^Poor Prognostic Factors:

- **Epidemiology:** Age > 65, Cardiovascular disease, Diabetes mellitus, Hypertension, Smoking, BMI >30, Chronic lung disease, Chronic kidney disease, Active cancer (especially hematologic, lung cancer and metastatic disease), History of transplant or other immunosuppression, use of biologic agents, uncontrolled HIV
- **Vitals:** HR > 125, RR > 24, SpO2 < 94% on RA, PaO2/FiO2 < 300
- **Labs:** D-dimer > 1, CK > 2x upper limit, CRP > 100, LDH > 245, Ferritin > 500, Troponin > 0.01, Absolute Lymphocyte Count < 0.8

COVID positive, admitted to hospital

*See Diagnostic work-up (page: 3)
**See specific therapies (page: 4)
^See Prognostic factors (left)

Adapted from MGH illness severity algorithm

1. Complete diagnostic work-up*
2. Ensure Code Status and HCP
3. Assess prognostic factors^
4. Determine severity of illness

Mild/moderate Disease (floor)
Asymptomatic/mild symptoms
SpO2 > 94% on RA

- Maintain oxygenation: SpO2 92-96% (88-92% for COPD)
- Maintain stable breathing: RR < 24, normal effort
- Ensure prophylactic anticoagulation is ordered unless contraindicated.

Supportive therapy only

Remdesivir and convalescent plasma if admitted to the hospital. Can consider steroids if significant symptoms present.

- Tylenol preferred for analgesia and fever, second-line NSAIDs
- Conservative fluid management
- Avoid antibiotics unless indicated
- No specific COVID-19 therapy indicated
- **Labs:** Daily BMP, CBC. Non-routine labs every other day if elevated at baseline
- Monitor for worsening clinical status and hypoxia

Severe Disease (floor)
SpO2 < 94% on RA, RR>30
PaO2/FiO2 < 300, greater than 50% lung involvement

- More likely in patients with poor prognostic factors^
- Maintain oxygenation: SpO2 92-96% (88-92% for COPD) via supplemental oxygen (nasal cannula to oxymask)
- Maintain stable breathing: RR < 24, normal effort
- Ensure prophylactic anticoagulation is ordered unless contraindicated.
- Therapeutic anticoagulation per protocol can be considered at clinician's discretion.
- Consider antibiotics if superimposed bacterial pneumonia
- Supportive therapy as Mild/moderate disease
- **Specific COVID-19 therapy** as per indication -Steroids, Remdesivir convalescent plasma, Baricitinib, Monoclonal antibodies, anticoagulation and proning per protocol
- **Labs:** Daily CMP, CBC, D-Dimer, PT/aPTT. Non-routine labs every 1-2 days as per severity.
- If worsening hypoxia 4-6L NC and increased work of breathing, consider MICU consult.

Critical Disease (ICU)
SpO2 <92% on > 6L, PaO2/FiO2 <200, rapidly increasing oxygen requirements

- MICU consult and evaluation for ICU admission
- Worsening hypoxia (>6L) and work of breathing (RR>30), hemodynamic instability (SBP <90, HR > 120s), lactate >2 after fluids, acidosis (ABG pH < 7.30), multi-organ failure
- Maintain oxygenation: SpO2 92-96% (88-92% for COPD) via supplemental oxygen (oxymask to HFNC/BiPAP/intubation)
- Consider antibiotics if superimposed bacterial pneumonia
- **Specific COVID-19 therapy** as per indication - Steroids, Remdesivir convalescent plasma, Baricitinib, monoclonal antibodies, anticoagulation and proning per protocol
- Rest of management per ICU protocol

COVID-19 Inpatient Treatment Algorithm

CHEAT SHEET FOR COVID-19

DOCUMENTATION

COVID-19 specific smartphrases have been created on EPIC for appropriate documentation.
To look up these smartphrases go to
Personalize > Smartphrase manager > User phrases > User: PANDA, SANCHIT [00119762] > Sharing > + Add me

COVID-19 Smartphrases
.COVID19HPI - H&P template
.COVID19PROGRESS - Progress note template
.COVID19VIRTUALVISIT - Virtual visit note for telehealth services
.COVID19ATTESTATION - Attending attestation for patient
.COVID19DCATTEST - Attending attestation for discharge summary
.APNICPROTOCOL – Document relevant details as per APNIC protocol prior to and then 2 hours after initiating proning protocol.

