ECHO COVID 19 CONVERSATIONS SERIES

Managing COVID-19 in Nursing Homes

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Financial Disclosures

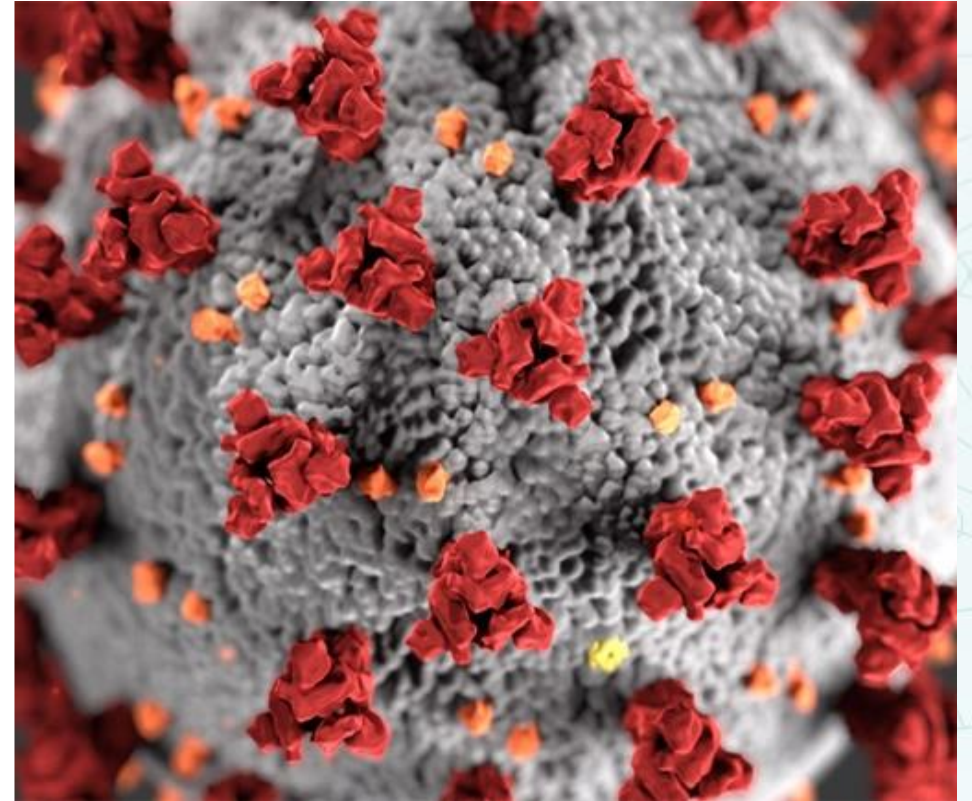
Dr. Unroe is the CEO of Probari (www.probarisystems.com) a healthcare start-up founded to improve care in nursing homes through implementing the evidence-based OPTIMISTIC clinical care model.

Learning Objectives

- Name nursing home challenges in preventing and treating COVID-19 outbreaks
- Identify key aspects of preparation
- Review navigating an outbreak – case study
- Describe common clinical courses of nursing home residents with COVID-19

Overview

- Nursing home residents are at high risk of getting COVID-19 and needing treatment and support.
- 80% of residents with COVID-19 will survive.
- About 15-20% of residents with COVID-19 will die.
- Nationally, about 40% of deaths are nursing home residents.



Multiple Challenges

- Most rooms double occupancy; shared bathrooms
- Building structures → unique solutions to cohorting
- PPE – supplies and training
- Off-site labs, time to receive COVID-19 results
- Access to providers – role of telehealth
- Personal care requiring prolonged exposure
- Staffing

Structural Challenges

- Resident's home – NOT the hospital → thus quality of life considerations continue to be paramount
- Most rooms double occupancy; 2 rooms typically share 1 bathroom (4 residents) → private rooms best when possible
- Building structures → unique solutions to cohorting, plan in advance, including break rooms/work rooms that may need to be relocated

PPE Challenges

- Many facilities lack N95s → stock up, hospital partners may be able to help
- CNAs and LPNs have minimal training in PPE use → lots of resident contact, so need significant support in PPE use
- Activities staff, office staff, therapy staff, social services may have no PPE use training → so they will need it!
- Visitors can be asked to bring their own masks → have PPE supply set aside for them

