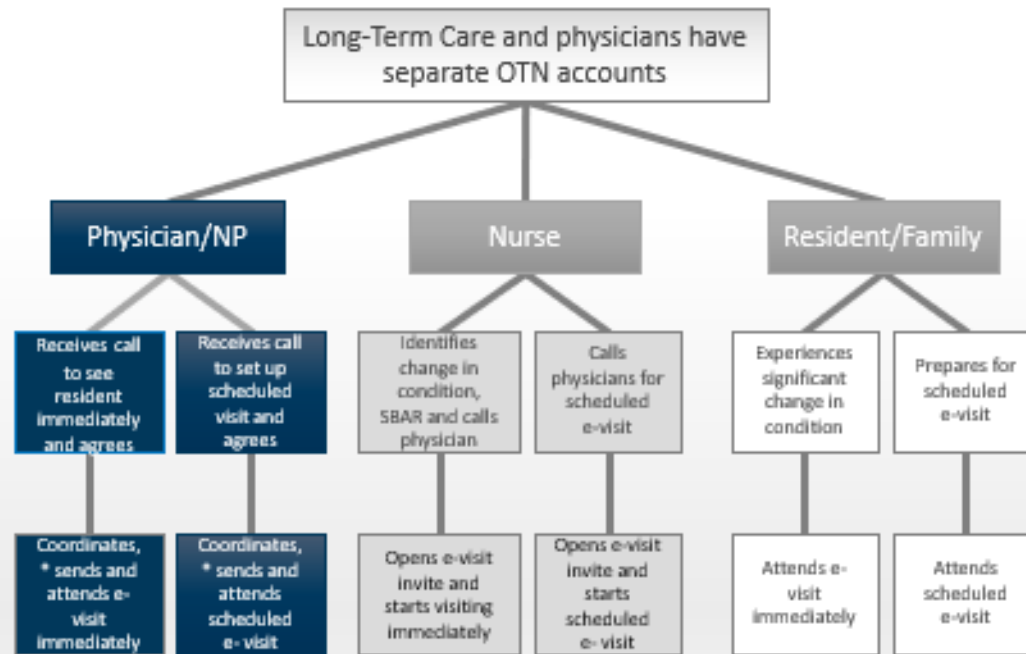
Myth Busting Virtual Care in LTC and Retirement Homes