Discharge instructions
.COVIDSELFQUARNOTICE – Notice for self-quarantine
.COVIDPLASMAPROJECT – Plasma donations after discharge

COVID-19 specific discharge instructions are also available for lookup on
Discharge instructions > Insert smart-text tab > Search COVID

ADMISSION AND ISOLATION

- COVID-positive patients (and rule-outs) should be admitted to **INPATIENT** status.
- All patients with confirmed COVID-19 infection should be placed on Enhanced airborne precautions.

- COVID Rule-out – Patients with high suspicion of COVID based on clinical presentation but testing negative.
- Rule out patients should be placed on Enhanced airborne precautions.

- High risk patient groups are patients from nursing homes, group homes, assisted living facilities, rehab facilities, memory care unit, correctional facilities, homeless or homeless patients living in shelters.

- For updated hospital policy regarding discontinuation of transmission precautions, please refer to COV D-04.
- For inpatient admissions, utilize the **Adult COVID Admission IP (UMU**) order set on EPIC
- Saliva PCR testing is also available now, approval is required from COVID team (Look in order). Criteria for nasal testing – Nasal precautions, anatomic defect, medical contraindication, combative or uncooperative patient, patient refusal.

Admission criteria for COVID positive patients (any two):

- Respiratory Rate > 24 breaths/min
- Heart Rate > 125 beats/min
- SpO2 $\leq$ 94% on ambient air
- Dyspnea (Clinically defined as the inability to speak in full sentences)
- Sepsis
- Suspicion of ARDS (Consider MICU Evaluation)
- Suspicion of Acute coronary event, Stroke or thrombotic phenomenon
- Historical RF - Age > 65, Active cancer (especially hematologic, lung cancer and metastatic disease), History of transplant or other immunosuppression, use of biologic agents, uncontrolled HIV

COVID-19 patients with mild symptoms should not be admitted solely based on abnormal investigational findings.

DIAGNOSTIC WORKUP

Labs

On admission (Routine):
CBC with diff, BMP, Mg, Phos, LFTs, D-Dimer, LDH, CRP, PT/PTT, Fibrinogen, Ferritin, Troponin, CPK, proBNP, Procalcitonin, EKG
If LFTs elevated: Acute hepatitis panel, HCV antibody, and HIV Ab/Ag
If AKI present: UA and urine protein: Cr ratio
Women of childbearing age: B-HCG
Consider blood cultures if suspecting bacteremia

Follow up labs:

Routine
CBC with diff, BMP, Mg, Phos (D-Dimer, PT/PTT if severe disease)

Non-Routine : Consider every 1-2 days if elevated at baseline or depending on clinical severity
LFTs, D-Dimer, LDH, CRP, PT/PTT, Fibrinogen, Ferritin, Troponin, CPK, Procalcitonin
If clinically worsening:
Fibrinogen, LDH, Troponin, EKG, ABG
CRP, Ferritin, D-dimer if rising LFTs and hypotension with concern for cytokine storm

For ordering labs utilize **Labs for COVID Inpatient order panel** in Manage orders.

