Guidelines for Patients with COVID-19 Suspected or Confirmed Infection
in the
Inpatient and ICU Environments

(Updated April 30, 2020)

Who should be tested for COVID-19?
- Guideline for testing patients for COVID-19 are fluid and may change frequently. Refer to the Nebraska Medicine COVID-19 Testing Recommendations for the most recent information.

- **How do I obtain the specimen?**
    - Refer to the specimen collection instructional video and the step-by-step infographic for details on how to appropriately collect specimens for testing.

Should a patient who is known to have COVID-19 (COVID positive) or suspected to have COVID-19 (Person Under Investigation or PUI) be admitted to the hospital?
- The presence or suspicion for COVID-19 does not necessitate admission to the hospital. The decision to admit should be based on a medical assessment and the need for advanced medical care not available outside the hospital. It is entirely appropriate to discharge known or suspected positives to home with supportive care.

- As part of an effort to prioritize admissions for COVID 19 patients to only those who need advanced medical care and to provide support for those discharged to home, Emergency Medicine and Internal Medicine have created a COVID Assurance Workflow. An Internal Medicine primary or subspecialty physician calls COVID related patients discharged from the emergency department and assesses for symptom progression.

- Patients may need special consideration for admission to the hospital if they have the following:
    - Significant co-morbidities (chronic kidney disease, congestive heart failure, chronic obstructive pulmonary disease, and diabetes) that may significantly worsen with concomitant COVID infection

- o Immunosuppressed patients who have symptoms of shortness of breath, fever, and/or cough
- o Hypoxic with SpO2 < 90% on room air (normal lung function) or SpO2 < 92% with underlying lung disease)
- o Tachypnea with RR > 25
- o Sepsis present (SOFA score greater than or equal to 2)
- o Individual that has another medical illness requiring hospitalization for another reason other than COVID positive/COVID rule-out

- As always, patients may fall outside of these general criteria and collaborative discussions are encouraged to determine the best utilization of resources and provide safe patient care.

- Patients that have worsening hypoxemia despite oxygen therapy or clinical deterioration should be considered for ICU admission

How do I get my patient admitted into the main campus hospital?
- Patients suspected to have COVID-19 (COVID PUI) and those confirmed to have COVID-19 (COVID positive) and require admission to an inpatient unit or the ICU will be assigned to one of following units:
  - o 7th Floor University Tower (7-UT) is a mixed care unit with the ability to provide ICU and med-surg/telemetry level of care
  - o 6th Floor University Tower (6-NN) can provide med-surg/telemetry level of care
  - o 5th Floor University Tower (5 West) can provide med-surg/telemetry level of care
  - o 5th Floor University Tower (MICU & PICU) provides ICU level of care
  - o 4th Floor Bellevue Hospital can provide med-surg/telemetry level of care
  - o Other inpatient units may be utilized as dictated by clinical need

How do I get my patient admitted from the ED? How do I transfer a patient from another inpatient unit?
- ICU level of Care: Contact CCM pager (402-888-7000)
  - o If Trauma/EGS/Surg Crit Care patient, contact Trauma/EGS/Surg Crit Care first. Trauma/EGS/Surg Crit will admit as primary provider, and consult COVID CCM team for co-management
- Acute/Telemetry level of Care: Contact Hospital Medicine COVID physicians
  - o PerfectServe (preferred) - Search NM COVID-19 group
  - o Pager (backup) (402-888-0301)
- Trauma patient requiring ICU or Acute/Telemetry level of care: Contact Trauma Service
  - o PerfectServe (preferred)
  - o Pager (backup) (402-888-1938)

