# UCLA Infectious Disease COVID-19 Team Clinical Guidance

**Contact Information:**
For general questions regarding COVID-19 (patients and staff): 310-267-3300
To facilitate scheduling COVID-19 testing after order has been placed: 310-481-0423

For confirmed outpatient cases that need ID consultation: Please call 310-206-7663, option 2 for an urgent telehealth consult or submit an e-consult for non-urgent issues

For any confirmed inpatient cases, please notify the following with questions or for a consult:

**Pediatric-COVID pager: p89315**
**RRUCLA-COVID pager: p89292**
**SMH-COVID pager: p89293**
**Please page the Transplant ID pagers if hx of transplant or listed for transplant**
**Heart/Lung p93424, Kidney p89057, BMT p89473, Liver p89276**
**OB-COVID pager: p90595/p27401**
**Palliative Care-COVID pager (for outpatients and SNFs): p89552**
**Palliative Care- inpatient: SMH 35502 and RR 35501**
**Infection Control pager 94040**

**Pharmacy support**
Infectious Disease Pharmacists: Matt Davis, Meganne Kanatani, Christine Pham
Clinical Trials Pharmacists: Christina Shin

During after-hours/weekends
--Kerry Menmuir, Director of Inpatient Pharmacy

**General Approach to Treatment of Patients with COVID-19**

Remdesivir is the 1st line agent for all patients with a SpO2 ≤94% who meet our eligibility criteria

Dexamethasone 6mg po/IV daily for up to 10 days is recommended for patients who require oxygen support, particularly those that are on high-flow nasal cannula or mechanically ventilated and should be considered for those with worsening hypoxia on any supplemental O2. Steroids are not recommended for patients who do not require supplemental oxygen.

JAK inhibitors (baracitinib, tofacitinib) and IL-6 inhibitors (tocilizumab, sarilumab) are recommended for patients with early, critical disease requiring high-flow nasal cannula or mechanical ventilation/ECMO with elevated/worsening inflammatory markers. See Section 3 below for specific criteria.

For a list of open inpatient and outpatient trials, please see this website.

Please also see DHHS guidance at: https://www.covid19treatmentguidelines.nih.gov/whats-new/

## Table of Contents



## Key Tables

**Section 1.** Whom to Test. Please test any inpatient with the following symptoms or signs:

Symptoms
Fever
Cough
Myalgia or fatigue
Shortness of breath
Headache
Nasal congestion
Nausea/vomiting/diarrhea
Ageusia-anosmia or ageusia
Sore throat

Patients with multiple comorbidities who live in congregate settings (skilled nursing facilities) may present with atypical symptoms and it is reasonable to screen all patients who come from such settings.

Labs and other studies:
Lymphocytopenia (83-90%) - this is a good marker to trend, recovery suggests good prognosis
Thrombocytopenia (27-36%)
Elevated AST/ALT (22%)
Leukocytosis (6%)

Imaging
Abnormal CT (86%), GGO most common (56%), bilateral 51.8%, localized 42%
Peripheral GGO early in disease
*(Would not get this as part of routine tests, see below)*
Abnormal CXR 59%, may change over the duration of the illness and with progressive hypoxia
Median admission w/ pneumonia 9d from sx onset (DELAYED)
ARDS 17-29%, unexplained resp failure
Co-infection possible, but has become rare over time (e.g., flu, RSV, rhino, usually from the same specimen)

**Risk factors for progression: age >60 years, BMI >30, persistent leucopenia, LDH >500. D-dimer >1000ng/mL may be seen more commonly in ICU patients. D-dimer >2000ng/mL may suggest thromboembolic disease, but data remain unclear.**

