

MEDICAL FLOOR – QUICK GUIDE FOR MANAGEMENT OF PATIENTS WITH COVID-19

ON ADMISSION

- Complete **Clinical Frailty Scale Score** for all patients https://www.bgs.org.uk/sites/default/files/content/attachment/2018-07-05/rockwood_cfs.pdf (see https://d29e30c9-ac68-433c-8256-f6f9c1d4a9ec.filesusr.com/ugd/bbd630_4ff6e0c26c914747929776b065a20aa0.pdf for helpful tips).
- Discuss realistic goals of care and expected prognosis (for guidance on discussion see <https://src.healthpei.ca/covid-19> under Palliative Care).
- If patient wishes for advanced life sustaining therapy are inconsistent with clinical judgement, discuss with ICU physician on-call (see table 1).
- Identify and document patient's **substitute decision-maker**.
- Discontinue ED admit orders and complete COVID-19 admission order set.

INITIAL WORK-UP

- Recommended on admission (if not already done): CBC, Electrolytes, creatinine, CK, Liver Panel, B-HCG (if applicable).
- Once COVID-19 confirmed, consider the following for risk stratification (if not already done): CRP, ferritin, LDH, troponin, d-dimer, lactate.
- See Massachusetts General Hospital **Risk Stratification Protocol** (see table 1).
- Consider testing for other causes of infection at admission
- Obtain CXR (if not already done).
- Check baseline ECG or obtain ECG if no recent baseline.

MANAGEMENT

Medications:

- Either continue or hold ACEi/ARB/ARNi and low-dose ASA per usual practice. No evidence to support increased risk in COVID-19.
- **DVT prophylaxis** per usual practice.
- **Acetaminophen preferred** for fever. No evidence to support concerns about non-steroidal anti-inflammatory drugs (NSAIDs) in COVID-19.
- **Dexamethasone** is recommended for patients requiring mechanical ventilation and for hospitalized patients requiring supplemental oxygen (RECOVERY trial). If dexamethasone is not available, methylprednisolone or prednisone are the preferred alternatives
- **Routine empiric antibiotics are not recommended** in non-critically ill patients. Follow Health PEI antimicrobial guidelines <https://src.healthpei.ca/microbiology> per usual practice or discuss with medical microbiology

IV Fluids:

- **Maintain IV access.** Avoid continuous infusion - **conservative fluid management** is recommended to mitigate risk of progression of respiratory failure.

Routine Bloodwork:

- Minimize blood draws if possible. Consider ferritin, CRP, CK, LDH, Liver panel q3days.

Respiratory Care:

- Droplet precautions. Airborne precautions if performing aerosol-generating medical procedure (AGMP).
- Avoid nebulized medications or treatments.
- Do not use non-invasive ventilation (CPAP, BiPAP, high flow nasal cannula) unless guided by internal medicine/ICU.
- Monitor for increasing oxygen needs, respiratory rate and effort.
- Supplemental oxygen with nasal cannula up to 5-6L/min.

CARE ESCALATION PATHWAY

- Hypoxemic respiratory failure is the most common indication for ICU in patients with COVID-19.
- **If clinically worsening** consider obtaining the following:
 - o CBC, electrolytes, CRP, CK, LDH, d-dimer (only if clinical suspicion for PE), lactate, ferritin, ABG, CXR
- **If appropriate based on goals of care, discuss with internal medicine/ICU if any of the following apply:**
 - o Rapid escalation of O2 requirements
 - o Significant work of breathing/clinical concern
 - o $O_2 \geq 4$ LPM to maintain O_2 at target
 - o Hemodynamic instability following conservative fluid resuscitation (e.g., SBP < 90; HR > 120)
 - o Acidosis: ABG with pH < 7.3, or $PCO_2 > 50$ (or above pt's baseline)
 - o Lactate > 2
 - o Need for intensive nursing care beyond the capacity of the floor.
- In the event of respiratory decompensation, initiate droplet AND airborne precautions.
- Consider early initiation of **COVID-19 Palliative Care Order Set** for high risk patients who are not clinically improving and whose care plan does not include advanced life-sustaining therapy.

PATIENT FLOW MANAGEMENT

- **Focus on early identification** of patients with significant comorbidities and other risk factors for severe COVID-19 disease (page 2).
- **Classify all COVID-19 Unit patients daily** as clinically 1) improving, 2) stable, or 3) worsening (further sub-divide this group into patients who would or would not be appropriate for ICU level care).
- Work with the charge nurse to **maintain daily patient list** classified as above; list is to be shared with patient flow daily.

TABLE 1: RISK FACTORS FOR SEVERE COVID-19 DISEASE

Patients should be considered a higher risk admission to the COVID-19 Medical Unit if they have **ONE OR MORE Category 2 or 3 risk factor**.

Category 1 (Epidemiological)	Category 2 (Vitals)	Category 3 (Labs)
Age > 55	RR>24	D-Dimer > 1000ng/ml
CKD	HR>125	CPK > 2x ULN
DM with HbA1C > 7.6%	SpO2<90% on RA	CRP > 100
Hypertension		LDH > 245 U/L
History of Cardiovascular Disease		Elevated Troponin
Use of Biologic Agents		Abs. Lymphocyte Count < 0.8
History of Transplant or Other immunosuppression		Ferritin > 300 ug/L

All patients with HIV (Regardless of CD4 count)

FOR MORE INFORMATION:

Toronto COVID Collective	www.torontocovidcollective.com
The Ottawa Hospital's Department of Critical Care COVID-19 Quick Reference Guide	www.covidottawa.com
Brigham and Womens' Hospital - COVID-19 Clinical Guidelines	https://covidprotocols.org/