- Emergency General Surgery patient requiring ICU or Acute/Telemetry level of care: Contact Emergency General Surgery
  - PerfectServe (preferred)
  - Pager (backup) (402-888-0447)
- Surgical Critical Care patient requiring ICU level of care: Contract Emergency General Surgery
  - PerfectServe (preferred)
  - Pager (backup) (402-888-0282)
- For patients that transfer from another Nebraska Medicine inpatient unit and are ruled out for COVID-19, the patient will transfer back to their originating provider at the appropriate level of care.
- For patients that transfer from another Nebraska Medicine inpatient unit and are found to be positive for COVID-19, the patient will stay in the appropriate COVID unit.
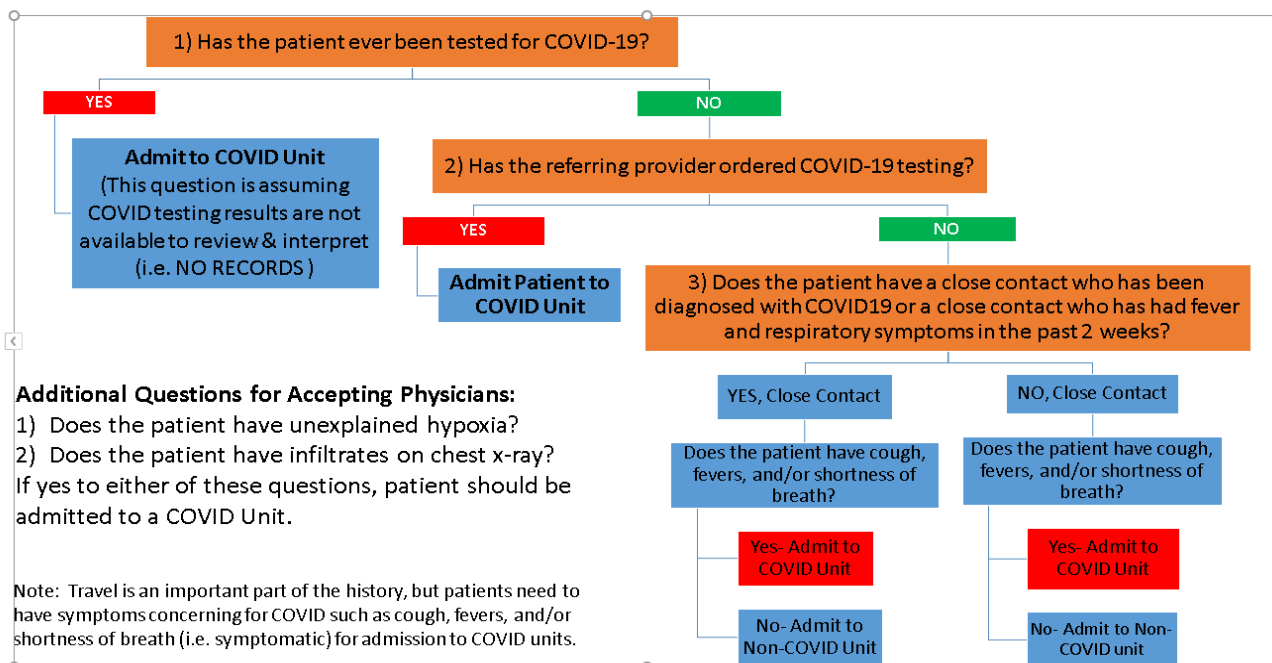
How do I get a patient admitted from a clinic or infusion center?
- Contact Patient Placement Unit (402-559-2337)
- You will be conferenced with a Nebraska Medicine physician based on the level of care patient needs and given specific instructions as to how the patient should transfer to the assigned COVID unit.

Are we accepting outside external transfers?
- The patient placement unit (PPU or BEDS desk) always completes preliminary screening for any requests to transfer a patient to Nebraska Medicine. As a safety measure, the physician accepting the outside transfer should also ask screening questions of the referring provider:

Screening Questions for External Transfers & Direct Admissions:

1) Has the patient ever been tested for COVID-19?

YES

NO

Admit to COVID Unit (This question is assuming COVID testing results are not available to review & interpret (i.e. NO RECORDS)

2) Has the referring provider ordered COVID-19 testing?

YES

NO

Admit Patient to COVID Unit

3) Does the patient have a close contact who has been diagnosed with COVID19 or a close contact who has had fever and respiratory symptoms in the past 2 weeks?

