## LTC+ Virtual Care Support for Long-Term Care Homes in Ontario

## Infection Prevention and Control in LTC Everything you ever wanted to know but were too confined to ask

LTC+ is a collaboration between Women's Virtual at Women's College Hospital, GEMINI at Unity Health Toronto, the Ontario General Medicine Quality Improvement Network, the Centre for Quality Improvement and Patient Safety and the Department of Medicine at the University of Toronto

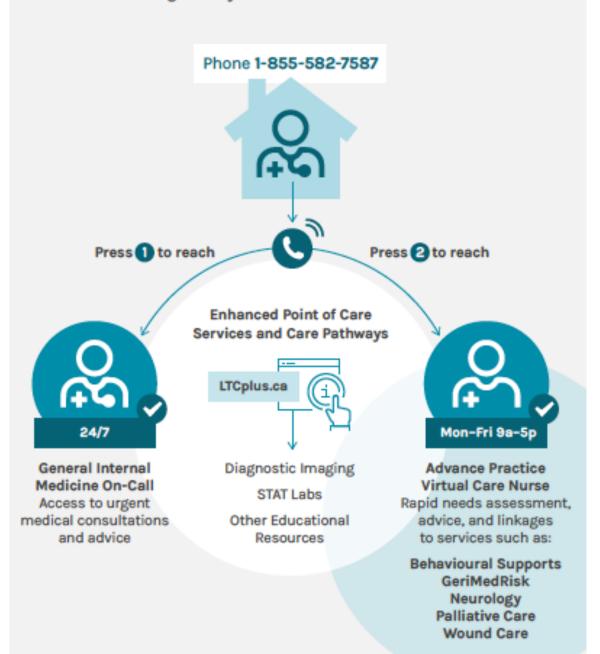
## Agenda

- LTC+ Program Update
- IPAC Management of COVID-19 in LTC Dr. Jerome Leis
- Q&A

# LTC+ Program Overview

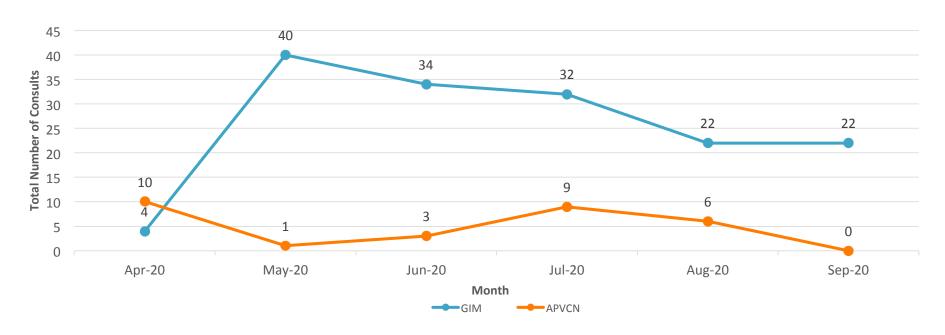
#### LTC+ Program Overview

Attending Primary Care Provider in LTC can access...



## LTC+ Impact

Currently supporting 47 LTC Homes through 5 Toronto hospital hubs



• 197 consults to date - leading to 82 (42%) diverted ED transfers

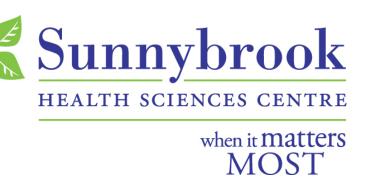
## INFECTION PREVENTION & CONTROL (IPAC) MANAGEMENT OF COVID-19 IN LONG-TERM CARE

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University of Toronto



## Objectives

- 1. Review the transmission of COVID-19 in longterm care homes that experienced outbreak during first wave
- 2. Discuss the best IPAC practices for protecting residents and healthcare workers in long-term care



## Faculty/Presenter Disclosure

- Relationships with commercial interests:
  - Grants/Research Support: None
  - Speakers Bureau/Honoraria: None
  - Consulting Fees: None



## Disclosure of Financial Support

- This program has NOT received financial support other than the support of the MOHLTC
- This program has NOT received in-kind support
- Potential for conflict(s) of interest: None to be disclosed



## Mitigating Potential Bias

The information presented in this CME program is based on recent information that is explicitly "evidence-based"



## The COVID-19 challenge among older adults

- Atypical presentations common
- Challenges in obtaining reliable history
- Efficient pre-symptomatic transmission
- Behaviors can increase exposures (eg. wandering)



## IPAC Contributing Factors during first wave

- ➤ Staff who worked while symptomatic
- >Staff who worked in more than one facility
- ➤ Inadequate familiarity with and adherence to PPE recommendations
- ➤ Inadequate supplies of PPE and other items (e.g., alcohol-based hand sanitizer)
- ➤ Delayed recognition of cases
- > Limited availability of testing
- ➤ Difficulty identifying persons with Covid-19 on the basis of signs and symptoms alone.