Virtual Care Algorithms



Long-Term Care: OTN

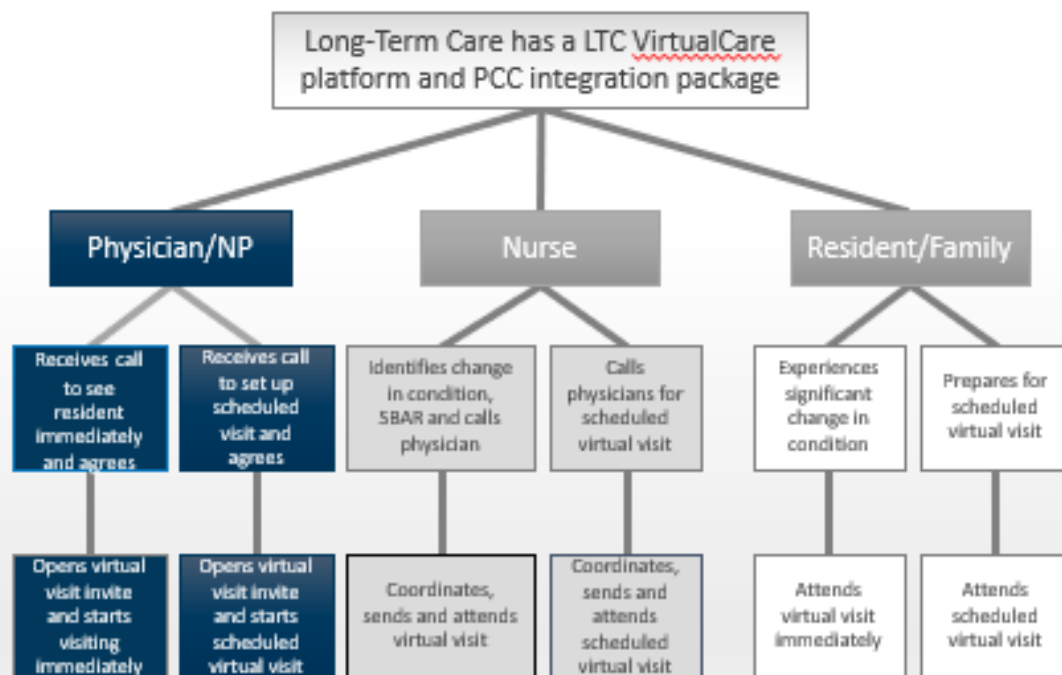


* Note: Physicians may coordinate e-visits for up to 18 parties on each OTN call

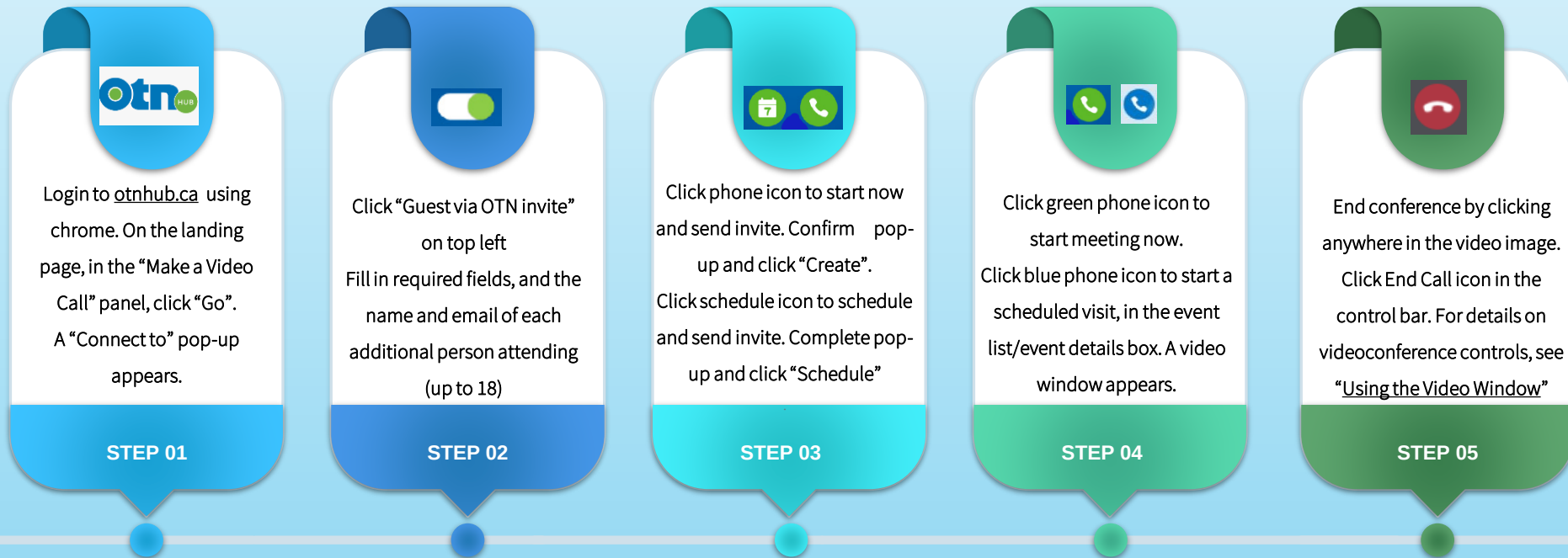
Virtual Care Algorithms



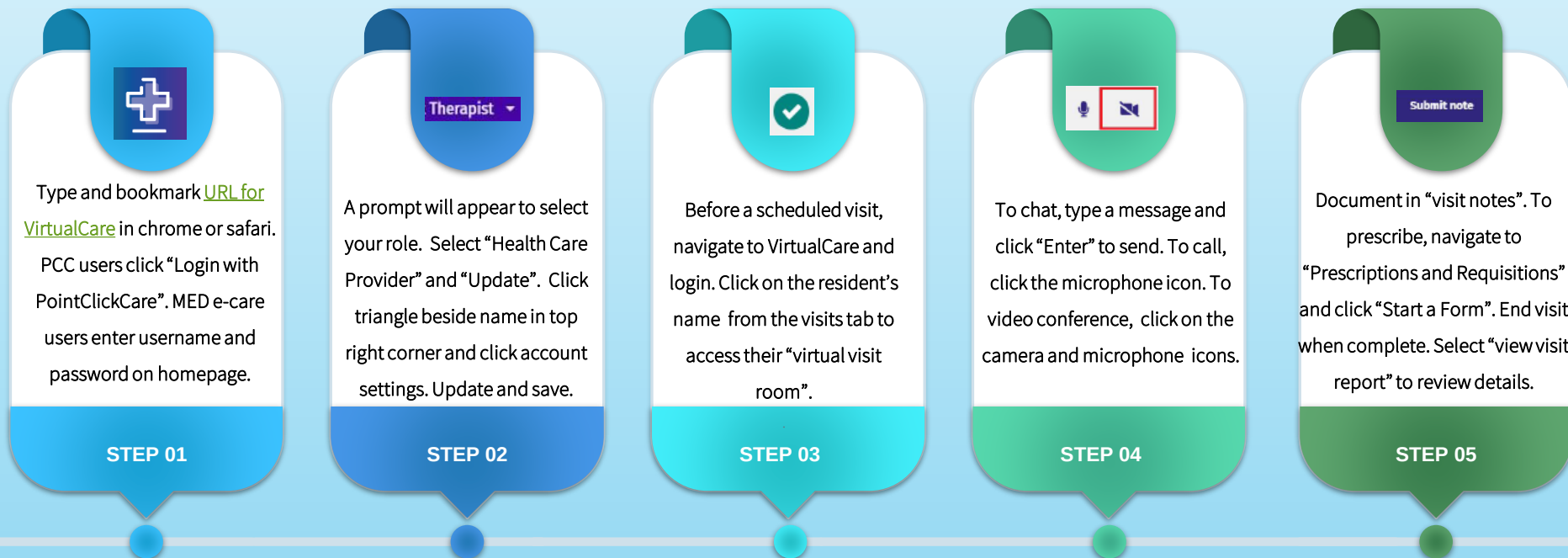
Long-Term Care: LTC VirtualCare (Think Research)



Setting up a Virtual Care Visit Using OTN



Provider's Guide to Using LTC VirtualCare in LTC and Retirement Homes



Act / Conclusions

- Residents and families were very satisfied with the use of virtual care in LTC and retirement homes
- Capacity to use virtual care increased across both LTC and retirement homes during the PDSA
- Physician engagement and in-home champions increased the use of virtual care
- Home environment (i.e., lack of IT support, staff and leadership turnover and outbreaks) and lack of a funded and sustainable virtual care model decreased use of virtual care
- Virtual care with clinical and technical support was associated with better resident outcomes than usual care
- Virtual care in LTC and retirement homes was associated with similar rates of ED visits and hospitalizations but not length of stay
- Long-term care homes were more “ready” to implement virtual care than retirement homes
- Homes that were more “ready” had more use of virtual care

Nurse-Led Outreach Team (NLOT) is Here to Help

Carrie Heer, NP, and the WWLHIN Nurse-Led Outreach Team (NLOT) are helping long-term care and retirement home residents access the care they need during COVID-19 and beyond.

If you need help setting up virtual care for residents in LTC or retirement home, email her at Carrie.Heer@sjhcg.ca.

She and her team are here to help!



Building Nursing Staff Capacity



Implementing
Best Practices and
Innovation



Optimizing Resident-Centred
Care



Reducing ED
Transfers



Questions

