GIM Step-Up Unit

Philosophy and basic principles

The General Medicine Step Up Unit on 14CG is reserved for those patients admitted to General Internal Medicine who require a level of care that is intermediate between the Intensive Care Unit and the ward.

Patients can only be admitted to the Step-Up Unit through the Emergency Room or from the General Internal Medicine ward. A ward patient whose condition evolves such that he or she requires more monitoring may be transferred from the ward bed to a Step-Up Unit bed. Regardless of the origin of admission, patients in the Step-Up Unit remain admitted under the same General Medicine attending physician.

A patient in the Intensive Care Unit (ICU) cannot be transferred out to the Step-Up Unit. A patient in the ER who is referred to a subspecialty service should not be admitted to GIM for use of the Step-Up.

One Step-Up patient can be managed in an isolation room if precautions are required. However, the Step-Up Unit will not be able to accommodate COVID positive patients or suspected COVID patients requiring non-invasive positive pressure ventilation during the pandemic as it remains as a clean unit. The Step-Up isolation room does NOT have negative pressure capability. The Step-up Unit CAN accommodate patients requiring NIV who are not COVID patients/do not require airborne/negative pressure isolation.

If a patient in the ER requires a Step-Up Unit bed and one is not available, the process as outlined in Appendix A should be followed.

Caring for patients in the Step-Up Unit

Given their higher level of acuity, Step-Up Unit patients should be rounded on by the senior resident immediately following Bullet Rounds, ideally before 11AM. This will also facilitate decision-making about patient disposition. The most responsible housestaff will make decisions about his/her respective patient's suitability for discharge from the Step-Up Unit. The length of stay of patients admitted to the Step-Up Unit is expected to be 24-48 hours. Patients should be reassessed for possible transfer to a regular ward bed TWICE daily.

Step-Up patients should be admitted to CTU teams A-D, not to team E, given their high level of acuity (and that team E is cross-covered by a junior resident not familiar with the patients overnight).

It is important that the senior resident on a team with patients in the Step-Up Unit give direct signover to the on-call senior resident at the end of every day as they may be called upon to co-manage sick patients.

1. Conditions for which patients ARE appropriate for admission to the Step-Up Unit:

A. CARDIAC

1. Hemodynamically stable arrhythmias requiring continuous or Q1-2 hour monitoring (e.g. rapid atrial fibrillation, atrial flutter, AVNRT, etc.)
   Tele without Step-Up admission should be considered if no more frequent than q4h vitals required
2. Congestive heart failure or pulmonary edema requiring non-invasive positive pressure ventilation, furosemide infusion, or close supervision
3. Hypertensive urgencies requiring intravenous medications and continuous monitoring – note that any patient on a continuous INFUSION requires ICU care.

B. PULMONARY

1. Patient demonstrating respiratory deterioration requiring closer supervision but not requiring intubation
2. Patients with existing lung disease with the potential for worsening respiratory insufficiency (e.g. severe pneumonia, asthma)
3. COPD exacerbation or hypercarbia requiring non-invasive positive pressure ventilation

C. NEUROLOGIC

1. Meningitis/encephalitis with change in level of consciousness
2. Recurrent seizures requiring close monitoring, not status epilepticus

D. METABOLIC

1. Diabetic ketoacidosis
2. Non-ketotic hyperosmolar coma
3. Thyroid storm
4. Hypo- or hypernatremia with change in level of consciousness and no concern about airway protection
5. Hyponatremia requiring blood work **more frequently** than q4h
6. Hypo- or hyperkalemia with EKG changes

E. TOXICITY AND INGESTIONS

1. Drug ingestion requiring frequent neurological, pulmonary or cardiac monitoring (but not requiring intubation for airway protection)

F. GI

1. Large GI bleed responsive to IV fluid therapy

G. ID

1. Sepsis requiring continuing or q1-2 h monitoring

H. OTHER

1. Any patient, who at the discretion of the admitting staff physician or senior resident, would benefit from more frequent monitoring of vital signs (continuous or q1-2 hours) and/or nursing interventions.

2. Conditions for which patients ARE NOT appropriate for admission to the Step-Up Unit

Any patient who fulfills admission criteria to the ICU or CCU should not be admitted to the Step-Up Unit. Patients with the following conditions are not appropriate candidates for the Step-Up Unit.