Challenges

- Diagnostic Services (Radiology, Lab)
  - Off site and shared with home health and other SNFs → create strong communication lines, who is your point person at the lab if you need answers?
- COVID-19 Testing
  - Initially limited
  - Variable time to results
  - Plan for ongoing resident and staff tested needed
- Medical providers
  - May cover multiple facilities
  - Telehealth may extend access BUT requires effort on part of staff to manage

Challenges

- Resident level
  - Personal care requiring prolonged interactions
  - Cognitive impairment – impaired insight and judgment
  - Multiple co-morbidities

- Staffing
  - Typical ratio 1:20 patient to nurse with 2-3 CNAs
  - Housekeeping, dietary, maintenance, activity staff shared throughout the building

Keep it out! Prevention

- Double down on hand hygiene
- Mid-March State and Federal Regulation:
  - Restrict all visitors
  - Social Distancing – no group dining or activities
  - Screening staff and residents for fevers and cough
  - Clinical staff wear medical grade facemask

JUST THE FACTS: WHAT CAUSED COVID-19 OUTBREAK IN NURSING HOMES

Location of a nursing home, asymptomatic spread and availability of testing – not quality ratings, infection citations or staffing – were determining factors in COVID-19 outbreaks according to independent analyses by leading academic and health care experts. A new study from Harvard University, with support from the National Institute on Aging and National Institutes of Health, examined COVID-19 outbreaks in New York, Detroit and Cleveland, and found that the intensity of COVID-19 outbreaks in nursing homes mirrored the rate of spread among the general population. These findings are consistent with research conducted by the American Health Care Association and National Center for Assisted Living (AHCA/NCAL), which examined recent data from the Centers for Medicare and Medicaid Services (CMS) on COVID-19 outbreaks in nursing homes.

KEY FINDINGS	DAVID GRABOWSKI, PHD *Professor Of Health Care Policy*	VINCENT MOR, PHD *Professor, Health Services And Policy*	R. TAMARA KONETZKA, PHD *Professor Of Health Services Research*
LOCATION OF FACILITY DETERMINED OUTBREAKS	"According to preliminary research presented, larger facilities located in urban areas with large populations, particularly in counties with a higher prevalence of COVID-19 cases, were more likely to have reported cases." [1]	Mor: "If you're in an environment where there are a lot of people in the community who have COVID, the patients in the building are more likely to have COVID." [1]	"Outbreaks of COVID-19 in nursing homes are often a signal of the communities into which the virus is spreading." [4]
ASYMPTOMATIC SPREAD AND AVAILABILITY OF TESTING WAS A KEY FACTOR	Grabowski: "It is spreading via asymptomatic and pre-symptomatic cases…We're not going to get a handle on COVID-19 until we get a systematic testing and surveillance system." [1]	"COVID-19's ability to hide in plain sight will continue to crush expectations of halting its spread unless more and quicker testing at nursing homes sweeps the country, said a top U.S. researcher (Mor)." [3]	"Given asymptomatic spread and inadequate testing, staff often do not know which residents are infected. With policymakers and the public initially focused on the spread of infection within hospital settings, nursing homes often lost that competition." [4]
QUALITY RATING OF FACILITY AND PREVIOUS CITATIONS WERE NOT A FACTOR IN OUTBREAKS	"COVID-19 cases in nursing homes are related to facility location and size and not traditional quality metrics such as star rating and prior infection control citations." [2]	"He (Mor) added that counter to some assertions, regression analyses show that infection rates are unrelated to quality rankings…" [3]	"We found no meaningful relationship between nursing home quality and the probability of at least one COVID-19 case or death…Indeed, the first death reported was from a nursing home in Washington State that had a 5-star rating." [4] Senator Susan Collins: "Testing should be conducted at all nursing homes, as Dr. Konetzka's research finds no correlation between CMS' quality ratings of nursing homes and the probability of at least one COVID-19 case. One of the worst outbreaks in Maine was at a nursing home that had five stars, the highest rating."[5]
NO SIGNIFICANT DIFFERENCE BETWEEN FOR- OR NOT-FOR-PROFITS IN THE CHANCE OF AN OUTBREAK	"Characteristics that were not associated with a facility having a COVID case included… whether it was for-profit, part of a chain… These factors had no correlation with whether the facility had cases of COVID-19." [1]	N/A	"We found no significant differences in the probability of COVID-19 cases by profit status, with for-profit nursing homes and not-for-profit nursing homes being equally likely to have cases." [4]

