COVID 19 Case Presentation and Clinical Care Approaches

Erik Dukes, MD, NMMCi, Regional Medical Director

Val Serio, MD, Assistant Medical Director, Relias

David Pizzimenti, DO, NMMC Hospitalist Director

Objectives

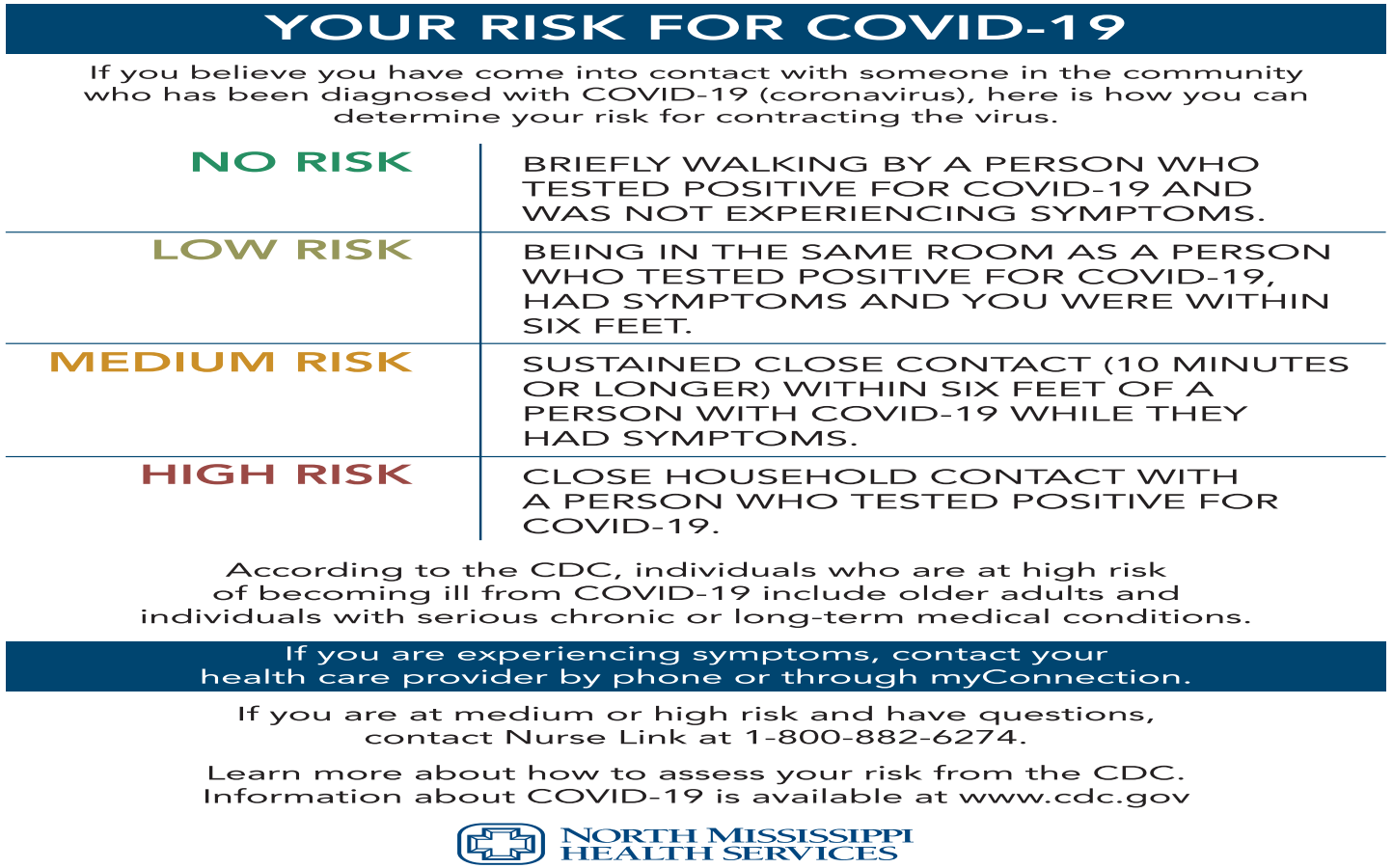
- MSDH and CDC approaches to clinical suspicion of COVID 19
- The inflection points of care are clinically defined, not test defined
- Screening – defining flow in ED
- Discharging from ED to home
- Admitting to the acute care setting
- Inpatient Treatment
- Discharge of COVID Positive Patient

Mississippi State Department of Health (MSDH); Center for Disease Control (CDC)

Dr. Erik Dukes

Clinic Approach and Pearls

- 55 y/o car salesman presents with no symptoms at the present but he negotiated for 9 min with an individual who tested positive for Covid-19 after going to the collection center in West Point 2 days later.



