THE UNC MEDICINE CHIEFS' CORNER

Special COVID-19 & Critical Care Edition
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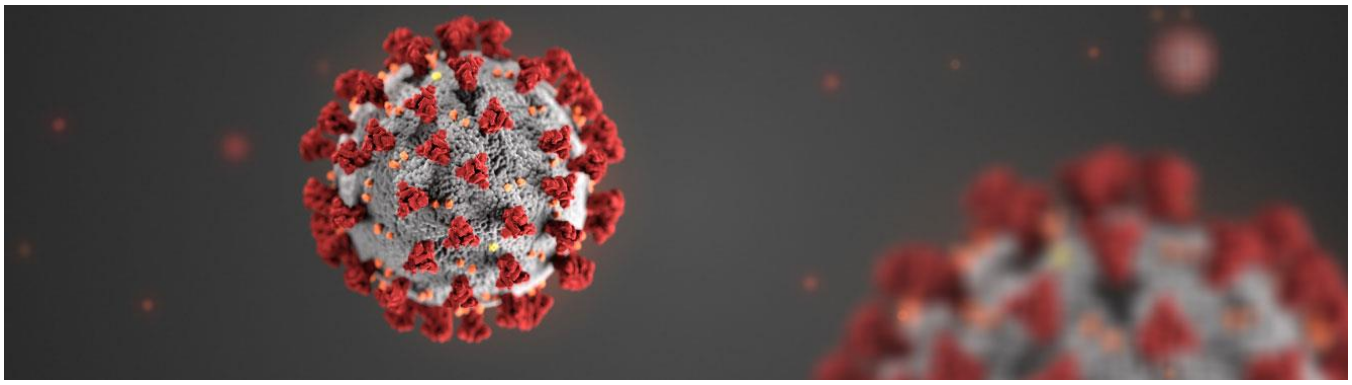
TOP STORY



COVID-19 is coming! The UNC protocol for a potential outbreak is still evolving, but these are the key takeaways currently:

- For any patient needing evaluation for COVID-19, the first call from the ER should be to the Infection Control pager on call. That person will help with the next steps.
    - Pager: 216-2935
    - Phone: 984-974-7500 (x47500)

- If the patient does not require admission, then Infection Control will work to arrange an outpatient quarantine and observation plan.
- If the patient is sick enough to be admitted (even floor status) the next call should be to the MICU team, where a limited number of volunteer providers will be caring for the patient while awaiting testing results in 2 designated isolation rooms.

We should not currently be involved in directly caring for these patients, but may be in the future on a voluntary basis if case numbers exceed the bandwidth of the current protocol.

- Formal PPE recommendations have not yet been made by the hospital but strict droplet/contact should be sufficient; there is evolving information on the role that N95 masks might play in protecting health care providers from illness.
- Residents at Wake Med: James will be reaching out separately with the hospital-specific protocol.

**** This is an evolving situation, and it is likely that protocols as well as clinical needs will change rapidly. At this time, the most important thing is to call Infection Control for directions in the setting of suspected or confirmed cases of COVID-19 ****

GENERAL ANNOUNCEMENTS

North Carolina has just announced our first case of confirmed novel coronavirus infection, and more are likely to show up soon.

More about COVID-19: Attached to this edition of Chiefs' Corner is an NEJM review article about the clinical manifestations of this illness, based on the clinical experience with it in China to date. Some takeaway points (thanks to Dr. Hemsey for putting together these notes):

- Fever is part of the illness in 89% but present at admission in < 50%. Otherwise it is a typical lower respiratory illness with mostly dry cough, shortness of breath. GI symptoms are unusual.
- Lymphopenia is common; elevations in D dimer and CRP are also seen.
- Patchy ground glass opacity or shadowing is seen on CT in most patients requiring hospitalization but patients (especially with non-severe disease) may have normal imaging.
- Median incubation is 4 days (2-7 days) and progression from symptoms to admission is 7 days.
- In the confirmed positive cohort as of end of January, 5% required ICU care, 2.3% required mechanical ventilation and 1.4% died. This does not capture many patients who had mild illnesses and were not tested. Patient with more severe illness tended to be older and have more comorbid conditions.

The current CDC recommendations for testing are copied below. One of the biggest current challenges is that testing must all go through the CDC or state and has a significant turnaround time (+/- 72 hours).

Clinical Features	&	Epidemiologic Risk
Fever[1] **or** signs/symptoms of lower respiratory illness (e.g. cough or shortness of breath)	**AND**	Any person, including health care workers[2], who has had close contact[3] with a laboratory-confirmed[4] COVID-19 patient within 14 days of symptom onset
Fever[1] **and** signs/symptoms of a lower respiratory illness (e.g., cough or shortness of breath) requiring hospitalization	**AND**	A history of travel from affected geographic areas[5] (see below) within 14 days of symptom onset
Fever[1] with severe acute lower respiratory illness (e.g., pneumonia, ARDS) requiring hospitalization[4] and without alternative explanatory diagnosis (e.g., influenza)[6]	**AND**	No source of exposure has been identified

Affected Geographic Areas with Widespread or Sustained Community Transmission

Last updated February 26, 2020

- China
- Iran
- Italy
- Japan
- South Korea

The criteria are intended to serve as guidance for evaluation. In consultation with public health departments, patients should be evaluated on a case-by-case basis to determine the need for testing. Testing may be considered for deceased persons who would otherwise meet the PUI criteria.