[1] *Provider Magazine*, 5/11/20
[2] "Characteristics Of U.S. Nursing Homes With COVID -19 Cases," 6/2/20

[1] *Provider Magazine*, 5/11/20
[3] *McKnight's Long Term Care News*, 5/11/20

[4] *Testimony To United States Senate Special Committee On Aging, 5/21/20*
[5] *Op-ed, Senator Susan Collins, The Portland Press Herald, 6/15/20*

Outbreaks

- Unfortunately, despite these measures, outbreaks continue to occur
- In the setting of continued community spread, numbers of nursing home residents continue to rise

Outbreak – facility case

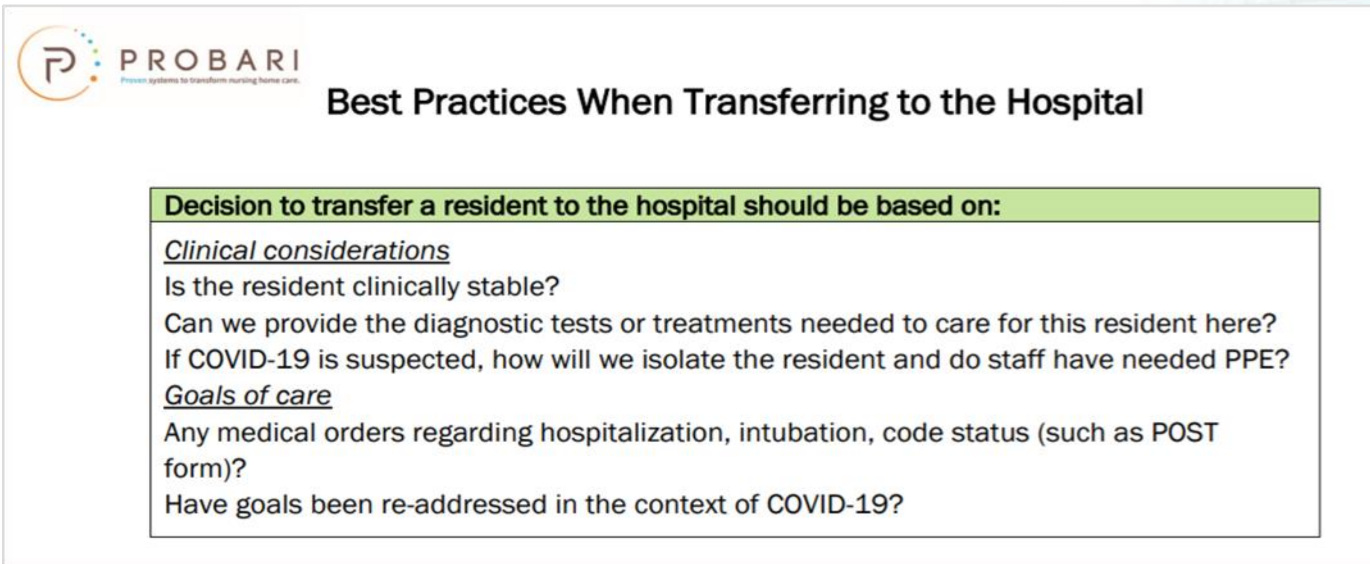
- 4 star nursing home
- >100 beds
- 78% (69) of our residents were infected with COVID-19

Treatment

- Supportive Care
- Active Monitoring – vital signs, labs
- O_2 via nasal cannula
- Nutrition support
- Dehydration – monitor labs, push oral fluids, IVF
- De-prescribing
- DVT prophylaxis
- Monitor for secondary bacterial infection
    - If infiltrate on chest xray, COVID vs. Bacterial
    - UTIs

When to hospitalize?