A. CARDIAC

1. Hemodynamically unstable arrhythmias
2. Congestive heart failure or pulmonary edema with EKG changes or positive cardiac enzymes requiring inotropic support or other cardiac intervension
3. Hypertensive emergencies with end organ damage requiring intravenous medications and continuous monitoring
4. Acute myocardial infarction (complicated or uncomplicated)
5. Cardiogenic shock
6. Cardiac tamponade
7. Complete heart block

B. PULMONARY

1. Patients with acute respiratory failure who are at imminent risk of requiring intubation

C. NEUROLOGIC

1. Status epilepticus
2. All Stroke (as no longer under GIM)

D. TOXICITY AND INGESTIONS

1. Unstable drug ingestion requiring frequent neurological, pulmonary or cardiac monitoring or intubation

E. GI

1. Large GI bleed unresponsive to IV fluid therapy

F. ID

1. Sepsis with hemodynamic instability or multi-organ dysfunction

G. OTHER

1. All patients requiring invasive hemodynamic monitoring (except arterial lines)
2. All patients requiring inotropic or vasopressor support
3. Patients who meet admission criteria for the ICU or CCU and whose medical needs exceed those that can be provided in the Step Up Unit
4. Patients from whom aggressive therapy is being withheld and are receiving only comfort measures
5. Patients requiring respiratory isolation (i.e., negative pressure isolation because of possible TB or another aerosolized pathogen)
6. Patients immediately post-cardiopulmonary resuscitation
7. Patients admitted to medicine subspecialties who require Step-Up level care (these patients shodul eb transferred to the ICU)

3. Discharge Criteria

1) A patient's clinical status has stabilized, the need for intensive patient monitoring is no longer necessary, and the patient can be cared for on the general medical ward; OR

2) A patient's status has deteriorated and invasive monitoring or support in an ICU setting is required**.**

Discharge Guidelines

1. The Step-Up Unit nurse will contact the medical team for transfer orders out of the Step-Up Unit when a patient meets the following criteria:

i) Hemodynamic criteria:
   - HR between 50 – 110 for > 8 hours
   - MAP > 75 or sBP 95 – 180 for > 8 hours
   - Patient is not on any IV medications for BP or HR control.
   - Patient has not required > 4 units of pRBCs in the preceding 24 hrs
   - Patient's hemoglobin has been stable for > 12 hrs

ii) Pulmonary criteria
   - RR < 20 for > 8hrs
   - O2 sat >92% on <4 L O2 via NP (>88% if COPD patient) for > 8hrs
   - Patient has been off BiPAP for > 12 hrs

iii) Neurological criteria
   - Patient is awake with GCS>13 (unless expressive aphasia from stroke)
   - Neurovitals, if originally ordered, have been discontinued or are no more frequent than q4h

iv) Monitoring criteria
   - Patient's vital signs can safely be monitored q4h
   - Patient no longer requires an arterial line for blood work and hemodynamic monitoring

Bed Management

The priority is to admit a Step-Up Unit patient in the Emergency Department to a Step-Up Unit bed.

If no Step-Up Unit beds are available, the flowchart in Appendix A can assist in a patient's transfer to the most appropriate clinical setting, as decided by the medical team.

Primary responsibility for Step-Up Unit bed management is between the General Internal Medicine Staff Physician (or delegate) and the Medical Unit Clinical Leader Manager (or delegate).

Bed Management Guidelines – Admitting a Medical Patient to the Step-Up Unit from the Emergency Department.

The following guideline was developed with broad consultation and in collaboration with the General Internal Medicine, Medical Surgical Critical Care, Emergency, and Corporate Patient Flow Performance Departments.