**Section 2.** Diagnostic Testing for Patients with Suspected or Confirmed COVID-19

Table 1. Diagnostic Testing

| Diagnostic Testing | |
|---|---|
| **Recommended labs on admission**<br>**Respiratory testing**<br>• COVID 19 NP PCR recommended as first test<br>• Repeat NP once if high suspicion and concern for inadequate specimen collection<br>• Send COVID-19 sputum if high suspicion, repeat COVID-19 NP negative and productive cough<br>• If intubated and high suspicion and COVID-19 NP negative, send COVID-19 mini-BAL or BAL. (Most critically ill patients have demonstrated positive NP swab in our lab)<br><br>**Baseline bloodwork**<br>• CBC with diff and CMP<br><br>**In anticipation of using dexamethasone/IL-6 inhibitors /JAK inhibitors, consider:**<br>• QFT-gold<br>• Cocci EIA<br>• Hepatitis BsAg, sAb, cAb, HCV Ab<br>• Strongyloides Ab<br>• HIV Ab | **Recommended daily labs**<br>**(can be discontinued at primary team's discretion if no longer needed):**<br>• CBC with diff (trend total lymphocyte count)<br>• CMP |
| **If worsening hypoxemia or in respiratory distress:**<br>(may be repeated q3 days if abnormal or with clinical deterioration):<br>• D-dimer, CRP, LDH, Ferritin (DO NOT ORDER DAILY)<br>• Sputum studies (fungal, bacterial)<br>• Blood cultures if other signs of sepsis<br>• BNP<br><br>Routine use of procalcitonin upon admission is not recommended, as the clinical significance in COVID is unclear, and the prevalence of community-acquired bacterial superinfection is very low (3-4%)<br><br>**Suggested labs for immunocompromised patients if evidence of clinical worsening:**<br>• serum beta-d-glucan<br>• aspergillus EIA<br>• serum cryptococcus ag<br>• cocci EIA | **If clinically indicated:**<br>For acute kidney injury<br>(i.e. serum creatinine >0.3 above baseline)<br>urinalysis with microscopy<br>spot urine protein:creatinine<br><br>For cardiac disease/cardiomyopathy<br>CK-MB<br>CK<br>Troponin-I<br>BNP<br>TTE if BNP elevated or other clinical concern<br>EKG<br>Continuous telemetry |

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|---|---|
| **Radiology** | |
| Portable CXR at admission<br><br>High threshold for PA/lateral in ambulatory patients, consider only if low suspicion for COVID-19 and result would change management or affect PUI status.<br><br>Would NOT get CT Chest as part of routine diagnostic tests per American College of Radiology recommendations.<br><br>Consider CTA PE protocol if concerned for pulmonary embolism | |

Note on serologic testing:

Nucleic acid amplification testing (NAAT) such as PCR remains the primary and most accurate way to diagnose acute COVID-19. The utility of COVID-19 serology testing in clinical settings is unclear.

While the sensitivity and specificity of the tests are presumed to be greater than >90% depending on the assay, the positive predictive value depends on the prevalence of the disease in a given population. Among patients with a high suspicion of past infection (including prior symptoms compatible with the disease and significant high-risk exposures), the test may have some modest utility in predicting true prior infection. Serologies should not be used to gauge immunity. Routine precautions must continue to be used even with a positive serology, including the use of enhanced droplet PPE when caring for patients with confirmed COVID-19 in the healthcare setting.

COVID-19 serologic testing could be **considered** for the following situations:

- In the setting of suspected prior infection that was not tested by PCR.
- Close contacts of high-risk patients (immunocompromised, elderly) who may have been exposed to the virus in the past
- Healthcare workers or first responders
- Patients residing in congregate settings that may have been exposed to or infected with the virus in the past, but who are not actively infected.
- In the setting of potential plasma donation with prior diagnosed or suspected COVID-19.
- In the setting of COVID-19-like illness where PCR is negative but clinical suspicion of disease remains high.
- In the setting of suspected multisystem inflammatory syndrome in children (MIS-C)
- To consider monoclonal antibodies in times of scarcity if other criteria are met or if considering compassionate use in patients who are hypoxic from covid-19

COVID-19 Serology **should not be used** in the following settings:

- When trying to diagnose acute COVID-19 (use PCR instead)
  Testing of low-risk community patients (members of the general public) with no suspicion of recent infection who may simply be curious or want to know if they were infected.