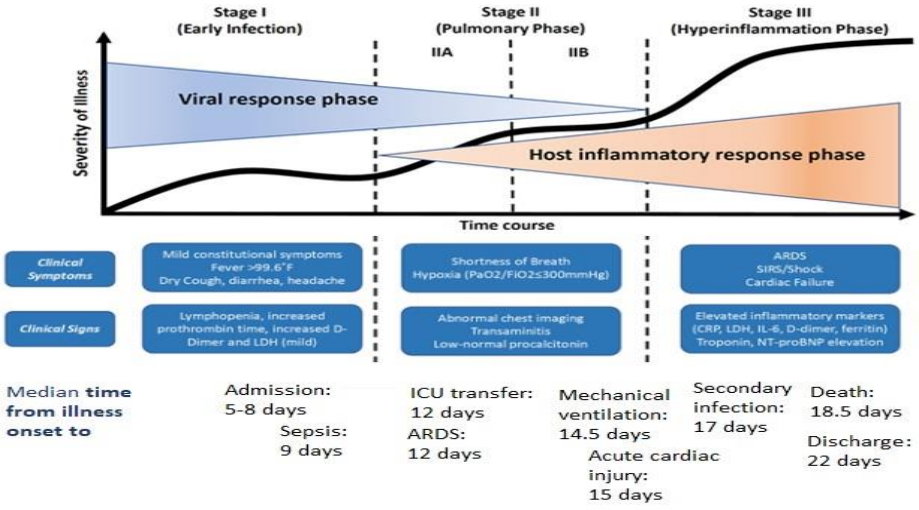
Imaging

Portable Chest X-Ray on admission or if any change in clinical status
Findings: 20% normal, expect consolidation or bilateral ground glass opacities in lower lung fields

CT chest without contrast is not routinely recommended unless otherwise indicated.
Consider CT Thorax angiography if PE suspected or unexplained hypoxemia present.
Evaluate for any thrombotic disease if clinical suspicion present.

Trans Thoracic ECHO:
Obtain if markedly elevated troponin (>5x ULN), shock, new heart failure, or arrhythmia. Avoid routine TTE.

CLINICAL COURSE



Siddiqi HK, Mehra MR. COVID-19 illness in native and immunosuppressed states: A clinical–therapeutic staging proposal. The Journal of Heart and Lung Transplantation. 2020;39(5):405-407. doi:10.1016/j.healun.2020.03.012

GENERAL MANAGEMENT AND SUPPORTIVE THERAPY

- Applicable for all patients admitted for COVID-19 regardless of disease severity.
- Maintain oxygenation SpO2 92-96% (88-92% for COPD).
- Ensure pulse oximetry is ordered with appropriate parameters.
- Analgesic and anti-pyretic – Acetaminophen first line, second line NSAIDs.
- Continue home statin, ACE/ARBs, inhalers.
- Conservative fluid management.
- Avoid empiric antibiotics unless there is a specific concern for superimposed bacterial pneumonia
- Ensure all patients receive SCDs and pharmacologic DVT prophylaxis unless contraindicated.
- Consider GI prophylaxis for stress ulcer prevention.

- Monitor for complications: Respiratory failure, ARDS, thromboembolic phenomena, inflammatory damage, AKI, DIC, secondary infections, acute cardiac injury, heart failure, encephalopathy.

- Ensure code status and HCP is established on admission, update families with changes in care.
- Do not initiate specific COVID-19 therapies unless the patient meets criteria for administration.
- If concern for rapid deterioration or for guidance on interventions, consider MICU and/or ID consult.

SPECIFIC THERAPY

NON-PHARMACOLOGICAL THERAPY

Awake Proning

- Awake proning is an effective non-pharmacologic intervention to improve oxygenation/hypoxia in cooperative patients.
- It can be combined with simultaneous use of any other non-invasive oxygen supplementation (NC/HFNC/Oxymask)
- Ideal candidate – Patient with isolated hypoxemic respiratory failure without substantial dyspnea (the "paradoxically well appearing" hypoxemic patient)
- The main risk of awake proning is that it could cause excessive delay in intubation

Criteria for patient selection

1. Patient should be able to move independently
2. Not have multi-organ failure
3. Patient expected to have a reversible lung injury and might avoid intubation
4. No hypercapnia (Pac02 <50) or substantial dyspnea (Respiratory rate <35, not using accessory muscles)
5. Normal mental status, able to communicate distress
6. No anticipation of difficult airway

- Can consider proning patients whose code status reflects DNI (Do Not Intubate).
- Can be used as a Stop-gap measure for a hypoxemic patient when intubation is not immediately available (Desaturation during transportation).

Contraindications

- Signs of respiratory failure (RR >35, Pac02 >50 or pH <7.3)
- Unstable hemodynamics (HR >120, SBP <90 mm hg)
- Spinal instability
- Facial or pelvic fractures
- Open chest or unstable chest wall
- Relative contraindications include delirium, confusion, immediately after meals, inability to change position independently, recent nausea/vomiting, advanced pregnancy

Patient Monitoring

- EKG leads should remain on the anterior chest wall for continuous monitoring (if clinically indicated)
- SpO2 probe (continuous) should be placed on the patient if not already in use.
- Patient's spO2, oxygen device (i.e. NC, simple face mask) L/min of oxygen, respiratory rate and dyspnea should be assessed just prior to proning and two hours after proning with appropriate documentation. (.APNICPROTOCOL)

Proning protocol can be ordered from EPIC order sets.
For further details refer to APNIC protocol.