- Confirmed goals of care are consistent with hospitalization
- Vitals become unstable despite interventions
- Urgent need for diagnostics and therapeutic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Best Practices When Transferring to the Hospital

Decision to transfer a resident to the hospital should be based on:
Clinical considerations
Is the resident clinically stable?
Can we provide the diagnostic tests or treatments needed to care for this resident here?
If COVID-19 is suspected, how will we isolate the resident and do staff have needed PPE?
Goals of care
Any medical orders regarding hospitalization, intubation, code status (such as POST form)?
Have goals been re-addressed in the context of COVID-19?

https://www.optimistic-care.org/probari/covid-19-resources

Safe Transitions

- Safe Transitions
  - WARM hand-off – provider to provider conversation
  - Communicate COVID-19 concern clearly
  - POLST, code status communication
  - Family contact information clear
- Place mask on all patient
- Nursing facility notifies EMS of COVID-19 +/exposure

Clinical courses

- Survivors:
  - 12 residents had periods of malaise/fatigue but also long periods were they were asymptomatic
  - 42 residents had significant symptoms, periods of stabilization, and symptom recurrence
- Decedents:
  - 9 had symptoms that steadily, slowly worsened over time
  - 5 had rapid onset of multiple symptoms and decline

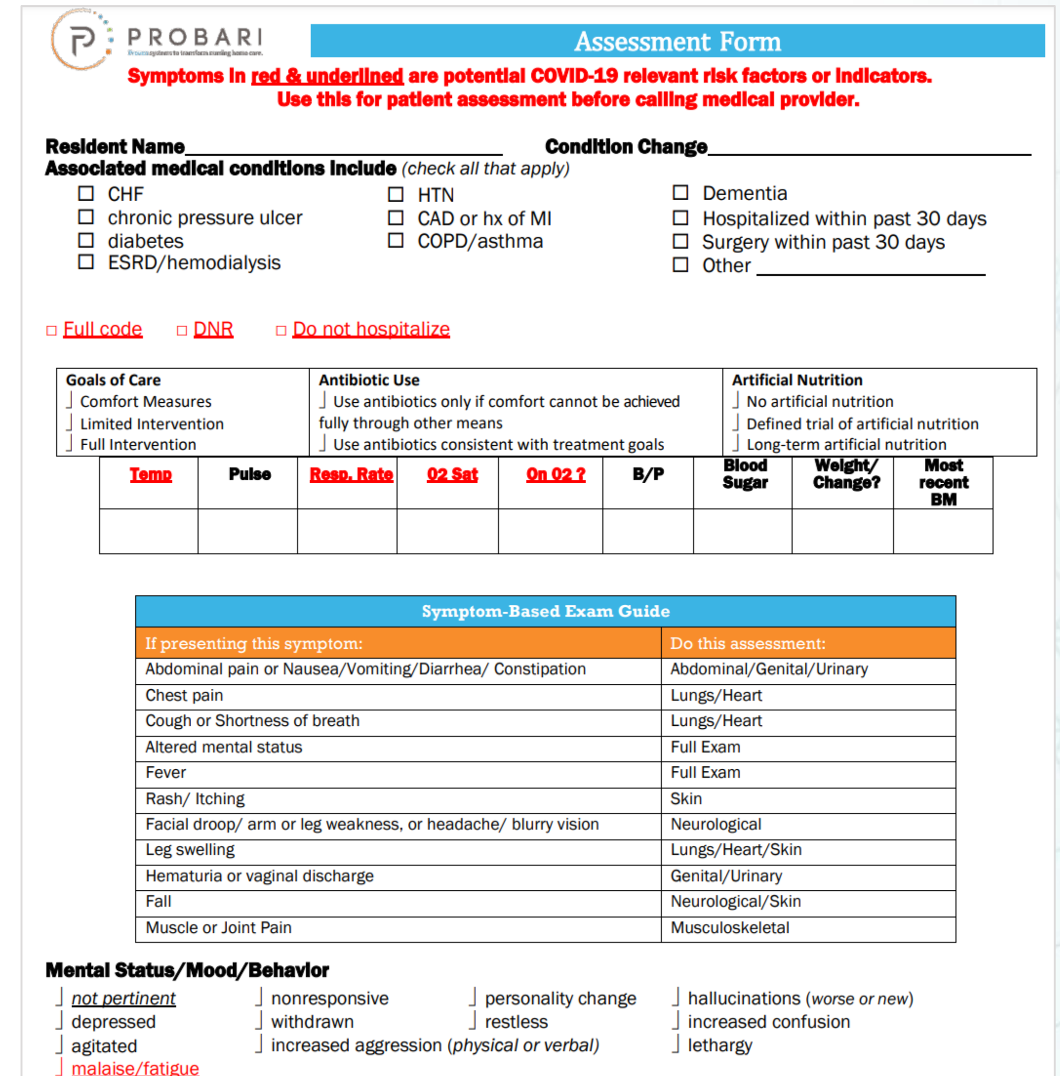
Clinical courses

- Common Symptoms: Fever, hypoxia, anorexia, and fatigue/malaise
- But watch for atypical symptoms
- Overall Mortality: 20%
  - 8 died in facility
  - 6 died in hospital

Lessons learned

- Constant assessment, LOW threshold to test
  - CBC (Lymphopenia)
  - BMP
  - Chest x-ray
  - Respiratory viral panel

- Identify best strategy/partnership with labs



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Assessment Form

Symptoms in <u>red & underlined</u> are potential COVID-19 relevant risk factors or indicators.
Use this for patient assessment before calling medical provider.

Resident Name____________________ **Condition Change**____________________

Associated medical conditions include *(check all that apply)*

- ☐ CHF
- ☐ chronic pressure ulcer
- ☐ diabetes
- ☐ ESRD/hemodialysis
- ☐ HTN
- ☐ CAD or hx of MI
- ☐ COPD/asthma
- ☐ Dementia
- ☐ Hospitalized within past 30 days
- ☐ Surgery within past 30 days
- ☐ Other ____________