YOUR RISK FOR COVID-19

If you believe you have come into contact with someone in the community who has been diagnosed with COVID-19 (coronavirus), here is how you can determine your risk for contracting the virus.

NO RISK	BRIEFLY WALKING BY A PERSON WHO TESTED POSITIVE FOR COVID-19 AND WAS NOT EXPERIENCING SYMPTOMS.
LOW RISK	BEING IN THE SAME ROOM AS A PERSON WHO TESTED POSITIVE FOR COVID-19, HAD SYMPTOMS AND YOU WERE WITHIN SIX FEET.
MEDIUM RISK	SUSTAINED CLOSE CONTACT (10 MINUTES OR LONGER) WITHIN SIX FEET OF A PERSON WITH COVID-19 WHILE THEY HAD SYMPTOMS.
HIGH RISK	CLOSE HOUSEHOLD CONTACT WITH A PERSON WHO TESTED POSITIVE FOR COVID-19.

According to the CDC, individuals who are at high risk of becoming ill from COVID-19 include older adults and individuals with serious chronic or long-term medical conditions.

If you are experiencing symptoms, contact your health care provider by phone or through myConnection.

If you are at medium or high risk and have questions, contact Nurse Link at 1-800-882-6274.

Learn more about how to assess your risk from the CDC. Information about COVID-19 is available at www.cdc.gov

NORTH MISSISSIPPI HEALTH SERVICES

Cases are only examples and not actual patients.

40 y/o female with fever, new onset cough and some dyspnea with exertion for 3 days, with no travel history to affected areas and no exposure to + Covid-19 laboratory tested individual.

Sent patient to collection center on Brunson

Then to home for self isolation and care for 14 days.

https://www.cdc.gov/coronavirus/2019-ncov/if-you-are-sick/index.html

Cases are only examples and not actual patients.

Call PLC: ADMIT to Covid-19 unit

- 67 y/o male that was on cruise who presents with fever, new onset cough with worsening dyspnea on exertion and sob at rest for 5 days. He has history of diabetes and COPD with 60 pack year history of smoking. He has not had any exposure of Covid -19 laboratory tested individual.

Cases are only examples and not actual patients.

Dr. Val Serio

Emergency Department Approach and Pearls

COVID screening FRONT DOOR

Patient comes into the screening area with the following:

- Flu like symptoms
- Fever
- Known Exposure possible COVID (+) Patient

If clinically stable with O2 sat >92, HR<110, SBP>95.

GO HOME, SELF QUARENTINE x 14 Days. If much sicker can call or return to the ED for further testing

If Clinically Unstable with O2 sat <92, HR>110, SBP >95
Or
CLINICAL GESTAULT OF BEING ILL

GO TO ZONE D FOR FURTHER EVAL

COVID screening FRONT DOOR

Patient comes into the screening area with any other complaint

The Patient will be sorted to the general ED

The Patient has an unrelated complaint, but has a (+) ROS for fever, or SOB, or flu like symptoms then:

A quick “deep dig” Performed and if unsure call zone D provider for placement

COVID screening INSIDE ED

Patient comes into the screening area inside ED

If Patient is deemed to be clinically stable, VS improve, and not ill appearing then:

COVID SWAB
GO HOME, SELF QUARENTINE x 14 Days. If much sicker can call ED or return to the ED for further evaluation.

If Patient meets admission criteria and high clinical suspicion for COVID:

Discuss with PLC, Hospitalist and Possibly with COVID unit attending for placement.

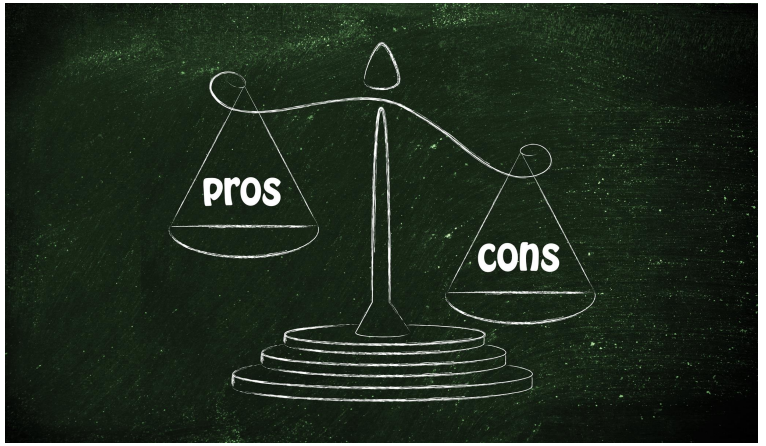
If Patient meets admission criteria and low clinical suspicion for COVID:

Discuss with PLC, Hospitalist and proceed with normal care.

