COVID-19: Adult Inpatient Treatment

Adult Inpatient

Printed 7/14/2020 9:52:32 AM by Joshua Male

Copyright by The University of Chicago Medical Center. All rights reserved. No part of this publication may be reproduced without permission in writing from The University of Chicago Medical Center.

Disclaimer: Clinical pathways are designed to standardize care of patients based on publically available medical evidence and/or consensus of medical professionals at The University of Chicago Medical Center (UCM). Clinical pathways are not meant to replace clinical judgment and patients should be managed accordingly, based on their individual needs. The application does not provide medical advice, does not make diagnostic, treatment, or other clinical decisions or judgments, and is not a substitute for the competent analysis and professional judgment of health care professionals. Clinical pathways may not represent the most recent evidence available. UCM is not responsible for any errors or omissions within the pathway or for any patient outcomes where a clinician consulted the pathway during patient care.

Pathway Contacts: Ethan Molitch-Hou, MD, Stephanie Kelly, MD, Michael O'Connor, MD, John Kress, MD, Cheng-Kai Kao, MD, Emily Landon, MD and Rachel Marrs, DNP, RN

QPI Contact: Danielle Bowsman

Last Updated: 07/14/2020

Resources and Updates

Resources:

- UCM Coronavirus (COVID-19) Resource Center
- For clinical questions regarding the care of COVID PUIs or COVID patients, page the COVID Resource Team (p30028)

Reference Pathways:

  - Adult Respiratory Failure & Cardiac Arrest
  - Exposed
  - Clearing
  - MDI & Nebs

Recent Updates:

- **7/14/20**
  - **Added pregnancy test and isolation orders**
  - **Added reference pathways**
  - **added guidance for dexamethasone**

(Archived Updates)

Inpatient Clinical iPads

Consider the following use cases for clinical iPads in the COVID unit:

- Specilaity consultation that does not require in-person visit
- Family meeting for code status discussion
- Patient-family communication
- Remote monitoring
- Communication from provider to patient that requires more nuance that may be prohibited by PPE

Steps to request using clinical iPad for COVID patient:

- Speak with the unit secretary to request an iPad to the patient's room
- For clinicians in COVID unit: either scan the QR code on the door, or use the facetime address (e.g. cvXX@uchospitals.edu, displayed on the iPad screen) to speak with the patient
- For consultants: Call the secretary and arrange a time for consultation, the secretary will provide the FaceTime address for contact
- For family members: use facetime or Zoom for a one-time conference call
- After use is complete, the iPad should be sanitized and returned to nursing station

Support Services for COVID-19 Patients

- Loneliness and Isolation- Video Conference with Family, consult Spiritual Care
  - Pager Link 7008
  - Consult Spiritual Care
- Grieving - Consult Spiritual Care in the Hospital, refer to UCM Support Group on discharge
  - Pager Link 7008
  - Consult Spiritual Care
- Grief Support Group is Tuesdays 2-3pm; email Jessica at
  - jjacoby@bsd.uchicago.edu.
- Psychological Intervention - Management of depression, anxiety, acute stress, PTSD
- Psychiatric Management- Delirium, Agitation, Suicidal, Severe Mental Illness
  - Consult Psych C/L service 6504
  - Order consult in EPIC for "Psychiatry"
  - Provide Name and Contact for RN to coordinate IPAD/Video Consult

Family Support

- Testing for our patient's family contacts is available through UCMC and Ingalls. If when you speak with them and if you recommend testing, you can refer them to 773-702-2800.
- Grief Support Group is Tuesdays 2-3pm; email Jessica at jjacoby@bsd.uchicago.edu.
- Additional masks and gloves can be provided if there is a family member caring for the patient.

Adult COVID-19 positive patient admitted to cohort unit

- **Order:** Enroll in Confirmed COVID-19 Pathway
- **Floor Admissions:** COVID Floor Admission Order Set

Order:

- Enroll in Confirmed COVID-19 Pathway
- Contact Precautions
- Special Respiratory Precautions

Assess Code Status

Code Status must be assessed, ordered and documented on each patient.

Review Symptoms Daily

- **Fever curve**: monitor daily, recommended patients be afebrile x 24 hours prior to discharge
- **Myalgias**: Frequently present during initial fevers can be marker of inflammatory response, monitor CPK
- **Renal dysfunction/ATN**: both due to disease itself and from fluid balance. Watch for renal dysfunction
- **GI Symptoms**: Frequently present. GI Losses in volume and electrolytes are common reason for prolonged hospitalization
- **Myelosuppression**: monitor daily CBC
- **Thrombosis**: Monitor patients daily for signs and symptoms of acute clot. Assure patient is on prophylaxis.
  - For all patients, recommended ppx dose is higher at 0.5mg/kg/day
- **Psychiatric Assessment:** assess for PTSD, Depression, Isolation and Grieving, See Support Services box for management
- If applicable, **Diabetes Care**: To limit need for SSI and additional nursing exposure, consider the use of oral agents (or resuming metformin) if renal function and reduced contrast exposure allow.
  - Discuss use of linagliptin with pharmacy

Monitor Respiratory Status

- Monitor daily O2 requirements, respiratory rate and O2 sat on Room Air
  - Goal for O2 saturation is 92%
  - Wean O2
- Check and document room air saturation on a daily basis
- When off of O2, check ambulatory sat
- Consider early proning
- Use a CONSERVATIVE fluid strategy: Maintain even to negative if patient can tolerate
  - Consider diuresis when able for additional negative fluid balance
  - Lasix

