



Management of intermediate acuity patients during a pandemic

April 15, 2020

The COVID Clinical Response Committee (CCRC) has been asked to comment on the safe diversion of Level 2 critical care patients.

Currently, diversion of level 2 patients out of Critical Care is not required.

Patients with the diagnoses listed below should be referred to the intensivist (or delegate) as per usual practice for admission to Critical Care.

There is support from divisional leads from cardiology, endocrinology, nephrology, general internal medicine, hospitalists, obstetrics, vascular surgery and thoracic surgery for this framework.

IMT Report Date - TBD

APPROVED AT Osler MAC – March 29, 2020.

Pending review with Nursing, Allied Health, and Pharmacy.

Purpose:

- To identify intermediate acuity patients requiring a level of care typically delivered in Level 2 Critical Care beds.
- Provide a safe alternate care pathway to allow Level 2 Critical Care patients to be cared for in a ward environment.

Initiation:

- When a pandemic situation requires Level 2 Critical Care beds to be used for Level 3 critically ill patients.
- Divided onto Phase 1 and Phase 2 depending on critical care bed pressure. Also divided by medicine and surgery based on typical care location following ICU stay.
- CCRT/Critical Care consultation is **NOT** required if the patient meets the transfer criteria outlined below.
- If a patient does not meet transfer criteria, CCRT or ICU consultation should be requested. Admission to ICU remains at the discretion of the consulting intensivist.

Next steps:

- Clinical Director Review
 - Nursing
 - Allied Health
- Pharmacy consultation

Phase 1

A. Medicine

Diagnosis	Typical ICU Care	Criteria for Transfer: ER to Ward	Ward Follow-up Plan
Hyponatremia	Urine output monitoring Q4-6h bloodwork	Sodium >110 with 2 consecutive checks within 4 meq/h, separated by 4hrs Foley inserted, urometer attached. Nephrology consult and MRP	Measure urine output q2h and page MD if U/O >400 cc in 2 hrs Serum sodium q6h - page MD if sodium increases by more than 2
Stroke/ICH	Q1h neuro vitals	No airway obstruction GCS 10 or higher tPA not given GIM admits patient to ward.	Neuro vitals q2h Neurology consult.
Atrial fibrillation requiring Amiodarone infusion when CCU bed is not available.	Cardiac monitoring	Amiodarone bolus given on full monitor and infusion initiated (ER or CCRT RN) No persistent bradycardia (HR <50) No persistent hypotension unresponsive to IV fluids (sBP <90) GIM admits patient to ward.	Telemetry bed. Vitals q4h CCRT follow-up 6 hours after consultation and amiodarone bolus. Cardiology consult.

B. Obstetrics and Gynecology

(Pre)-eclampsia requiring magnesium sulfate infusion.	Neurological monitoring Cardiac monitoring.	No ongoing seizures after therapy started. No evidence of severe HELLP syndrome. Stable respiratory status.	Manage on Labor and Delivery Ward. Follow MgSO4 protocol. OB to call ICU if help required.
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C. Surgery

Diagnosis	ICU admission needs	Criteria for Transfer: PACU to Ward	Ward Follow-up Plan
Carotid Endarterectomy or Carotid stenting (IR)	Q1h neuro vitals HR and BP monitoring	Uncomplicated OR Patient able to use the call bell reliably. Monitored in PACU X 6 hrs with: <ul style="list-style-type: none"> • No new neurological deficits • No severe headache • sBP >100 & <160, MAP >65 • No unstable bradycardia Vascular surgeon clears patient for ward	Neuro vitals q2h x24hr CCRT nurse to see on rounds X1 in the evening post-op day zero.
Lower extremity vascular bypass procedure	Q1h arterial Doppler	Uncomplicated OR Monitored in PACU X 6 hrs with q1h: <ul style="list-style-type: none"> • adequate Doppler pulses • examination of operative limb Vascular surgeon clears patient for ward	Doppler pulse check and inspection of operative limb q2h x24hr
VATS Lobectomy	Monitor respiratory status Chest tube monitoring	Uncomplicated OR Monitored in PACU X 6 hrs and: <ul style="list-style-type: none"> • Chest tube output <300 cc • Post op CXR reviewed by surgeon • HR <120, sBP >100 • SpO2 ≥92% on <40% oxygen Thoracic surgeon clears patient for ward.	Chest tube output q2h x24hr Vitals q2h x3, then q4h
Cardiac comorbidities with recommended post-operative monitoring	Cardiac monitoring	Uncomplicated OR No changes in baseline ECG No chest pain Anesthesia clears patient for ward	ECG daily x3 Troponin q8h x3, then daily x2 Cardiology consult

Phase 2

A. Medicine

Diagnosis	Typical ICU Care	Criteria for Transfer: ER to Ward	Ward Follow-up Plan
DKA	Cardiac monitoring q4-6h bloodwork IV insulin infusion	Insulin infusion rate stable for 2 hours (not changing by more than 2 units/hr) pH above 7.1 Potassium range 3.6-5.5 Endocrinology consult.	Continue IV insulin infusion Electrolytes q4h, CBG q2h MRP to reassess within 6 hours of arrival to ward.