HOSPITAL TRANSFERS & PATIENT COHORTING STRATEGIES FOR COVID-19

Aida Wen, MD
Dept of Geriatric Med

Sabine Von-Preyss, MD
CMO Avalon Health Care

Caitlin Cook, MPH
Hawaii DOH
Disclaimer...

- Remember that we are learning new things about this virus on a weekly, if not daily basis. This guidance was developed based on the scientific evidence and with input from local hospitals, local LTC providers, HAH, DOH, and colleagues at AMDA who have been experiencing COVID in their nursing facilities.

- Guidance may change as the prevalence in the community changes. Everything we are sharing with you today is to provide some guidance for what we believe are for realistic scenarios at the present time.
First...
Let’s Review!

Screening Criteria and Symptoms
Incubation period
Clearance Criteria
Clinical Course
Screening Criteria for COVID-19 in Older Adults

Fever OR symptoms/signs of LOWER respiratory infection (e.g. new dry cough, dyspnea, or new/worsening hypoxia) OR change in clinical status with no immediate explanation for infection/sepsis (e.g. UTI, bacteremia, skin/soft tissue infection) should be investigated.

Anyone with close contact within 14 days of a suspect or confirmed COVID-19 patient.

CAVEATS:

- **Older adults may NOT have fever, cough, chest discomfort or sputum. They MAY present with Delirium, elevated RR, HR, or low BP.**
- **The definition of fever in Older Adults**: temperature of > 100.0 F, or temperature > 99.0 F on two consecutive measurements, or temperature > 2.0 F above patient’s baseline temperature)


*Fever definition taken from IDSA Clinical Practice Guideline for the Evaluation of Fever and Infection in Older Adult Residents of Long-term Care Facilities (High et al, Clinical Infectious Diseases 2009) and Society for Healthcare Epidemiology of America surveillance definitions (Stone et al, Infection Control and Hospital Epidemiology 2012).*
About COVID-19 Transmission

- Incubation Period: 2-14 days after exposure, with 97% showing symptoms within 11.5 days of exposure.
- Exposure occurs 48 hours before onset of symptoms
- People can transmit virus even if asymptomatic or pre-symptomatic
- Usually spreads through respiratory droplets
- May spread from contact with contaminated surfaces
- Highest Risk: older adults, comorbidities (cardiac, pulmonary disease, smoker, diabetes, etc) = everyone in the nursing facility

We must be very conservative!

New Clearance Criteria from CDC and HDOH

NEW
4/29/20

- Improvement of respiratory symptoms (cough, SOB) AND
- >72 hours after fever and myalgias resolved without use of fever-reducing medications AND
- ≥ 10 days since symptoms first appeared.

Based on:
- Recent research showing that even when COVID RT-PCR tests come back positive for weeks, viral cultures are NOT showing replicating virus after 8 days\(^1\).
- Or viral load not high enough to replicate quickly enough to be infectious at day 9\(^2\).

...but may use test-based clearance criteria (COVID test neg x 2) as an alternative for LTCF (under discussion)

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Observations of COVID’s clinical course:
(Lessons from Canterbury Rehab)

- General: High fevers, GI prodrome in minority, cough, wheeze, sputum production in majority, marked hypoxia (60’s not uncommon) in people without lung disease.

4 Types
- **Indolent/Fatal** - fever → stabilization → then sudden worsening on day 5-7 (cytokine storm), death despite max treatment within 24h. (20% of cases)
- **Indolent/Convalescent (Majority)** - fever → stabilization → improvement, but watch for secondary pna.
- **Acute Respiratory Distress** - perfectly normal then sudden onset from sx to death only 6-12 hours. (usually older adults in 90’s)
- **Change in mental status/Sepsis** - “asymptomatic” positive.
When is it reasonable to transfer to SNF?

- Hopefully, patients have passed the window of the Cytokine storm to ensure they are stable and won’t “crash” at the SNF.
- Majority will stabilize and improve gradually, but should be monitored for development of pneumonia. The SNF setting is a reasonable place for this to happen.
- WHEN ALL OF YOUR FIREWALLS ARE UP!
Firewalls

1) Lockdown
2) Symptom screening for all Facility Staff
3) Stringent Infection Control which includes Universal use of surgical masks during patient care
4) LOTS OF TESTING
   - Testing ALL inpatients **48-72 hours PRIOR to discharge to facility** (and if the hospital has a defined COVID-19 outbreak, all inpatients should receive two COVID-19 tests, 24h apart)
   - This includes inpatients who are admitted for COVID symptoms as well as those who were not.
   - This includes transferring patients from COVID units and Admission units to Regular NH beds
5) Have a COVID positive Unit (Isolation)
6) Have a New Admission Unit (Quarantine)
Nursing Facilities should be a priority

- This will require a lot of PPE
- This will also consume more tests

But protecting our kupuna is worth it!
Pre-admission COVID-19 Screening prior to Hospital to Post-Acute Care Transfer

KEY QUESTIONS:

■ Do they have symptoms suggestive of COVID-19?
■ Was the patient considered a PUI?
■ Was the patient tested for COVID-19 in the hospital within 72 hours of discharge?
■ Have fevers resolved for at least 72 hours?
■ Are respiratory symptoms improving?
■ How many days have passed since the onset of their first symptoms?