☐ <u>Full code</u> ☐ <u>DNR</u> ☐ <u>Do not hospitalize</u>

Goals of Care	Antibiotic Use	Artificial Nutrition
☐ Comfort Measures	☐ Use antibiotics only if comfort cannot be achieved fully through other means	☐ No artificial nutrition
☐ Limited Intervention	☐ Use antibiotics consistent with treatment goals	☐ Defined trial of artificial nutrition
☐ Full Intervention		☐ Long-term artificial nutrition

<u>Temp</u>	Pulse	<u>Resp. Rate</u>	<u>O2 Sat</u>	<u>On O2 ?</u>	B/P	Blood Sugar	Weight/ Change?	Most recent BM

Symptom-Based Exam Guide

If presenting this symptom:	Do this assessment:
Abdominal pain or Nausea/Vomiting/Diarrhea/ Constipation	Abdominal/Genital/Urinary
Chest pain	Lungs/Heart
Cough or Shortness of breath	Lungs/Heart
Altered mental status	Full Exam
Fever	Full Exam
Rash/ Itching	Skin
Facial droop/ arm or leg weakness, or headache/ blurry vision	Neurological
Leg swelling	Lungs/Heart/Skin
Hematuria or vaginal discharge	Genital/Urinary
Fall	Neurological/Skin
Muscle or Joint Pain	Musculoskeletal

Mental Status/Mood/Behavior

- ☐ *<u>not pertinent</u>*
- ☐ depressed
- ☐ agitated
- ☐ <u>malaise/fatigue</u>
- ☐ nonresponsive
- ☐ withdrawn
- ☐ increased aggression *(physical or verbal)*
- ☐ personality change
- ☐ restless
- ☐ hallucinations *(worse or new)*
- ☐ increased confusion
- ☐ lethargy

Key points

- Multiple challenges inherent in the nursing home setting which we must navigate
- Advance care planning is a skill and is critical before and during an outbreak
- Infection control practices are necessary and require significant vigilance and effort over time
- Even if you do the right things, outbreaks can occur and require a plan for managing staff and residents and transitions of care
- Nursing home residents may experience a variety of clinical courses with COVID-19

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Additional COVID-19-Specific Resources

Advance Care Planning During a Crisis for Nursing Homes Presentation

Advance Care Planning and COVID-19

CALMER Goals of Care Discussion Guide

Symptom Management in the Nursing Home During COVID-19

The educational handout is below.

Symptom Management in the Nursing Home During COVID-19

Care Guidance for Residents and Staff

Care Guidance for Residents

Self Care Guidance for Staff

Thank you!

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https://www.optimistic-care.org/probari/covid-19-resources

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