COVID in the Nursing Home

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DISCLOSURE

Dr. Uy has stated that he has nothing to disclose in relation to this presentation.

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LEARNING OBJECTIVES

1. Prepare our health systems for a second COVID wave in long term care facilities.
2. Describe why LTCF's have been devastated by SARS-CoV-2 including characteristics of the virus, the facilities and societal policies.
3. Integrate lessons learned into an ideal management strategy for long term care for prevention and outbreak management.
4. Advocate for effective external support from health systems and government.

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The stories

1. Life Care Center of Kirkland, WA
2. Andover Subacute and Rehabilitation Center in Andover, NJ
3. AdviniaCare in Wilmington, MA
4. Renaissance Healthcare and Rehabilitation, Philadelphia, PA

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#1 Kirkland - Flying blind

- Kirkland Life Care Center, Washington. February 2020
  - 130 bed facility, 180 staff
  - First case dx 2/28/2020
  - Patients and staff had been symptomatic since early February
  - We didn't know what to do, there were no guidelines, no testing, no PPE supplies
- March 15, 2020 (2 weeks later)
  - >81 residents with COVID
    - 29 deaths
    - >54 pts sent to the hospital
  - 46 staff infected
- Conclusion
  - If we do nothing-this is typical
  - This hasn't stopped

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#2 Andover Subacute and Rehabilitation Center - abandoned

- 543 bed facility
  - Outbreak declared 3/29
  - April 13-anonymous tips leads to 17 dead bodies being found in the facility
  - 70 patients died as of 4/19, 94 by 5/7.
  - Investigation 5/2020 found failure of infection control, insufficient PPE, insufficient medical care
- Behind the headlines
  - Patients with psychiatric diagnosis, post incarceration, dementia with behavioral issues (facility of last resort)
  - Facility had been requesting testing, PPE and staffing support for weeks
  - Funeral homes were not accepting patients at that time in NJ
  - The National Guard came and were painting hallways
- Conclusion
  - Advice isn't enough
  - NH's need support

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#3 AdviniaCare at Wilmington, MA - Asymptomatic threat

- 142 bed facility
  - Medical director Chuck Pu-Harvard
  - Early March lock down-by the book
    - No visitors, no group dining or activities
    - Temperature and symptom screens for every employee and resident every shift
    - Universal facemask policy
  - Getting ready to be designated as a COVID SNF and have residents moved to other naïve facilities
- April 1-point prevalence survey (no symptomatic patients in the facility).
  - 97 residents-52/97 tested positive (53.6%) (45 negative)
  - April 5 31/45 test positive
  - 83/97 residents test positive (85%) despite lock down
- Conclusions
  - Massive community spread leads to massive nursing home outbreaks
  - Symptom screens fail to detect asymptomatic spread. Need testing
  - PPE does work. Execution matters and policies are not enough

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#4 Renaissance Healthcare and Rehabilitation - rapid response

- 123 bed facility in South West Philadelphia
  - Locked down since 3/12 (approx.)
  - 3/20-first resident gets diagnosed in with COVID
  - 3/23-Universal facemask and eye protection
  - 3/28-20+ patients positive
  - 4/3-spread to 2 other wings of the building

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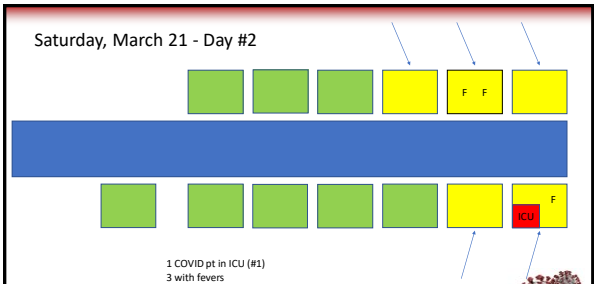
Saturday, March 21 - Day #2



1 COVID pt in ICU (#1)
3 with fevers

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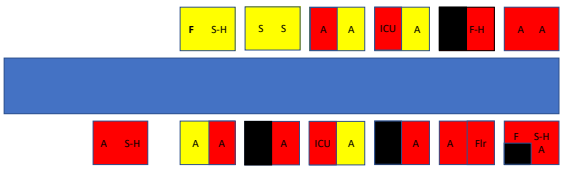
Friday, March 27 - Day #8



20 COVID patients, 1 suspected
3 ICU
1 Gen med floor (DNR/DNI)
4 Deceased
3 with fevers
12 without symptoms

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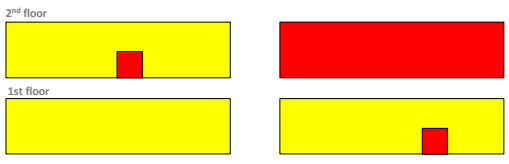
Friday, April 3 – Day #15



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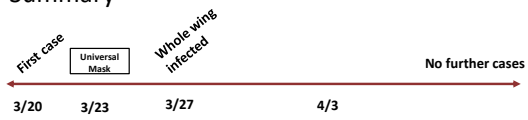
Summary