Dr. David Pizzimenti

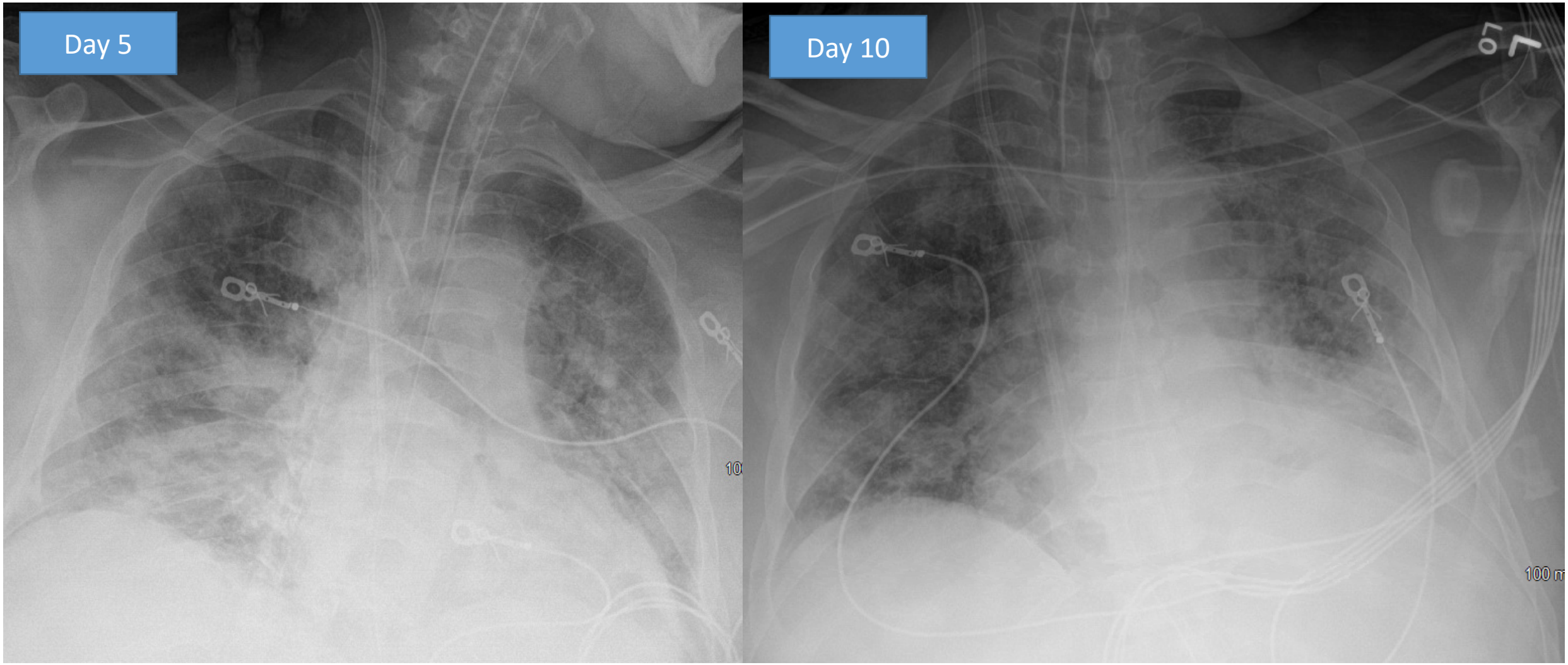
Hospitalization Approach and Pearls

COVID Clinical Diagnosis



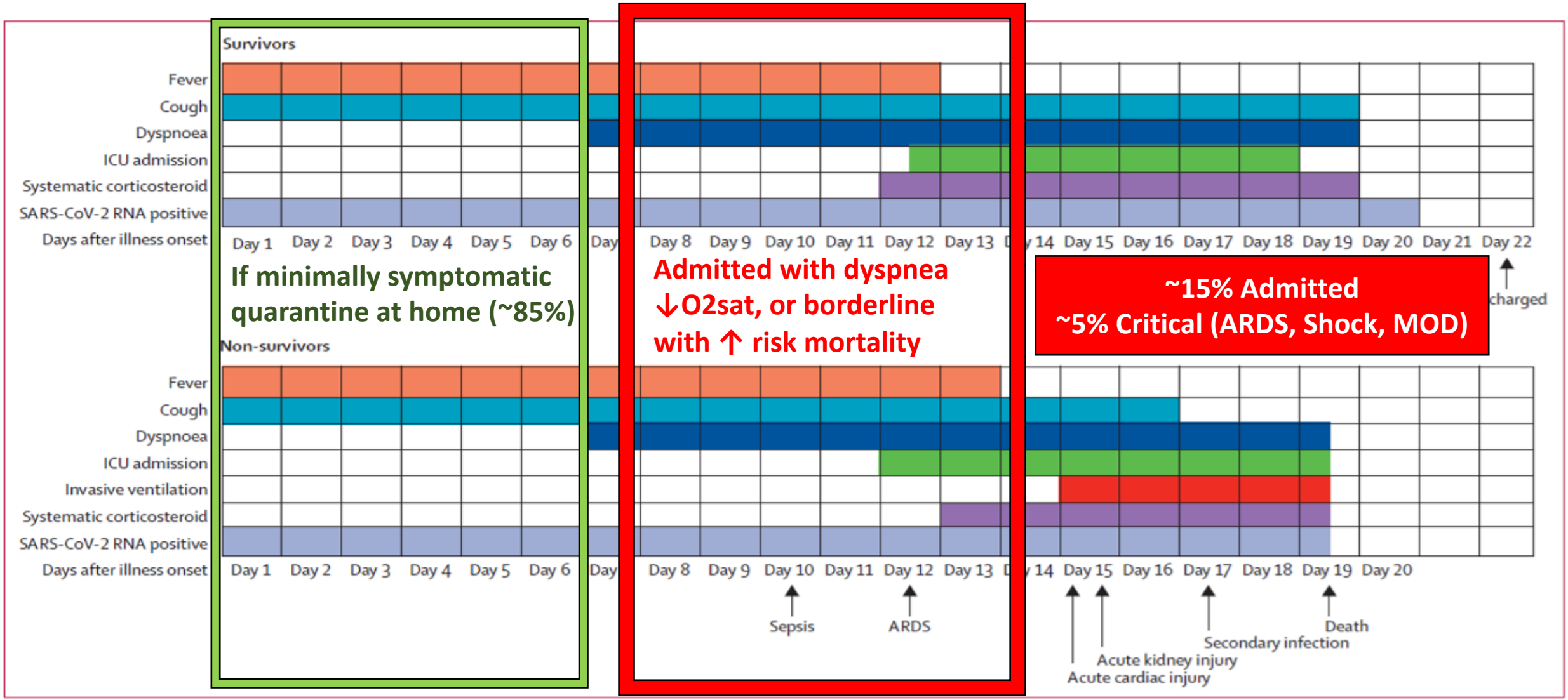
- Why it's VERY IMPORTANT to get it RIGHT upfront
  - Under diagnosis = patients not properly cohorted exposing others
  - Over diagnosis = waste precious resources and risk COVID exposure
- Screen → Algorithmic approach
  - Patient **screens** positive now what??
  - If I get a call to admit a patient to COVID unit…
    - Do they have the usual: Fever, Dry cough, Myalgia or fatigue, Dyspnea (usually after 7days), Other reported symptoms GI (diarrhea>nausea), HA, eye pain, anosmia, loss of taste, etc…
    - Obvious community exposure (family, etc…), but I consider everyone to have possible exposure
    - Rule out other potential causes: Influenza (BioFire PCR if available), CAP (urine strep-Ag), skin/soft tissue, UTI, abdominopelvic, etc… Not always easy… luckily co-infections rare but they exist!!!
    - Labs: WBC variable (lymphocytes↓), Procal↓, D-Dimer↑, LDH↑, LFTs↑, Cr ↑, CRP↑
    - Imaging:
      - CXR with diffuse interstitial and alveolar infiltrates (occasional lobar consolidation) → ARDS
      - CT good sensitivity but poor specificity (ground glass, diffuse > unilateral consolidations)
    - Make sure work up **COMPLETE** before accepting… BUT **CLINICAL PRESENTATION HAS BEEN VARIABLE** and we are erring on the side of admitting to COVID unit if no other obvious etiology.
    - Confirm PCR+ (rapid testing ordered)