PHARMACOLOGICAL THERAPY

	Monoclonal Antibodies									
Disease Severity	**Bamlanivimab**	**Casirivimab and Imdevimab**	**Bamlanivimab and Etesivimab *****	**Awake proning**	**Remdesivir**	**Convalescent Plasma**	**Dexamethasone or other glucocorticoids**	**DVT prophylaxis**	**Therapeutic Anticoagulation**	**Baricitinib**
Outpatient Mild or Moderate	Yes	Yes	Yes	Yes	No	No	No	No	No	No
Inpatient Mild or Moderate	Yes	Currently being evaluated in a Clinical trial	Yes	Yes	Yes (Priority < 6 days of illness and O2 requirement at baseline)	Yes (Likely most effective early)*	Consider (for patients with significant symptoms and baseline O2 requirement)^	Yes	Consider only if High risk	No
Severe	No	No	No	Yes	Yes (most effective early)	Yes (Likely most effective early)*	Yes	Yes	Consider only if High risk	Consider**
Critical	No	No	No	Yes, if feasible	Yes (most effective early)	Yes (Likely most effective early)*	Yes	Yes	Strongly Consider	Consider**

*RCT did not show benefit, but patients were late in course of illness by the time they entered the trial (Li et al JAMA. 3 June 2020)
** Baricitinib combined with Remdesivir was shown to improve outcomes vs Remdesivir alone, particularly for pts on non-invasive mechanical ventilation and those later in the course of illness.
***Not currently available at Upstate, expect availability in the future
^Based on clinical judgement

SPECIFIC THERAPY IN COVID-19

- Decision on specific therapy depends on disease severity, risk factors and presence of significant symptoms.

Anticoagulation

- Due to the increased risk of thrombotic events with COVID-19, all patients should receive pharmacologic DVT prophylaxis unless contraindicated.
- Please refer to updated anticoagulation protocol for reference.
- With clinical trials currently underway (REMAP-CAP, ACTIV-4, ATTACC) new evidence and guidance is expected in the future.

Dexamethasone and other glucocorticoids

Dexamethasone is shown to reduce mortality among hospitalized patients with severe disease.

Eligible patients
Has been found to improve survival in hospitalized patients requiring supplemental oxygen, mechanical ventilation, or ECMO. Therefore, the use of dexamethasone is strongly recommended in this setting.
NIH does not recommend use of steroids in patients not on supplemental oxygen, however they can be considered if a patient has significant symptoms and baseline oxygen requirement.

Dose
6 mg daily for 10 days or until discharge, whichever is shorter

If Dexamethasone is unavailable, can use other glucocorticoids at equivalent dose
Monitor closely for adverse effects while on steroids

Remdesivir (RDV)

It is an RNA dependent RNA polymerase inhibitor.
RDV should be used as early as possible and best within 7-10 days of onset of symptoms

Eligible Patients
It can be used in all symptomatic patients requiring supplemental oxygen with COVID-19, however there is insufficient data to recommend for or against it. NIH recommends it may be appropriate to use in patients at high risk of progression to severe disease.

Dose
200 mg IV on day 1, followed by 100 mg IV for 4 days
Full course of 5 days need not be completed if patient has improved and is stable for discharge.

Adverse effects:
Diarrhea, transaminitis, rash, renal impairment

Contraindications: Hypersensitivity to RDV or ALT $\geq$ 10x upper limit of normal

Baricitinib

It is a JAK-1&2 inhibitor with potential direct antiviral activity through interference with viral endocytosis, potentially preventing entry into and infection of susceptible cells.

Eligible Patients

To be used in combination with Remdesivir in patients with COVID-19 who require oxygen, ventilatory support, or ECMO.