Testing and PPE can extinguish an outbreak
Takes luck (to identify an outbreak that can be contained)
Have to move fast

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What have we learned? - The virus

- It's the virus
  - ❑ Asymptomatic spread, asymptomatic infections, atypical presentations
    - Always playing catchup and reacting
  - ❑ Airborne spread
    - Eye protection matters
    - Ventilation matters

Morawska, Milton. It is time to address Airborne Transmission of COVID-19. Clin Infect Dis. July 6, 2020.
Tang et al. Aerosol transmission of SARS-CoV-2? Evidence, prevention and control. Environ Int. Nov 2020
de Man et al. Outbreak of COVID-19 in a nursing home associated with aerosol transmission as a result of inadequate ventilation. Clin Infect Dis. Aug 28, 2020
Klompas et al. Airborne Transmission of SARS-CoV-2. JAMA. July 13, 2020. (w/podcast)
Bhaskar et al. SARS-CoV-2 Infection Among Community Health Workers in India Before and After Use of Face Shields. JAMA. Aug 17, 2020

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What have we learned? - Facilities

- LTCF's are particularly high risk
  - ❑ Residents are very frail and multimorbid
  - ❑ Incredible close personal care (ie >2.7 hours per person per day-PPD)
  - ❑ Socialization is a major goal-with group activities, dining and visitation
  - ❑ Staff work in multiple facilities and are often caregivers for others at home
  - ❑ Memory care units are accelerators for spread
  - ❑ LTC facilities are not hospitals
    - Goals, resources

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What have we learned? - Facilities

- Characteristics of LTCF's with big outbreaks
  - ❑ Communities with high prevalence
  - ❑ Large facilities
  - ❑ Staff work in multiple facilities
  - ❑ Lower staff ppd
  - ❑ Lower socioeconomic communities
  - ❑ Star ratings are likely irrelevant
  - ❑ Staffing ratio's>deficiencies on surveys

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What have we learned? - Systemic issues

- No facility has enough PPE supplies: N95's, gowns
- Infection control practices for flu do not help for COVID
- Lab testing is a national problem
- Staffing is a historical and systemic problem
- Lack of physicians in NH's is by design
- For profit ownership (ie real estate companies)
- Off site leadership
- Silo's of care

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What have we learned? - Policies

- Poor government leadership-Inconsistent and changing guidelines have caused confusion
  - ❑ Federal: CMS, CDC
  - ❑ State: DOH, DHS
  - ❑ Local: DOH
- Redundant reporting requirements
- Redundant surveys (state and federal) and telephone assessments
- Non collaborative policies like hospital discharge policies
- Poor education-Flow of information has been voluminous (webinars and pdf's)
- Material support was needed: testing, staffing and PPE
- Fines do not help
- More recently-antigen testing machines with no instructions

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Antigen testing

- July 20 to the end of September, CMS sends 14,000 antigen testing machines to all NH's in the US
- Issues:
  - ❑ Time-each test takes 15 minutes
    - Testing 100 residents and 140 staff would take 60 hours of continuous operation
  - ❑ CLIA Certificate of waver
  - ❑ Daily reports to federal (HHS), state, local DOH's
  - ❑ False positives and false negatives

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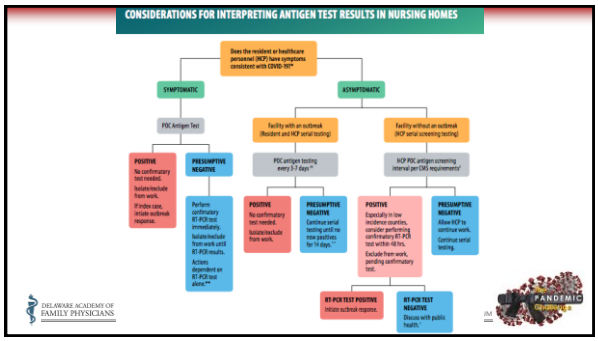

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What have we learned? - Lock down

- Lockdown in a NH
  - ❑ Every resident in their room with their door closed
  - ❑ No group activities, no group dining
  - ❑ No visitors
- Phase 1 reopening
  - ❑ Limited group dining, limited group recreation, aggressive testing
  - ❑ If no cases x 14 days then…
- Phase 2 reopening
  - ❑ Limited group dining, limited group recreation and outings
  - ❑ If no cases x 14 days then…
- Phase 3 reopening with visitors

https://www.cms.gov/files/document/qso-20-30-nh.pdf-0

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Where we stand

- As of 9/4/20 (https://www.kff.org/health-costs/issue-brief/state-data-and-policy-actions-to-address-coronavirus/)
- 468,607 cases in NH
- 76,270 deaths
- 18,147 facilities with cases
- 41% of deaths in the US are due to NH's
- We continue to have whole building outbreaks
- It is not clear that we have done much nationally
- NH's are still having to choose between lockdown and outbreaks

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What we need to do - for the virus