Imaging

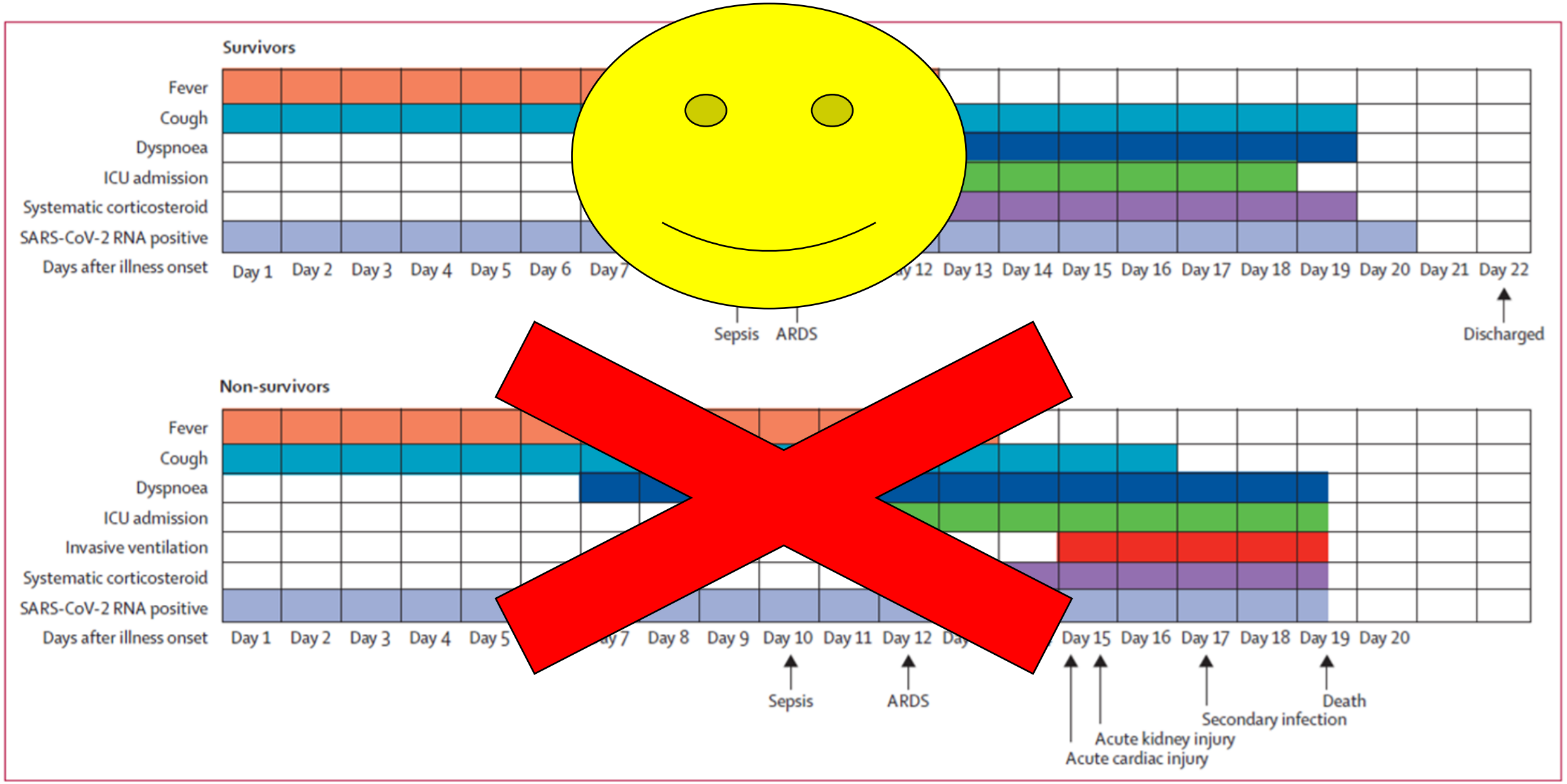


Admission Criteria

- Based on symptoms and risk factors (age and comorbidities)



Inpatient Treatment



Discharge of COVID + patients

- *Test-based strategy for DC of Transmission-Based Precautions (we aren't doing this do to testing limitations)*
- ***Non-test-based strategy for DC of Transmission-Based Precautions*.**
  - No fever for 3 days without antipyretics **and**
  - No respiratory symptoms (cough, SOB) for 3 days **and**
  - 7 days have passed *since symptoms first appeared*
- If COVID+ discharged home:
  - Isolate at home until DC of Transmission-Based Precautions (as above).
  - Considerations of the home's suitability for and patient's ability to adhere to home isolation recommendations.

Questions and Discussion

For updated information please see NMHS.net