Consider Baricitinib for patients who cannot tolerate steroids but receiving Remdesivir or who were already previously taking the equivalent of a standard steroid dose for COVID when they acquired COVID-19 infection.

Dose

4 mg once daily in combination with Remdesivir. Duration of Baricitinib is 14 days or until hospital discharge, whichever is first

Convalescent plasma

- There are insufficient to recommend either for or against the use of COVID-19 convalescent plasma for the treatment of COVID-19 as per NIH.
- Currently not indicated in hospitalized patients outside of clinical trials.

The potential benefits
Rapid decline and clearance of virus
Decrease in the cytokine storm seen in acute respiratory distress syndrome associated with severe COVID-19 infection
Improved morbidity and mortality
Decrease of time on ventilator with improved oxygenation
Decrease in total hospitalization days

The potential risks
Allergic reaction
Volume overload
Potential antibody enhancement of the virus

Eligible patients
Can be used in all symptomatic patients with COVID-19 admitted to the hospital regardless of disease severity.

Dose
Treat with 1 unit of convalescent plasma.
Dose can be repeated up to 3 times especially in High risk patients who are symptomatic and <10 days in their illness

High risk patients - Age ≥ 65 with any one of the following risk factors or Age <65 with more than one risk factors
Risk Factors - Cardiovascular disease, Diabetes mellitus, Hypertension, Smoking, BMI >30, Chronic lung disease, Chronic kidney disease, Active cancer (especially hematologic, lung cancer and metastatic disease), History of transplant or other immunosuppression, use of biologic agents, uncontrolled HIV

How to Order
COVID Convalescent plasma (CCP) is currently investigational and thus requires a special consent prior to the first dose of CCP in addition to our standard transfusion consent.
The link for the CCP-specific consent can be found on the adult and pediatric COVID admission ordersets.

THERAPIES FOR OUTPATIENT USE

Monoclonal Antibodies
Eligible patient should have

- Mild or moderate symptoms
- Must be within 10 days of their onset of symptoms or diagnosis, whichever was first
- Have any of the following risk factors for progression to severe disease
  - Body mass index (BMI) ≥35 kg/m²
  - Chronic kidney disease
  - Diabetes mellitus
  - Immunosuppression (immunosuppressive disease or treatment)
  - ≥65 years of age
  - ≥55 years of age and who have cardiovascular disease, and/or hypertension, and/or chronic obstructive pulmonary disease (or other chronic respiratory disease)

All of the following antibody therapies have received emergency use authorization from the FDA for outpatient use in these patient groups.
Mildly symptomatic COVID-19 patients being admitted or currently inpatient should be evaluated for monoclonal antibody therapy if they meet the above criteria.

Casirivimab and Imdevimab (REGN-COV2**)**
An antibody cocktail administered together for the treatment of COVID-19 in adults ddeveloped to neutralize SARS-CoV-2 by targeting the SARS-CoV-2 spike protein and preventing viral cell entry.

Available for use in an outpatient setting.
Not to be used inpatient except in a clinical trial, (Primary investigator – Kristopher Paolino, MD).
Please contact ID if a patient is interested in the antibody cocktail to see if they would be eligible candidates.
Patients receiving convalescent plasma are excluded from the trial.

Bamlanivimab
A monoclonal antibody to the spike protein of SARS-COV-2 used in the ED for patients early in course and with mild disease. Shown in clinical trials to reduce COVID-19-related hospitalization or emergency room visits in patients at high risk for disease progression within 28 days after treatment when compared to placebo.

Available for use in an outpatient setting.
Can be used in inpatients with mild/moderate disease if they meet eligibility criteria.

Bamlanivimab and Etesevimab
An antibody cocktail administered together for treatment of COVID-19 in adults.
Being evaluated in BLAZE-1, a randomized, controlled trial including 577 outpatients with mild to moderate illness, comparing different doses of Bamlanivimab monotherapy with combination bamlanivimab-etesevimab therapy with placebo.
Results of phase 2 trial at one month showed, treatment with bamlanivimab and etesevimab compared with placebo was associated with a statistically significant reduction in SARS-CoV-2 viral load at day 11 (IRR 4.9%, 95% CI -8.9 to -0.8).

Not currently available for use at Upstate, expected to be available in the future.