**Section 3.** Treatment Guidance for COVID-19 Positive Patients
**NOTE:** Supportive care is crucial for management of cases

Table 2. General Principles of Treatment

| All COVID-19 Positive Patients | |
|---|---|
| • Remdesivir should be considered for all symptomatic patients who meet the window (see eligibility)<br>• Enrollment in trials should be done sequentially<br>• Monitor high risk patients: including those who are immunosuppressed and have had Lung Transplant/BMT/other SOT (All transplant patients should get ID consult)<br>• ACC/AHA states do not stop ACEi/ARB<br>• WHO states do not stop NSAIDS.<br>• Screen for drug interaction via Liverpool chart<br>• Place all adult patients on pharmacologic VTE prophylaxis such as lovenox or heparin SC if no contraindications. Otherwise place on mechanical VTE prophylaxis such as TEDs/SCDs. (American Society of Hematology) | |
| **Outpatient care** | |
| COVID+, clinically stable | • Advise patients on self-isolation<br>• Outpatient trials are available (Convalescent Plasma, monoclonal antibody)<br>• Monoclonal antibodies and other agents are available for high-risk patients within 5-7 days of a SARS-COV-2 positive test, see EUA and UCLA outpatient COVID guidance (link)<br>• Oral therapies are available for high-risk patients at select pharmacies and clinics in LA County<br>• Other repurposed drugs such as fluvoxamine are not recommended outside clinical trials at this time. However, if patients fall under the higher risk categories (notably Tier 1 and 2) this may be considered at the discretion of the primary care physician. |
| **Inpatient - Floor level care** | |
| Low risk - SpO2 >94% on room air<br><br>Moderate risk, SpO2≤94% but stable | • If antibiotics are started, reassess need based on cultures/clinical condition<br>• Remdesivir can be used for mildly symptomatic high-risk patients with SpO2>94 if sx onset ≤7d<br>• Remdesivir if SpO2≤94% if sx onset ≤10d, review eligibility criteria<br>• Consult ID for transplant patients for evaluation of treatment options<br>• Certain trials or compassionate use agents may be considered<br>• Dexamethasone is NOT recommended for patients who do not require supplemental oxygen |

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| **Step-Down/ICU level care- Consult Infectious Diseases and Pulmonology** | |
| Moderate-High Risk<br>SpO2≤94% on RA AND<br>requiring increased supplemental O2<br>OR<br>RR > 30<br>OR<br>PaO2/FiO2 ≤ 300mmHg<br>OR<br>Mechanical ventilation | • Consider Remdesivir, review eligibility criteria<br>• Consider dexamethasone 6mg po/IV daily for up to 10 days if progressive oxygen requirements and in particular mechanical ventilation unless contraindications. Please see Table 1 for additional screening considerations.<br>• Tocilizumab or baricitinib may be considered for select patients who are critically ill (ID consultation is needed-see guidance below)<br>  • In the setting of drug shortages, tofacitnib and sarilumab may be considered<br>• Routine supportive care, including blood and respiratory cultures and antibiotics as clinically indicated |
| **If refractory hypotension, increased pressor requirement** | |
| Please obtain blood cultures, sputum cultures and chest x-ray as needed<br>Consider TTE<br>Consider pulmonary embolism on differential, CTA PE protocol<br>Empiric broad spectrum antibiotics as appropriate | |

**Guidance regarding tocilizumab or baricitinib in combination with dexamethasone**

Recent data have suggested that tocilizumab in conjunction with dexamethasone can result in a reduction in days of organ support and mortality if used within 24 hours of receiving organ support. Baricitinib has also been shown to reduce mortality among patients who are not undergoing mechanical ventilation. Given this, use of tocilizumab (single intravenous dose of 8 mg/kg of actual body weight, up to 800 mg) or baricitinib (4mg[1] po daily for maximum of 14 days) can be considered **in combination with dexamethasone** in certain hospitalized patients who are exhibiting rapid respiratory decompensation due to COVID-19 meeting the following inclusion/exclusion criteria below:

Inclusion:

- Admitted to ICU < 24 hours and:
  - mechanical ventilation (tocilizumab only)
  - noninvasive mechanical ventilation (tocilizumab or baricitnib)
  - high-flow nasal canula oxygen (>0.4 $FiO_2$/30 L/min of oxygen flow) (tocilizumab or baricitinib)

  ***OR***

- Recently hospitalized patients (not in an ICU) with:
  - Rapidly increasing oxygen needs who require NIV or HFNC **and** have significantly increased markers of inflammation. (Tocilizumab or baricitnib).