New MICU Surge Plan: It has become very clear this year that we need a formal plan for the MICU teams when the census surges. Although no plan can account for all possibilities, in conjunction with the MICU leadership and resident service line directors, we have put together the following plan:

- When the total MED I census is greater than 35 patients at 7 am, the On-Call Fellow will call Dr. Carson and/or Dr. Chang to activate a 3rd MICU attending
- An intern from the 10-patient team will join with the backup attending and assist with notes and orders on 'ectopic' patients. The resident or fellow on the 10-patient team should decide which intern is designated to work with the backup attending.
- The MICU teams that day will ONLY be responsible for rounding on patients physically in the MICU, as well as new admits.
- The backup attending and designated intern will be responsible for rounding on all patients who are physically outside of the MICU (including other ICUs and stepdown-status MEDI patients). They can divide notes up as they see fit; this intern, as always, can still write no more than 10 notes in a day.

This will clearly require flexibility on the parts of the interns, residents, fellows, and attendings and some days (eg, resinterning days, resident days off, busy admitting days) will be more challenging than others. As we roll out this plan, please continue to give us feedback about how we can continue to improve the MICU!

HOSPITAL HAPPENINGS

Sepsis Compliance Saves Lives! Or at least it doesn't hurt. Remember the keys to complying with key sepsis measures:

- Use the sepsis order set bundle on ALL septic patients. Even if you put in most of the clinically necessary orders already, there are a few key orders only found on the order set (eg, Notify Pharmacy of Septic Patient)
- Give and document 30 cc/kg fluid resuscitation; clearly document if there is a contraindication to giving this much fluid.
- Use the SEPSISEXAM dotphrase to document your perfusion assessment, AFTER initial fluids and WITHIN six hours of identifying sepsis. You can also type a few notes at the bottom of this note about your clinical impression and plan.
- Order a follow-up lactate within 6 hours, and take action if still rising.

BITE-SIZED NEWS

Update from Dr. Lydia Chang: Adult Rapid Responses will continue to be called overhead for the time being. We will notify again when a date is again chosen to go "silent."

SHOUT OUTS

- To **Dr. Trudy Li, Dr. Ben DeMarco, and Dr. Monty Williams**, for picking up a few extra Alt and SDC shifts to help their colleagues on Alt get some days off who got a lot of extra MICU shifts.
- To **Dr. Max Diddams**, for covering last-minute shifts and for being inexplicably enthusiastic. And for presumably ultrasounding everyone on service.
- To **Dr. Sheetal Gambhir**, for managing a really sick patient overnight at Wake Med and using excellent physical exam skills to figure out what was going on and getting him the treatment he needed.
- To **Dr. Courtney Mullins**, for being excellent with patients and for putting together a super complicated discharge at Wake, going above and beyond to make sure things didn't fall through the cracks.
- To **Dr. Josh Hudson**, for braving the snow storm to come in on his pre-call day even when he didn't have to.
- To **Dr. Chris Armstrong and Dr. Luke Baldelli**, for stepping in to help keep physical exam rounds going!
- To **Dr. Monty Williams**, for stepping up to help out with an extra patient at the ACC who needed a provider due to a scheduling kerfluffle.
- To **Dr. Ben Demarco and Dr. Matt Van Dongen** for very skillfully navigating a stressful IVC in Same Day Clinic.

SPOTLIGHT ON

Max Diddams, MD!

Max grew up in the San Francisco Bay Area but found the perfect weather too oppressive, so he went to Carleton College in Minnesota. There, he met his wife Caitlin, majored in Chinese Linguistics, and learned to swing dance. His senior thesis was on humor in translation by close reading of the Hitchhiker's Guide to the Galaxy. Minnesota didn't have enough snow, so they moved to Buffalo, NY for medical and graduate school, but not before taking a year off to teach English in Shanxi, China.

In Buffalo, Max developed a passion for point-of-care ultrasound that led him to pursue a career in pulmonary-critical care. He also did research in CPR outcomes in popular television and film, with the goal of better connecting with patients over their end-of-life wishes and expectations. He was a manager of the medical school's free clinic, and despite all familial expectations was inducted to both AOA and Gold Humanism Honor Societies.

Max was over the moon to be accepted to UNC and has loved living and working in Chapel Hill. He has no plans to ever leave, especially now that his in-laws live in Asheville. He is now certified in critical care ultrasound with Chest and continues to work diligently with the department to grow our small but growing ultrasound program. In his spare time he is involved in his church, climbs poorly at the local rock climbing gym, studies foreign languages, and tries to get to Wilmington to SCUBA dive.

Morning Report & Noon Conference schedule and archive: available via Resident Links -> Conferences on the residency website (requires Onyen log-in).

Please let the Chiefs know if you would like to be removed from this distribution or if you know of someone who would like to be added.
Contact: Nick Maston -- nicholas.maston@unchealth.unc.edu