DISCHARGE

Discharge of COVID positive patients can be considered when patients have resolution of symptoms and do not require any further specific or supportive therapy.

For discontinuation of transmission precautions following strategies can be followed, refer to policy COV D-04.

Symptom-based strategy (Must meet all criteria)

- Resolution of fever > 24 hours without antipyretics
- Improvement in signs and symptoms (cough, dyspnea, oxygen requirement)
- > 10 days since the onset of COVID (1st day of symptoms or 1st positive test)

Test-based strategy (Must meet all criteria)

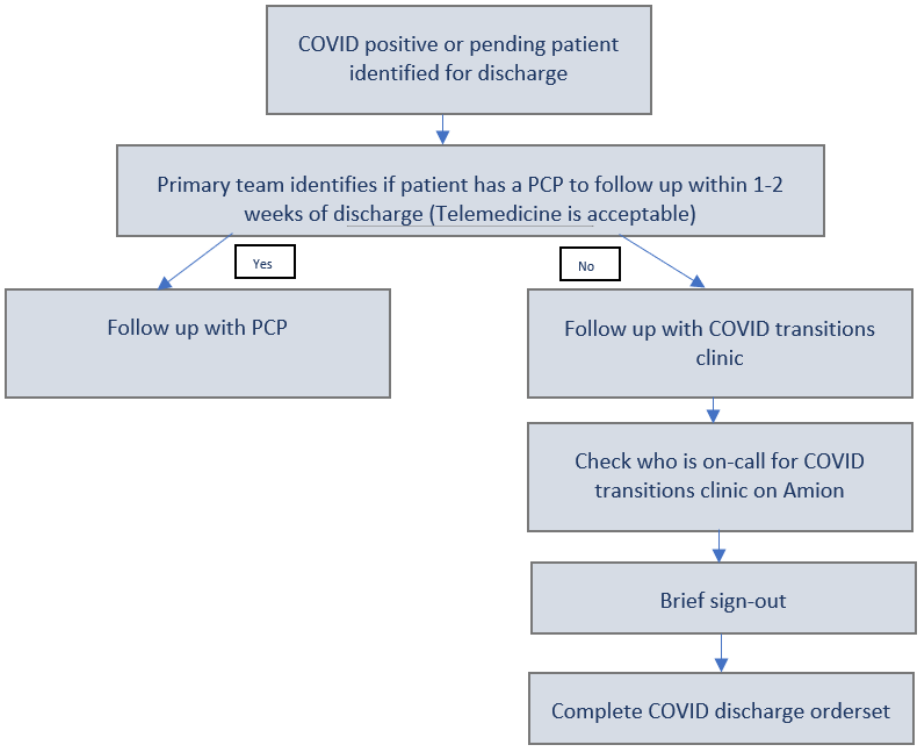
- Resolution of fever without antipyretics, improvement in symptoms
- 2 negative RT-PCR from at least 2 consecutive respiratory specimens collected > 24 hours apart
- > 10 days since the onset of COVID (1st day of symptoms or 1st positive test)

Medications

If the patient has decreased mobility or D-Dimer >0.5 on day of discharge can consider anticoagulation for DVT prophylaxis at discharge for 14 days. (Group 1).
If therapeutic anticoagulation was used during hospital admission, discharge with anticoagulation as per protocol. (Group 2/3)

COVID Transitions Team

Will follow COVID discharges for clinical stability and facilitate triage. Find under "COVID-19 Transitions Clinic" on Amion.



Discharge pending test results

Patients with a pending test who are clinically stable may be discharged provided patient is given the mandatory self-quarantine order from the County. The DOH does NOT need to be notified. If the subsequent test result is positive, the DOH is notified by the lab and will contact the patient. They can follow up in My Chart or with PCP for negative results.

AMA Discharges

- If a patient has the capacity to make his or her own health care decisions and the discharge plan determines that the patient is not a threat to the public (i.e., the patient can and will agree to quarantine), the patient may be discharged AMA. Infection Control and DOH notified by team or case manager.
- If the patient is not willing/able to quarantine, Dr. Housam Hegazy [C: (315) 491-9588] must be contacted; he will do a legal and ethical analysis, mainly assessing the public health risk and guiding safe discharge planning. If there is a public health concern or other legal concerns, then he will raise it to legal and possible ethical departments for further action as per policy COV D-02.