YES, Close Contact

NO, Close Contact

Does the patient have cough, fevers, and/or shortness of breath?

Does the patient have cough, fevers, and/or shortness of breath?

Yes- Admit to COVID Unit

No- Admit to Non-COVID Unit

Yes- Admit to COVID Unit

No- Admit to Non-COVID unit

Additional Questions for Accepting Physicians:
1) Does the patient have unexplained hypoxia?
2) Does the patient have infiltrates on chest x-ray?
If yes to either of these questions, patient should be admitted to a COVID Unit.

Note: Travel is an important part of the history, but patients need to have symptoms concerning for COVID such as cough, fevers, and/or shortness of breath (i.e. symptomatic) for admission to COVID units.

- As a general rule supported by NM policy MS32, Nebraska Medicine will not accept patients for transfer from other hospitals who are COVID positive or COVID rule-out unless the external facility cannot provide the higher level of care is deemed necessary after a collaborative discussion between the Nebraska Medicine accepting physician and the external referring physician. For example, Critical Access Hospitals may need to transfer their confirmed to have COVID-19 (COVID positive) or suspected to have COVID-19 (COVID PUI) patients because of higher level of care needs that cannot be provided at the critical access hospital.

How do I get a patient admitted at Bellevue Medical Center (BMC)?
- Patients suspected to have COVID-19 (COVID PUI) and those confirmed to have COVID-19 (COVID positive) and require admission to an inpatient unit
  - Most patients will be admitted to Level 4 of BMC hospital which provides med-surg/telemetry level of care.
- Patients at BMC who require critical care and are COVID+ should be transferred to NMC
- Nuances to this plan:
  - If there is a low risk/suspicion rule out patient at BMC <u>and</u> the one negative pressure ICU room is open, the patient can stay at BMC until the testing is finalized
    - If the testing is positive – the patient should be transferred to NMC
  - If the one negative pressure ICU room is full and a second critical care rule out patient arrives in the ED or an inpatient deteriorates, the second patient will need to be transferred to NMC

- UNMC Family Medicine service should be contacted for admissions of COVID-19 (COVID PUI) and those confirmed to have COVID-19 (COVID positive) requiring admission to an acute/telemetry level of care Bellevue inpatient unit

Now that my COVID positive/COVID PUI patient has been admitted what do I do?

- **What should I do with test results and does my patient need two tests to be ruled out?**
  - COVID test results as positive: Patient remains in COVID unit for duration of their care. Determine need for re-test based on clinical scenario and infection control recommendations.
  - COVID test result is negative: All patients are discussed clinically with infection control and COVID-ID physicians on a mid-day call. If the patient has been discussed and a plan was developed regarding the need for repeat testing a sticky note should be present in the chart. If no plan is noted, the treating clinician should contact either the COVID-ID physician or infection control medical director to discuss if a second test is needed.
    - If NO repeat test is necessary, COVID isolation can be removed by infection control and the patient can transfer to a non-COVID unit. Contact 888-4646 for flag removal.

- If YES, patient remains in COVID unit for re-test. Obtain specimen as directed by infectious diseases or infection control experts.

- **Should I obtain an infectious disease consultation?**
  - COVID-19 is not a mandatory ID consult. However, differentiation of COVID-19 from other respiratory tract infections can be difficult and patients may have multiple ongoing processes. The ID Division is pleased to assist in sorting through these issues. Please consult the ID service through usual channels using Perfect Serve and the appropriate ID service (General, Oncology, Solid Organ Transplant, Orthopedic, Community). Clinical guidance comparing COVID-19 to other respiratory tract infections and conditions is available on the [Nebraska Medicine COVID-19 resource page](#).

- **What is the appropriate PPE and isolation strategy for COVID positive/COVID PUI patients?**
  - Patients that have been diagnosed with, or are being ruled out, for COVID-19 should adhere to Standard, Airborne and Contact Isolation precautions. More information regarding PPE can be found on the [Nebraska Medicine COVID-19 resource page](#).