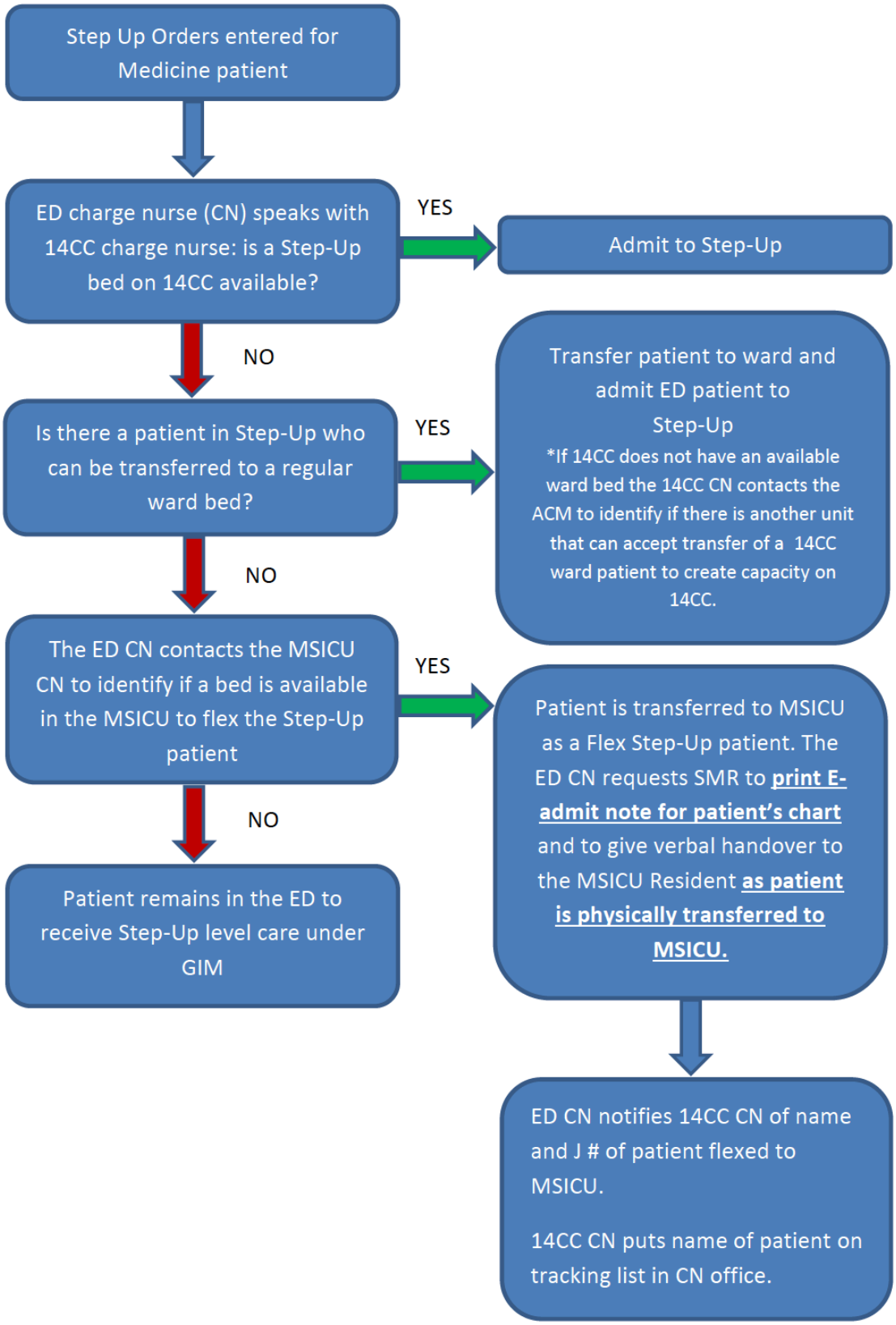
This guideline shall not supersede clinical opinion and judgement.

1. General Internal Medicine Staff Physician (or delegate) will write Step-Up Unit admission orders. If a bed is available, the Emergency Department patient will be transferred directly to the Step-Up Unit.

2. If there is no available bed, the General Internal Medicine Staff Physician (or delegate), in collaboration with the Clinical Leader Manager (or delegate), will determine whether a patient already admitted to the Step-up Unit fulfills the criteria for transfer out to a ward bed. If this can be achieved, the Emergency Department patient will be transferred directly to the Step-Up Unit.

3. If there is no available Step-Up Unit bed, no available patient to transfer out of the Step-Up Unit, and the Emergency Department patient cannot be admitted to the ward, the General Internal Medicine Staff Physician (or delegate) will follow the ICU Flex Policy (Appendix A) to transfer the patient temporarily to an ICU setting until such a time when a Step-Up Unit bed becomes available or the patient is safe for transfer to the GIM ward. If this can be achieved, the Emergency Department patient will be transferred directly to the Medical Surgical Intensive Care Unit under the care of the attending physician within that unit.

Appendix A. Admitting a GIM Patient to the Step-Up Unit from the Emergency Department



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