Exclusion: Without high suspicion of bacterial/fungal/mycobacterial infection; Risks and benefits of therapy should be weighed prior to initiation for patients with pre-existing VTE/PE (baricinib), lymphocytopenia (ALC < 500 cells/mL), neutropenia (ANC < 1000 cells/mL), severe anemia Hgb < 8g/dL.

ID consultation is needed for the use of tocilizumab or baricitinib for Covid-19. In rare circumstances, baricitinib can also be considered alone when dexamethasone cannot be used. In extreme shortages, sarilumab 400mg x 1 dose may be used in lieu of tocilizumab, and tofacitinib[2] 10 mg po twice daily for up to 14 days or if earlier hospital discharge in lieu of baricitinib.

**Pediatric Considerations:** Tocilizumab is not recommended for the majority of pediatric patients who have mild or moderate COVID-19. For children with severe or critical illness, use of tocilizumab or baricitinib should be evaluated on a case-by-case basis in consultation with the Pediatric Infectious Diseases team

[1] Dose reduction from baricitinib 4 mg to 2 mg PO daily is recommended for eGFR ≥30 mL/min to <60 mL/min and to 1 mg PO daily for eGFR of 15 mL/min to <30 mL/min. Baricitinib **is not recommended** for patients with eGFR <15 mL/min.

[2] Dose reduction from tofacitinib 10 mg to 5 mg PO twice daily is recommended for eGFR<60 ml/min. Afternoon doses should be given after dialysis for HD-dependent patients, no supplemental doses required for pre-HD doses.

**Guidance on the use of Outpatient Treatment (please see separate document for full details)**

Since November 2020, the FDA issued emergency use authorizations (EUA) for the use of investigational SARS-CoV2 monoclonal antibody products and additional treatment agents for outpatients **with symptoms** of mild-moderate COVID-19 who are at **high risk for progression** to severe infection. While most of these treatments have been given Emergency Use Authorization (EUA) by the Food and Drug Administration (FDA), some have been considered for off-label use based on published data. Please see UCLA outpatient guidance document here:

Selection of Therapies
Four options will be considered depending on availability of treatment, predominant circulating strain, and contraindications:

- Sotrovimab (IV), a monoclonal antibody targeting the receptor binding domain of the spike protein
- Paxlovid (po), a protease inhibitor: several drug interactions
- Molnupiravir (po), nucleotide analogue, introduces errors in replication: contraindicated in pregnancy
- Remdesivir (IV), a nucleotide prodrug analogue targeting RNA polymerase
- Convalescent plasma (IV) (Currently not available outpatient)

**Please note that neither casirivimab/imdevimab nor bamlanivimab/etesevimab are effective against the Omicron variant. At any point, the emergence of new variants may render a specific therapy ineffective and such therapies may be withdrawn entirely.**

How to order/refer:
The referral process for these outpatient treatments will remain the same as it has been for monoclonal antibody therapies. A new referral order for outpatient Covid-19 therapies, which includes these criteria, is currently available on Care Connect as follows: **Referral for COVID-19 Outpatient Therapies [REF1012].**

When the demand for this therapy may exceeds our ability to administer on any given day, the order time stamp and a point system, specifically prioritizing risk of disease severity and risk of exposure (including socioeconomic vulnerability), will be included in the allocation process. A lottery system may also be utilized if multiple individuals have the same risk for disease severity. We will review all referrals at 10:30am on each calendar day.

Ongoing trials regarding the efficacy and safety of monoclonal antibodies, including ACTIV-2 here at UCLA, as well as other studies, remain open. Please send a message in Care Connect to the COVID Research Pool for more details.