Skilled Nursing Facilities

- COVID positive patients can be discharged to SNF after transmission precautions have been discontinued, please refer to policy COV D-04.

Patients with a positive COVID-19 test may be discharged following

- DOH notified/approval (this is done by the case manager in conjunction with infection control).
- Patient is given the mandatory self-quarantine order from the County Executive (dot phrase: COVIDSELFQUARNOTICE). Required only for patients being discharged to home.

CM, infection control, DOH, and SW are helping provide information on discharge.
CM can help arrange follow up with the COVID transition clinic (also see AMION).
COVID discharge kits are available for patients on discharge, please contact CM for the same.
Please give COVID-confirmed patients information regarding the convalescent plasma donations.
Patients that receive convalescent plasma or antibody treatments will not be candidates for plasma donation for 6 months.

Please refer to discharge procedure policy COV D-02 for detailed guidance.

Appendix

ANTICOAGULATION IN COVID-19

Anticoagulation Management in Critically Ill and Non-Critically Ill COVID-19 Positive Adult Patients

VTE Diagnosis

- Routine use of ultrasound screening and/or biomarkers (i.e., D-dimer) should not be used for detection of asymptomatic DVT.
- For suspected VTE, doppler ultrasound or computed tomography angiogram should be performed.
- The utilization of enoxaparin for thromboprophylaxis is preferred over heparin to limit staff exposure to COVID positive patients.

VTE Prophylaxis

	CrCl ≥ 30 mL/min	CrCl < 30 mL/min
Standard	Enoxaparin 40 mg sq daily	Heparin 5,000 units sq q8h
Weight ≥ 120 kg OR BMI ≥ 40	Enoxaparin 40 mg sq twice daily	Heparin 7,500 units sq q8h
Weight < 50 kg	Enoxaparin 30 mg sq daily	Heparin 5,000 units sq q12h
• ***Intermediate dosing of enoxaparin is not recommended for VTE prophylaxis***		

Therapeutic Dosing

- For known or suspected VTE
- For patients on therapeutic anticoagulation prior to admission where agents with a shorter half-life are warranted due to clinical status, (i.e., renal dysfunction, potential procedures, etc.)

	CrCl ≥ 30 mL/min	CrCl < 30 mL/min
Standard	Enoxaparin 1 mg/kg sq q12h	Heparin Infusion – High Dose
• ***For critically ill patients on enoxaparin and requiring vasopressors the use Anti-factor Xa peaks should be considered to guide dosing***		
• ***For patients on enoxaparin who are ≥ 140 kg, BMI > 40, or < 50 kg, use of Anti-factor Xa peak should be considered to guide dosing due to risk of over anticoagulation***		
• ***Dose adjustments to be made in accordance with policy CM A-29***		