### PPE 'maximalism'

- x N95 masks without indication
- x Double gowns, head covers or booties
- x Double masking
- x Wearing PPE across clean areas















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## 1. Adequate IPAC resources for LTCH

- 1.0 FTE ICP per 200 beds
- Medical Director/Director IPAC
- IPAC training upon hire and minimum every 2 years
- Key elements of program
  - Hand hygiene
  - Surveillance
  - Policies/practices
  - Occupational Health and Safety
  - Education/training



#### 2. Elimination of multi-bed rooms

- Population-based retrospective cohort study in Ontario
  - 4496 (86%) infections in 63 (10%) homes
  - Incidence and mortality increased with number of residents per bedroom and bathroom (RR=1.7)
- Conversion from 4-bed to 2-bed rooms
  - Would avert 18% of infections/death



## 3. Preventing introduction of COVID-19 in LTCHs

Limiting gatherings

Physical distancing

Universal masking



#### 4. Active surveillance

Residents

Healthcare workers

Visitors

## Please tell us if you have any of the following:







Sore throat or difficulty swallowing

New <u>or</u> worsening cough







Shortness of breath



Conjunctivitis (pink eye)



Unexplained fatigue/muscle aches



Loss of taste or smell



Vomiting or diarrhea





## 5. Occupational Health & Safety

Identification of staff exposure/illness

Streamlined assessment and/or testing



## 6. Testing

Symptom-based testing remains mainstay of surveillance

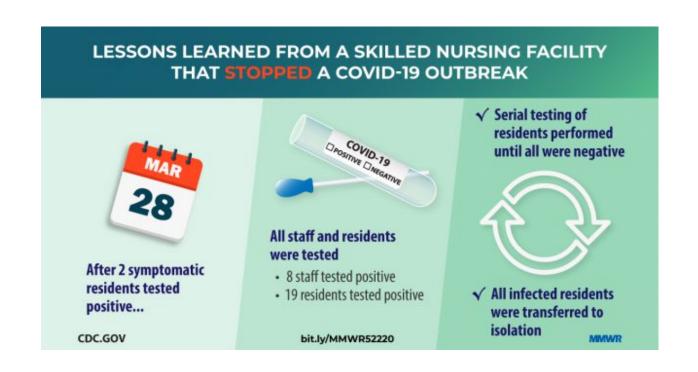
Asymptomatic testing in Ontario –
majority of positives identified in homes
that already had known outbreak but low
yield otherwise



## 7. Management of a single healthcare-associated case

Sentinel event

- Point prevalence of unit
- Cohorting of positive cases





Roxby et al, JAMA Intern Med 2020 Dora et al, MMWR, 2020 Arons, NEJM, 2020

## 8. Ensuring PPE supply and proper technique



#### Clean (green) areas







MOST



## 9. Cleaning / Disinfection

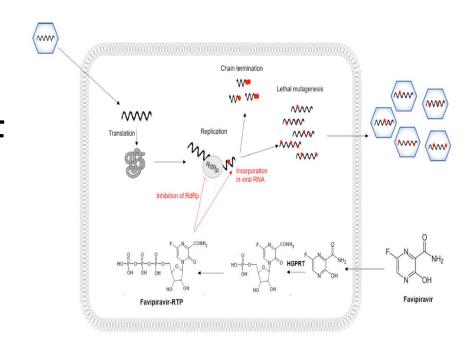
High-touch surfaces

Shared equipment

Dedicated equipment

## 10. Chemoprophylaxis (research only)

- Favipiravir
  - RNA polymerase inhibitor
- In vitro activity against influenza, VHF and SARS-CoV-2
- Safety data from >40 clinical trials





Furuta, Antiviral Res, 2013; Wang, Cell Res, 2020; Shiraki, Pharmacol Ther, 2020



## 10. Chemoprophylaxis (research only)

- Placebo-controlled cluster-randomized trial
  - Efficacy of favipiravir for control of COVID-19 outbreaks in LTCHs

http://www.tibdn.ca/control-covid





## Favipiravir – Exclusions

- 1. Pregnancy
  - Females < 55 years of age require a negative urine pregnancy test, and either menopause or two concurrent reliable methods of contraception need to be confirmed
- 2. Previously diagnosed liver cirrhosis
- 3. Known abnormality of uric acid metabolism (other than gout)
- 4. Hypersensitivity to remdesivir or favipiravir
- 5. Medications, which cannot be discontinued for the study duration:
  - Pyrazinamide
  - Hydralazine
  - > 3000 mg of acetaminophen per day





IN LONG TERM CARE

## Summary

 Chronic gaps in some Canadian LTCHs exposed by COVID-19

 Adequate IPAC resources for LTCHs essential to improving outcome of residents and staff







## **Questions?**

Type questions into the chat

OR

Unmute yourself and ask a question

Please visit LTCPlus.ca for further information about the program and access to additional resources

#### LTC+ Virtual Care Support for Long-Term Care Homes in Ontario

### **Partners**

















Ontario General Medicine Quality Improvement Network