- For the virus
  - ❑ PPE-universal surgical mask and **eye protection**
  - ❑ Large capacity of testing for both surveillance and detecting scope of outbreak
  - ❑ Better tests (cheaper, more sensitive, faster)
  - ❑ Meticulous infection control
  - ❑ **Break room** vigilance
  - ❑ Restart indoor group dining last

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What we need to do - for facilities

- **Clinical management**
  - ❑ Monitoring residents and staff (looking for atypical symptoms)
  - ❑ Triaging appropriately
    - Good reasons to send to ER-hypoxia, lethargy
    - Not so good reasons-fever alone, testing, end of life care, goals of care discussions, IVF, lack of staffing
  - ❑ Therapeutic care: Labs, IVF, physician support
  - ❑ Palliative care: Advance care planning, symptom monitoring and management
- **Collaboration** to solve system issues
  - ❑ Admissions and readmissions
  - ❑ Dialysis patients

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What we need to do - for facilities

- Increase geriatricians or primary care physicians in NH's
  - ❑ Change payment policy
    - Medicare A pays the facility
    - Medicare B pays the physician
- Collaboration to support LTCF's with specialists
  - ❑ Occ med, ID, Pulm, infection prevention, palliative care
- Staffing (for surge staffing and minimize cross staffing)

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What we need to do - external support

- Material support with testing, PPE and staffing
  - ❑ Long term-geriatric work force support
  - ❑ Policies on payment for staff in NH's
  - ❑ Minimum staffing requirements in LTCF's
  - ❑ Fix Medicaid and Medicare to support LTC
- Clear consistent streamlined guidelines and information
  - ❑ CMS, CDC, AMDA, AGS
- COVID SNF's

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What we need to do - Policy changes

- Enhance clinical care in LTCF's
  - ❑ Elevate the role infection preventionist in every NH with time and training
  - ❑ Incentivize physicians to work in NH's
  - ❑ Standardize the role of medical directors in NH's
  - ❑ National network of medical directors

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What's still missing?

- So far, from the government we have had
  - ❑ Recommendations/webinars- "We told them what to do and they didn't do it."
  - ❑ Surveys and fines- "We threatened and punished them and they didn't do it"
- So how do you get a facility from average to meticulous care?

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Behavior change -1. Leadership

- Defined visible leadership with clear roles
- Simplify information for facility
- Skilled at crises communication
- Good relationships and trust with staff
- Humility and flexibility

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Behavior change -1. Leadership

Crisis communication

1. Don't over reassure
2. Proclaim uncertainty
3. Validate emotions-Your audience's and your own
4. Give people things to do
5. Admit and apologize for errors
6. Share dilemmas

https://www.cidrap.umn.edu/covid-19/covid-19-cidrap-viewpoint

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Behavior change -2. Develop a program

- Co-create solutions
- Simplify interventions
- Address barriers
- Address morale and emotions
  - ❑ Support for staff and families (PPE, money)
- Utilize existing culture
- Designate team leaders

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Behavior change -2. Develop a program

Hierarchy of social incentives

1. Private-no one sees or notices
2. Activities are witnessed
   - ❑ We talk about the behavior
3. Support from others is encouraged
   - ❑ i.e. peer mentor
4. Support is reciprocal
   - ❑ Talk about the intervention as a group
5. Reciprocal support is embedded in team incentives
   - ❑ Team rewards

Asch, Rosin. Engineering Social Incentives for Health. NEJM. 2016

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Behavior change -3. Education and feedback

- Utilize a variety of educational methods
  - ❑ Intense training session
  - ❑ Daily reminders through pre shift huddles or team talks
  - ❑ In time reminders with just in time training through observers
  - ❑ Simplified education
  - ❑ Concrete education
- Give feedback
  - ❑ Get a commitment
  - ❑ Visual signs
  - ❑ Dedicated staff to give verbal reminders
  - ❑ Disciplinary reminders
- Train team leaders to give feedback

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Behavior change -4. Feedback from staff

- Build relationships with key stakeholders
  - ❑ Unions
  - ❑ Employees
  - ❑ Government (DOH, DHS)
  - ❑ Professional organizations (AMDA)
  - ❑ Industry organizations (Leading Age, AHCA/NCAL)
  - ❑ Health systems
- Anonymous surveys
- **Observation** and auditing

Dean et al. Mortality Rates From COVID-19 Are Lower In Unionized Nursing Homes. Health Affairs. 2020.

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What we need to do - New interventions

Formative interventions (think coach)

- Currently we have
  1. Drive by education like a published guideline or a telephone survey
  2. To fines and citations
- What we need are
  1. Interventions that are medium term, focused on culture change
  2. Formative and not summative
  3. Feedback focused
  4. With longitudinal observation

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The final game plan

- Aggressive PPE policies (universal eye protection and mask)
- Simple, cheap, fast and accurate COVID test (it doesn't exist)
- Meticulous infection control (consistency, break rooms)
- Enhanced clinical management in the LTCF (physicians, IP)
- Collaboration across systems of care
- External support from health systems and the government
- Policy changes to improve clinical care in LTCF's

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Q&A

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THANK YOU

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