**Guidance Regarding Use of Remdesivir**

On October 22, 2020, the FDA approved remdesivir for use in adults and pediatric patients (≥ 12 years and weighing at least 40 kg) with COVID-19 requiring hospitalization. The Emergency Use Authorization granted on May 1, 2020 is still in effect for pediatric patients (< 12 years old and weighing at least 3.5 kg). Remdesivir reduced the time to recovery by 29% compared with placebo (10 v 15 days) among patients with COVID-19 infection in the NIH-sponsored ACTT-1 Trial. Remdesivir appears to have the most benefit in patients who have low-flow oxygen requirements and has no benefit for individuals who are mechanically ventilated >48 hours.

Data suggest that a 5-day course is non-inferior to a 10-day course, and as such we recommend universal 5-day courses. **Any longer courses of remdesivir require an ID consult.**

At this time, we recommend remdesivir for patients meeting the below criteria:

1. Positive SARS-CoV-2 RT-PCR result within 7 days of admission
2. Symptom onset within 10 days prior to initiation of treatment
3. Hypoxia defined as:
    a) $SpO_2$ ≤94% on room air OR
    b) Requiring supplemental oxygen (low-flow/highflow) OR
    c) Mechanically ventilated <48 hours
4. ALT < 400 (10x ULN) prior to initiation

Patients who are not hypoxic but high risk (anticipatory chemotherapy, lung transplant) may be considered on a case-by-case basis. Patients representing the Essential Critical Workforce, as defined by California Executive Order N-33-20, could be considered for higher prioritization.

If remdesivir is given via EUA (for pediatrics < 12 years or weighing 3.5-40kg), a patient fact sheet must be reviewed with the patient/caregiver prior to use.

If supply becomes severely limited (i.e. when demand > supply), those with terminal illness will not be considered. Modifiers for the definition of terminal illness considered include:

- Clinical Frailty Score ≥8
- Advanced progressive incurable neurologic disease requiring ventilatory support or Rankin scale ≥5
- Metastatic cancer with expected survival ≤1 year despite treatment

## Guidance Regarding Use of COVID-19 Convalescent Plasma (CCP) via Emergency Use Authorization

On December 28, 2021, the Federal Drug Administration (FDA) reissued an Emergency Use Authorization (EUA) for the use of COVID-19 convalescent plasma (CCP) as a passive immune therapy and restricted CCP for the treatment of patients with immunosuppressive disease or receiving immunosuppressive treatment with COVID-19. CCP is human plasma collected by FDA registered blood establishments from individuals who have recovered from a COVID-19 infection and whose plasma contains anti SARS-CoV-2 antibodies. These donors must meet all standard donor eligibility requirements. Each donor/CCP unit undergoes testing for anti SARS-CoV-2 antibody titers to determine that there are sufficient antibody levels before being released into inventory. However, at UCLA, these titer determinations were not performed using the EUA assay and therefore will be labeled with a "low titer" tag to meet the EUA specifications. It is important to note, certain clinical trials will exclude patients if they have received CCP and it is important to address all the possible therapeutic regimens available at this time.

The EUA was granted based on retrospective, observational data that suggested a potential clinical benefit is associated with high-titer units of CCP administered early in the course of disease (within 72 hours of diagnosis for inpatient, within 8 days of symptom onset for outpatient based on the Mayo Clinic National Convalescent Plasma Expanded Access Protocol). Three large randomized clinical trials (RECOVERY, REMAP-CAP, CONCOR-1) each failed to demonstrate clinical benefit on mortality or duration of organ support outcomes in the inpatient setting. Although these trials did not exclude patients with impaired humoral immunity, most patients did not report immunodeficiency or receipt of immunosuppressive therapy. Based on these data, the NIH COVID-19 guidelines recommend against convalescent plasma in patients without impaired humoral immunity (**A-I**).

At this time, we recommend considering the administration of 1-2 CCP units administered within 72 hours of diagnosis under guidance from ID consultation for select hospitalized patients and within 7 days of symptom onset for outpatients who meet the following criteria:

- Impaired humoral immunity either by an immune compromising condition or immunosuppressive agents
- Select patients with profound cell mediated immunodeficiencies (such as those who have received a bone marrow transplant or with chronic lymphocytic leukemia), CCP can be considered

Dosage considerations should be made based on patient weight/TBV (if >85 kg, consider 2 units of CCP). Patients with impaired cardiac function and heart failure may require a smaller volume or transfusion over a longer period. CCP may be contraindicated in patients with a history of severe allergic reactions or anaphylaxis to plasma transfusion.