Additional Respiratory Treatments

- Aerosol generating procedures accepted on COVID floor and in COVID ICU
  - Albuterol MDI + Spacer
  - Acapella
  - Chest PT
  - Incentive Spirometry
  - Nightly CPAP

Additional Orders

Quick orders:

- COVID-19 Labs order set
- Lab Add-Ons
- COVID Inflammatory labs
- Type and Screen
- EKG
  - Monitor QTc for patients on QTc prolonging treatments
- CXR
  - If initial CXR performed was normal, repeat CXR at 48 hours

If not ordered yet, order:

- RVP
- Urine legionella
- Urine strep pneumo Ag
- Pregnancy Test

Consult ID prior to ordering any antivirals

Discuss the treatment plan on daily consult rounds with ID Consult (p30024), including the eligibility of the Remdesivir trial. ID team will automatically consult if Enrolled in the Confirmed COVID-19 pathway.

Antiviral Treatment

All COVID specific treatment options will be reviewed by the ID team based on trial eligibility.

Does patient meet the following criteria?

- **10 days have passed since symptom onset and last positive**

- AND -

- **Asymptomatic for 3 days** (Symptoms Concerning for COVID-19)

Yes → Follow: COVID-19: Inpatient Clearing

No → When patient is ready for discharge

When patient is ready for discharge

Before discharge:

- Consider timing of symptom onset: Patients within 6-9 days from symptom onset are at highest risk of worsening.
- Patient need to be afebrile for 24 hours before they can be discharged.
- If patient is off oxygen, assess O2 need on discharge at rest and with ambulation to ensure they are able to ambulating without de-satting.
  - discharged with Home O2
- For patients who received Tociluzimab, monitor for at least 48 hours after receiving
- For patients who are immunosuppressed, discuss with consultants (ID and specialist) prior to discharge for close follow up.

Patient Discharged Home

- For stable patients with a good home quarantine plan
- Patients may be discharged with Home O2 if stable and far enough from initial diagnosis
- Patients on HD will need both a COVID+ and non-COVID chair established prior to discharge
- Isolation: patient needs to self-quarantine for a period after discharge depending on timing of symptom onset
- Make a telehealth appointment for patient within 48 hours (they are able to do them for patients with PCP)
  - Confirm patient's contact information is updated in EPIC
- Ride: no Uber or Lyft allowed. Either someone has to pick them up or Ambulance.
- Meds2Bed are available - they will drop off medication on the hallway and nursing will have to pick it up from there.
  - Meds2Beds will also deliver mask for patient and caregiver
- Several INR clinics are not open at this time, so if patient on warfarin, might need to determine other options (Lovenox vs. NOAC).
- For Outpatient Labwork:
  - Email COVID+PUIclinic@uchospitals.edu
  - Indicate it is a lab only and that patient does not need eval and is COVID+
  - Indicate who is following up test results.

Add COVID discharge instructions:

1. Go to Epic Discharge Tab
2. Go to Add'l Instruction
3. Click "Go to References/Attachments" on right hand side.
4. Click Additional Search
5. Type in "COVID".
6. Add "UCM GOING HOME WITH COVID-19".
7. Add "UCM PATIENT VIDEO VISIT CHECKLIST".
8. Add "UCM MYCHART STEP-BY-STEP INSTRUCTIONS"
9. Add "UCM MYC Viral Illness OR COVID-19 Precautions"
10. Use .COVIDFAMILYTESTING to provide testing info for family members
11. This will be printed out by the nurse for the patient.

Post-acute Care Facilities, e.g. nursing homes

- Patients should be afebrile x 72 hours without tylenol use prior to placement
- Some facilities require that patients stay in the hospital until two negative COVID tests.
- Consider anticoagulation on discharge if patient is less mobile
- Check with SW (pager 8165) when planning to send patients to a facility. Each facility has its own requirement about COVID discharges. Some nursing homes have isolation and PPE available.

Patient Discharged to A Safe Haven

Considerations for ICU Admission

Rapidly rising oxygen requirement (i.e 2 or more L in 12 hours)

- Requiring >6 L O2
- Significant work of breathing not alleviated by current supplemental O2
- Underlying lung or systemic disease that would affect O2 requirement including volume status
- Signs of shock or hemodynamic instability
- Multiple clinical and laboratory risk factors may impact decision

If ICU transfer required

ICU Admissions: COVID ICU Admission Order Set

From cohort floor

  - Page 30047 for ICU eval
  - If emergent intubation required, call 53911
  - Once discussed with ICU, place transfer order specifying "Covid ICU in comments," and "Medical intensive care unit" as receiving service
  - The ICU will recommend which unit to receive patient, triage the patient to the correct unit, and will communicate your details to give signout to the right ICU team

- **From non-cohort floor**
  - Page 30047 to discuss patient with ICU
  - If emergent intubation required, page 7000 or overhead anesthesia. Specify covid-positive in page.
  - Once discussed with ICU, place transfer order specifying "Covid ICU" in comments, and "Medical intensive care unit" as receiving service.
  - The ICU will triage the patient to the correct unit and will communicate your details to give signout to the right ICU team.

General Treatment Principles

Treatment of known or suspected COVID-19 cases

- Antiviral treatments are NOT recommend for patients with known or suspected COVID-19 who are deemed well enough to be discharged at home. Patients well enough to return home should still undergo appropriate testing (RVBP and specimens for COVID-19).
- Avoid NSAIDs
- Managing a COVID-19/Patient Under Investigation (PUI) on High Oxygen Requirements Outside of the Intensive Care Unit (ICU)