- **Can I perform blood work on this patient? What about other ancillary procedures?**
  - Yes. Patients with COVID-19 or under investigation can receive blood work just the same as any other patient.
  - Ideally, all non-critical bedside procedures should be deferred until a later time in COVID-19 positive and PUI patients. If tests are required, please refer to the [Perioperative/Procedural guidance document](#) for overarching details as well as the extensive procedure-specific resources provided on the [Nebraska Medicine COVID-19 resource page.](#)
  - Ideally, COVID-19 positive and PUI patients should not leave the inpatient room for testing if possible. If medically necessary, patients can be transported to other locations as noted below.

- **How do I transport a patient safely?**
  - For detailed instructions on how to safely transport patients between units or departments, please refer to an [informational video](#) as well as this [Guidance for Transporting Patients](#) document.
  - When transporting patients to/from one of the inpatient COVID units in University Tower:
    - When going to UT, use the service elevators (behind the B-elevators) and get off on the appropriate floor.
    - When going to Hixson Lied for an operating room, use the service elevators (behind the B-elevators), get off on Floor 2 and take the corridor to Hixson Lied. When possible, proceed directly to the operating room or pre-op negative

pressure room for intubation. Please refer to the [Perioperative/Procedural guidance document](#) for details.

- **Can this patient undergo an invasive procedure or surgery?**
  - Yes, you can perform invasive procedures on patients when necessary. Ideally, any procedure should be delayed until COVID-19 test results are available.
  - Please refer to the [Perioperative/Procedural guidance document](#) for details.

- **My patient is in the ICU and requires a ventilator. Are there any special considerations that I should utilize?**
  - Yes. Our CCM/CCA teams have created protocols to help with unique situations. They are listed as addendum to this protocol.

- **How can I work to decrease the chances for this patient to transmit COVID-19?**
  - There are a variety of things that have been introduced to decrease the potential transmission of COVID-19
    - Avoid aerosol generating procedures such as bronchoscopy, sputum induction, etc. if possible.
    - Utilize oxygen supplementation and respiratory support utilizing the [Nebraska Medicine guidelines for decreasing aerosol-producing medical interventions](#).
    - Care for patients in the appropriate setting (COVID units) and wear the appropriate PPE while caring for patients.
    - Have the patient wear a cloth mask while any healthcare worker is in the room

- **What health care workers should enter this patient's room?**
  - Health care workers having contact with the patient should be minimized as much as possible.   This will require all team members to work together to provide safe patient care to these patients.
  - Consulting services should coordinate with the primary team to avoid entering the room unless deemed medically necessary. Technology such as video visits should be utilized to obtain history and discuss plans with the patient. Examination of the patient for billing documentation purposes is not an appropriate reason to enter the room.

- **Beyond supportive cares, how do I best treat this patient?**
  - Please review the [Nebraska Medicine COVID-19 Antiviral and Pharmacotherapy Information](#) sheet for details
  - All COVID-19 specific therapy decisions should be made in consultation with infectious disease and infection control experts

My patient has passed away and is COVID positive or a PUI. What do I do?

- When time of death is pronounced, a procedure mask must be placed on the deceased patient who should remain in the room for 60 minutes in order to all full air exchange. The deceased patient can then be removed by designated personnel under droplet precautions (i.e., no N95 respirator is needed.)

My patient is ready for discharge – what do I do?

- Plans for a safe quarantine in the home or residence need to be established with the patient and caregiver(s). Homeless shelters, skilled nursing facilities and other group setting discharges may or may not have the ability for quarantine and if such a setting is anticipated it should be discussed with care transition nurses and other members of the health care team.
- Determine follow-up plans with the patient's primary care and other physicians prior to discharge.
- For patients needing hemodialysis, there are COVID-19 positive HD centers available.
- Home oxygen is easy to arrange for COVID-19 positive patients

How do we safely clean the patient room?

- Follow the Nebraska Medicine Room Cleaning Guidance Document for more information. Note this document does not apply to operating rooms or procedural areas.