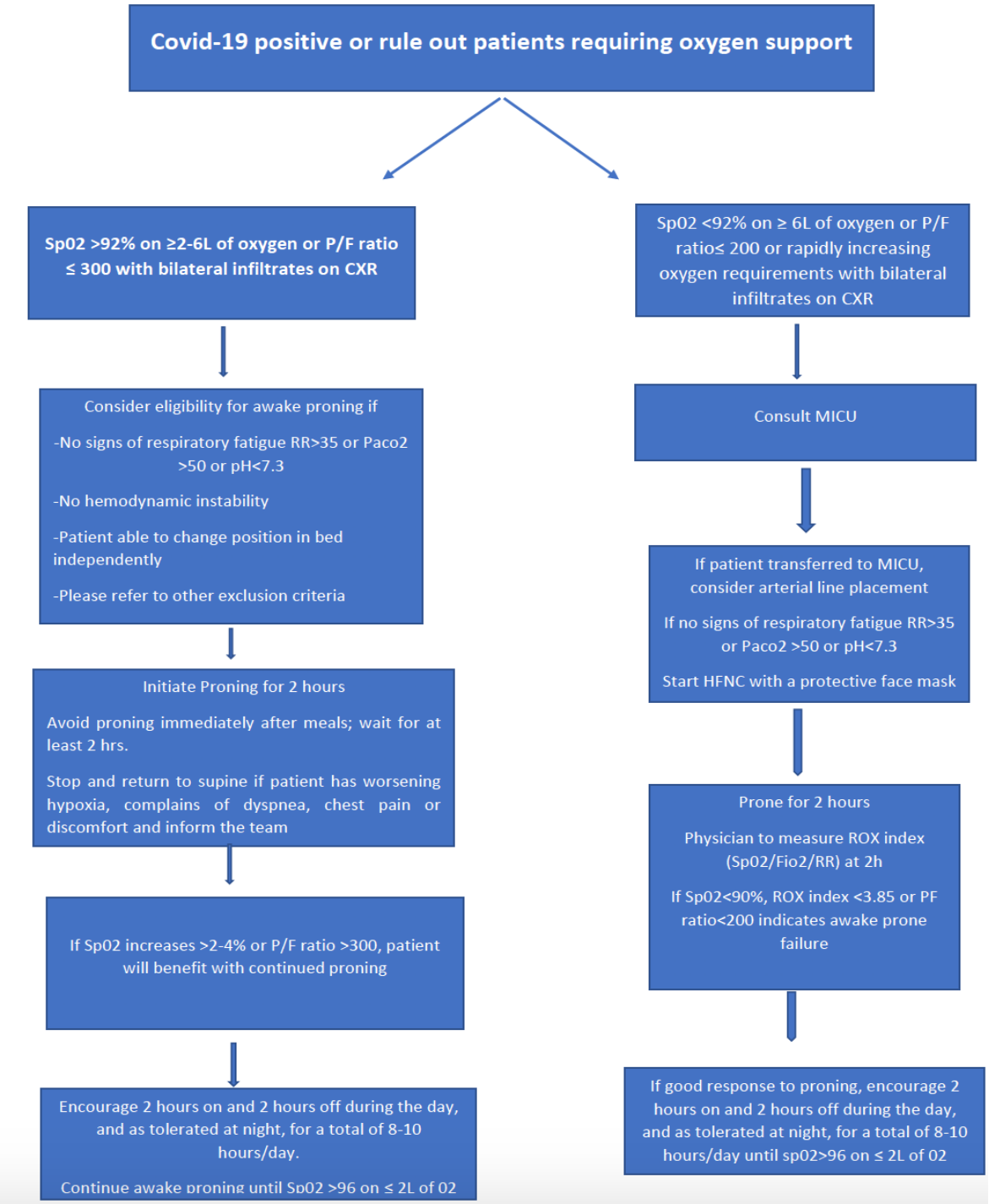
Heparin Allergy, History of Diagnosis or Suspicion of Heparin Induced Thrombocytopenia

	Prophylaxis with CrCl ≥ 30 mL/min	Treatment with CrCl ≥ 30 mL/min
< 50 kg	Fondaparinux is contraindicated	Fondaparinux 5 mg sq daily
50 – 100 kg	Fondaparinux 2.5 mg sq daily	Fondaparinux 7.5 mg sq daily
> 100 kg	Fondaparinux 2.5 mg sq daily	Fondaparinux 10 mg sq daily
• ***Use of fondaparinux is contraindicated in patients with a CrCl < 30 mL/min***		
• ***If therapeutic anticoagulation is required the use of argatroban should be considered.***		

Discharge VTE Prophylaxis and Treatment

- Use of VTE prophylaxis after discharge is not suggested
- For patients requiring therapeutic anticoagulation, apixaban, dabigatran, rivaroxaban or edoxaban should be utilized for 3 months
    - Initial parenteral anticoagulation is needed before dabigatran and edoxaban
- For patients who are not able to be treated with a DOAC, warfarin should be utilized
    - Parenteral anticoagulation needs to be overlapped with vitamin K antagonists
- For patients who required therapeutic anticoagulation prior to admission, the therapeutic agent that was utilized prior to admission should be restarted if not done so during admission unless a change therapy was instituted.

APNIC PROTOCOL FOR AWAKE PRONING



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Please refer to Upstate Book of COVID-19 for detailed guidance at https://www.upstate.edu/hospital-medicine/pdf/covid-19-final-upstate-guidelines.pdf