PURPOSE: Pre-screening helps INFORM Nursing facilities where the patient should be admitted
“Non-COVID” patient
(undetected COVID)
FROM HOSPITAL

Complete Pre-admission Screening Tool & COVID test x1, within 48h

COVID negative AND no symptoms?

YES

Admit to a Observation Unit for monitoring x 7-14 days (to pass potential incubation period)

Surgical Mask, face shield, gown

Monitor VS and $O_2$ sat, and Symptoms

Symptom development

YES

Retest & Continue Quarantine

NO

If no symptoms after 14d, transfer to Regular NH unit

Surgical Mask, face shield, gown

NO

OR Admit to COVID Unit with full isolation precautions

GO to COVID POSITIVE Flowchart

Ideally, keep at Hospital until COVID-19 test Negative x 2.

NO to either

ISOLATION

NH COVID Unit

QUARANTINE

NH Observation Unit

REGULAR/CLEARED

Regular NH Unit
If <10 days, will need isolation
Or If ≥ 10 days, but other symptoms not resolved, will need isolation
Admit to COVID Unit with full isolation precautions
Monitor VS and O2 sat
Monitor symptoms
Rehabilitation
Palliative Care

Hospital COVID positive patient
Who are no longer hospital level of care, and no room at hospital

Does NOT meet ALL symptom-based clearance criteria

Discharge home or Transfer to Regular Unit
COVID test negative x2 & Symptom resolution x72h

ISOLATION

YES

REGULAR/ CLEARED

YES

EXTRA PRECAUTION: COVID test negative x2 & no symptoms x72h

QUARANTINE

Does NOT meet ALL Symptom-based clearance criteria

If ≥ 10 days, and 72 hrs since all other symptoms resolved.
Consider admission to the Observation Unit for special monitoring
Surgical Mask, face shield, gown
Monitor VS and O2 sat
Monitor symptoms
Rehabilitation
Palliative Care

EXTRA PRECAUTION: COVID test negative x2 & no symptoms x72h

QUARANTINE
Admit to a **Observation Unit** for monitoring x 7-14 days (to pass potential incubation period) If HD patient, should stay here indefinitely

- Surgical Mask, face shield, gown
- Monitor VS and $O_2$ sat, and Symptoms

If no symptoms after 14d, transfer to Regular NH unit

**Flowchart**

1. Admit to COVID Unit with full isolation precautions
   - Go to COVID POSITIVE Flowchart

2. COVID POS?
   - YES
     - Retest & Continue Quarantine
     - NO
     - symptom development

3. Symptom development
   - YES
     - Retest & Continue Quarantine
   - NO
     - Quarantine

**Current NH resident**

- NH resident on HD
- NH resident returning from ED evaluation
- NH resident with new symptoms = PUI. Send COVID test
- If no symptoms after 14d, transfer to Regular NH unit
Facility COVID POSITIVE UNIT

- For NH residents who develop symptoms, become PUI or test positive
- A separate Unit or Wing should have a separate entrance/exit to the outside (won’t contaminate rest of the building)
- All staff wear N95 for aerosolizing procedures, Surgical masks at other times, face shields, and long sleeve isolation gowns, all day (no need to change frequently), and gloves
- System in place to reuse PPE
- Residents remain in isolation until “clearance” criteria met

- Monitor VS and O2 sat:
- Consider Q2h monitoring for hypoxia and Q4 VS check.
- Development of pneumonia/other complications
- Provide Rehabilitation
- Be prepared for providing Palliative Care (Have morphine and lorazepam readily available).
Observation Unit = Safety Valve

- **For Hospital Transfers or After ED Evaluation**
  - *This Quarantine Unit serves as a safety valve, preventing cases from getting into the main parts of the facility*
  - *All staff wear surgical masks, face shields, and long sleeve isolation gowns, and gloves*
  - *Should change PPE between patients (protect patients and staff)*
  - *System in place to reuse PPE*
  - *Residents remain in quarantine x 7-14 days, then transfer out*
Observation Unit = Safety Valve

- HD residents should stay here indefinitely
  - Many of the index cases are HD patients (due to frequent transportation to HD facility)
  - Keep HD patients in one room/wing
  - HD patients should “don” gown and mask before leaving the facility
  - HD patients should “doff” gown and mask, and do thorough handwashing/shower when they return
  - These patients do not get transferred back to Regular NH units
Protecting our Regular NH units

- We must PROTECT the majority of our NH residents who live here.
- Continue Physical distancing measures, restricting visitors, use of telemedicine, and screening of staff
- All staff wear Surgical masks, face shields, gloves, but short sleeve gowns ok
- System in place to reuse PPE
Facility Readiness is an Important Consideration

- Policy of universal masking in place (at least a surgical mask for all HCW)
- Daily screening of HCW
- Are all staff trained and competent in transmission-based precautions?
- Does the facility have ample PPE/isolation supplies? (at least a 2-week supply)
- Does the facility have private rooms available if needed for immediate isolation?
- Does the facility have rooms/unit designated for
  - COVID+ patients,
  - Observation Units,
  - and Regular Units?
- Does the facility have staffing plans in place to designate staff to each of these units (no floating)?
- Restrict “floaters”: physicians, staff, aides, therapists, etc

If a facility is NOT yet ready, they should NOT be forced to take new admissions
READY FOR THE BATTLE!
Surge?

- What happens in the event of a COVID surge?
- Stay tuned-- Plans are underway!