Prior to CCP order entry and transfusion, the standard Consent to Blood Transfusion must be obtained. The patient must be provided with the state required brochure "A Patient's Guide to Blood Transfusion" per hospital policy HS1320, and the "Fact Sheet for Patients and Parents/Caregivers, Emergency Use Authorization (EUA) of COVID-19 Convalescent Plasma for Treatment of COVID-19 in Hospitalized Patients." The consent and accompanying documents are available on the Forms Portal.

Patients undergoing CCP transfusion should be monitored closely for transfusion reactions as per UCLA Health Transfusion Policy 1338. Any adverse reactions associated with CCP transfusion should be reported to the blood bank. For more information or questions, please contact **Alyssa Ziman, MD at 310-267-8090** or call the **Ronald Reagan UCLA Blood Bank at 310-267-8150.**

Table 3. Dosing of Specific Therapeutics

| Agent | Dosing | Monitoring |
|---|---|---|
| Remdesivir | 200mg IV x1, followed by 100mg q24h for duration of hospitalization; 5 days recommended<br><br>**Pediatric Dosing:**<br>*For patients weighing 3.5 kg - <40 kg:*<br>Loading dose: 5 mg/kg/dose IV x 1 dose (max 200 mg)<br>Maintenance dose: 2.5 mg/kg/dose IV Q24H (max 100 mg); 5 days recommended<br>*For patients weighing 40kg or higher:* 200mg IV x1, followed by 100mg q24h for duration of hospitalization; 5 days recommended | Self-limiting, reversible hepatotoxicity has been observed, which resolved after therapy cessation. |
| Convalescent Plasma | 1 unit, if <85kg<br>2 units, if >85kg | Transfusion-associated circulatory overload (TACO), transfusion-associated acute lung injury (TRALI) |
| Dexamethasone | 6mg PO/IV daily for up to 10 days<br>**Pediatric Dosing:**<br>0.15mg/kg (max 6 mg) PO/IV daily for up to 10 days | Hyperglycemia, neuropsychiatric effects (insomnia, irritability), heartburn, impaired wound healing, fluid retention |
| Baricitinib | 4 mg PO daily for up to 14 days maximum<br>eGFR 30-60 mL/min: 2 mg PO daily<br>eGFR >15 to <30 mL/min: 1 mg PO daily | Superinfection, VTE, GI perforation, TB activation |
| Tocilizumab | 8 mg/kg TBW/Adj BW (obese), max 800mg x 1 dose | GI perforation, superinfection, hepatic injury, TB activation |
| Sarilumab | 400 mg x 1 dose | GI perforation, superinfection, hepatic injury, TB activation |
| Tofacitinib | 10 mg PO twice daily for up to 14 days or hospital discharge<br>eGFR<60 ml/min: 5 mg PO twice daily | Thrombotic events, lymphopenia, liver enzyme elevations, superinfection, serious cardiac related events, GI perforation |

**Drugs for which there is insufficient or no data:**
Nitazoxanide, ivermectin, lopinvavir/ritonavir, favipiravir, colchicine, inhaled corticosteroids, fluvoxamine. Hydroxychloroquine is not recommended due to data that suggest no benefit.

Table 4. Drugs in Pregnancy

| Class | Agents | Data | MFM Consultation Needed |
|---|---|---|---|
| Antivirals | Remdesivir | Data limited for remdesivir, likely safe | |
| Corticosteroids | Hydrocortisone, Prednisone, Dexamethasone | Safe in pregnancy when indicated, for refractory shock per ICU indications | X<br>Dose may be adjusted for fetal benefit in case of impending delivery |
| Convalescent plasma | Convalescent plasma | Limited data, likely safe to use, not excluded from study | |
| Monoclonal Antibody Therapy | Casirivimab/imdevimab<br>Sotrovimab | Limited data, likely safe. | X<br>Recommend fetal monitoring per protocol > 24 weeks GA. |
| Il-6 receptor blocker | Tocilizumab | Limited data, likely safe. Monitoring of infant at birth | X |
| Protease inhibitor | Paxlovid (nirmatrelvir; ritonavir) | Nirmaltrevir: Data limited, likely safe at clinical doses.<br>Ritonavir: No identified risk. | X |
| Nucleotide analogue | Molnupiravir | Suspected teratogenic risk. Do not recommend unless benefits outweigh risks. | X |

**Section 4.** Consultations to consider specifically for patients admitted due to COVID-19

| | |
|---|---|
| **Pulmonary/ICU** | • Should be consulted for clinical deterioration |
| **Mental Health and Psychiatric Care** | • Many patients in isolation may experience worsening of their underlying psychiatric illness<br>• Urgent consult needed in patients expressing suicidal ideation, hallucination, psychosis, or agitation.<br>• Consult for other non-emergent issues: depression, anxiety<br>• Ensure at least PHQ-2 (if not PHQ-9, GAD-7) are administered within 3 days of admission and weekly thereafter<br>• Consider video/telephone consult, if needed |
| **Palliative care** | • Early involvement for patients with significant frailty, elderly, difficulty with iADLs, ADLs to assess goals of care<br>• Prolonged ICU stay<br>• Emotional, spiritual and symptomatic support at the end of life for family/patient<br>• Ethical decision-making<br>• Consider video/telephone consult, if needed<br>**For SNF or Outpatient assistance Email COVIDPalliativeCare@mednet.ucla.edu or page the team at 89552** |
| **Cardiology** | • For ICU patients, obtain TTE as needed<br>• Monitor for CAD, cardiomyopathy with labs as above |
| **Neurology** | Scattered case reports and autopsy findings suggest that COVID-19 patients may uncommonly develop two neurologic complications that can exacerbate respiratory difficulty and cause inability to wean from a ventilator: A) Guillain-Barre syndrome – peripheral autoimmune disorder causing weakness/paralysis of all limbs and respiratory muscles; B) Bickerstaff's encephalitis – inflammation of the brainstem, including disruption of centers for respiratory drive.<br><br>To screen grossly for these conditions in patients with difficulty weaning, look for:<br><br>1) Weakness of all 4 limbs with reduced/absent reflexes<br>2) Severely impaired ability to move the eyes<br><br>Because presence of these signs might herald a change in management, or altered (CNS dosing) of COVID-19 trial drugs, for more detailed screening and for management recommendations, please consult Neurology. |
| **Addiction medicine** | • Assess substance use history<br>• Consult in patients with history of opioid, methamphetamine or cocaine use disorders<br>• Consider video/telephone consult, if needed |
| **Chaplain, rabbi, spiritual services** | • Should not see patient in person<br>• May provide support for psychosocial, spiritual and existential suffering in patients with a life-limiting or life-threatening illness |

## **Section 5.** Discharging patients home/to SNFs

LA County DPH recommends that patients can be taken off home isolation 5 days after the onset of symptoms or, if the patient remains asymptomatic, 5 days after the initial positive COVID-19 test, if the following criteria are met:

1. Fevers are resolved without the use of fever-reducing medications
2. Symptoms are improving
3. A COVID-19 viral test (antigen preferred, PCR acceptable) collected on/after day 5 is negative

If the repeat test remains positive, or if no testing is performed, isolation may end 10 days after the onset of symptoms. For patients who remain asymptomatic, isolation may end 10 days after the initial positive COVID-19 test.

Similar to the general population, patients should be advised to continue masking when they are in public or coming to clinic, especially if they end isolation early (after 5 days with a negative test) or continue to have respiratory symptoms including cough.

For patients who live in congregate settings including skilled nursing facilities, additional precautions are used. Patients should be kept on enhanced droplet isolation 10 days after the onset of symptoms (20 days for residents with severely immunocompromising conditions) plus 24 hours without fevers and fever reducing medicines.

Please see isolation and quarantine guidelines:

http://publichealth.lacounty.gov/acd/ncorona2019/isolationquarantine/

http://publichealth.lacounty.gov/media/Coronavirus/docs/HOO/HOO_Coronavirus_Blanket_Isolation.pdf

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https://www.covid19treatmentguidelines.nih.gov/

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