Surgical High Acuity Unit (SHAU) Admission Criteria (SPH)

1. Introduction

1.1. Purpose

- To ensure all patients meet the criteria for admission to the Surgical High Acuity Unit (SHAU) at Saint Paul's Hospital (SPH)

1.2. Scope

This policy applies to all physicians and staff seeking to admit patients to SPH Surgical High Acuity Unit (SHAU)

2. Policy

2.1. Standards

To provide second stage post-operative care for patients who have undergone an elective, urgent or emergent surgical procedure.

The Surgical High Acuity Unit provides close observation and monitoring for patients admitted under the surgical program, including those at risk for physiologic decompensation requiring continuous coordinated physician, nursing and respiratory care.

2.2. Admission Process

2.2.1. <u>All admissions</u>

- The perioperative or night anesthesiologist receives a request for consultation and admission from the most responsible physician.
- The perioperative or night anesthesiologist will examine and assess the referred patient.
- The perioperative or night anesthesiologist will accept the patient to the SHAU when all resources required are available.
- The Post Anesthetic Care Unit (PACU) Clinical Nurse Leader (CNL) or Charge Nurse (CN) is responsible for coordinating timing, equipment and nursing needs for admissions.
- The department of anesthesia will provide medical coverage and determine which patients are suitable for the SHAU.
- Over capacity or off-service admissions require discussion with the Patient Care Manager or delegate, and the perioperative anesthesiologist

2.2.2. In-House Admission

- Patients may be admitted directly from SPH PACU.
- Patients from surgical wards requiring a higher level of care may be admitted to the SHAU by surgical and anesthesia team decision.
- Patients who are recently discharged from SHAU (24hrs or less) and clinically deteriorating may warrant a re-admission back to SHAU as per the perioperative anesthesiologist.
- Vascular patients from an interventional area may be admitted to the SHAU after consultation and acceptance by the perioperative anesthesiologist.
- Non-operative spleen patients may be admitted from the Emergency Department to the SHAU after consultation and acceptance by the perioperative anesthesiologist.
- Patient receiving alteplase (Tissue Plasminogen Activator) or tenecteplase may be admitted from the Emergency Department to the SHAU after consultation and acceptance by the perioperative anesthesiologist.
- Post-surgical patients may be admitted from the Intensive Care Unit (ICU) to the SHAU in consultation with the ICU physician, admitting surgeon and perioperative anesthesiologist.
- In the event the SHAU is required to accommodate an ICU overflow patient (level 4 care per Surgical High Acuity Level of Care, Appendix A), the care of the patient will be determined by both the perioperative/night anesthesiologist and the ICU physician on a case-by-case basis. ICU patients will remain the responsibility of the ICU physician. The perioperative anesthesiologist or night anesthesiologist will not be involved in the care of the ICU patient.

2.2.3. External Admission

- The purpose of the SHAU is to facilitate flow of PHC surgical patient and thus external admissions are NOT encouraged unless the hospital is in a severe overcapacity situation

Provide additional details or policy directives, as needed.

2.3. Patient Admission Criteria

- Patients requiring close observation or continuous monitoring following surgery may be directly admitted from SPH PACU. This includes but is not limited to: open

abdominal aortic aneurysm, cystectomy with ileal conduit formation, nasal surgery or palatoplasty, with obstructive sleep apnea (OSA) and colorectal surgery. This also applies to patients with multiple co-morbidities that have had surgery and require close observation postoperatively

- Surgical patients on inpatient ward requiring higher level of care/intervention.
- Vascular patients from interventional radiology requiring Tissue Plasminogen Activator (tPA) therapy for ischemic limb
- Alteplase (Tissue Plasminogen Activator) therapy or tenecteplase for ischemic stroke (note: first choice for placement is ICU)
- Blunt abdominal trauma with splenic trauma (e.g. laceration) requiring close observation.
- Non-ventilated newly created tracheostomy patients requiring continued support to reach discharge criteria to ward.
- ENT patients requiring close monitoring for upper airway obstruction (e.g. angioedema, dental abscess).

2.4. Exceptions

- SHAU will NOT admit patients that require ongoing or prolonged critical care. This includes:
    - ventilated patients who are predicted to be intubated/ventilated for greater than 24 hours
    - patients requiring multiple inotropes or vasopressors – this may require consult with the ICU physician and patients should not be admitted to the SHAU if it is predicted the patient will require multiple inotropes or vasopressors for greater than 24 hours or if they are not progressing as expected
    - Patients with pulmonary arterial (PA) catheters
    - Patients that require Continuous Renal Replacement Therapy (CRRT)
    - Patients requiring transvenous or transcutaneous pacing (however, patient may require pacing in Advanced Cardiovascular Life Support situations)
    - The SHAU will NOT admit patients who have suspected or confirmed airborne illnesses/isolation precautions

3. Responsibilities

Staffing requirements:

- All nurses working in SHAU will have advanced knowledge of either critical care or high acuity if caring for patients requiring high acuity specific care
- The PACU CNL or Charge Nurse will ensure the appropriate number of nurses is available to meet patient care as guided by the Surgical High Acuity Levels of Care (see Appendix A).

4. Compliance

All physicians and staff members are responsible for adhering to this policy and monitoring their activities in accordance with the policy.

5.1 Related Policies/Decision Support Tools

B-00-13-10105 - High Acuity Unit Admission/Post Anesthesia Care Unit Overnight Stay (SPH)

5. Appendices

- Appendix A: Levels of Care

Appendix A Levels of Care

Surgical High Acuity Levels of Care and *Recommended Nurse to Patient Ratio		
1	• Patients requiring more detailed observations or interventions, including basic support for a single organ system, and those discharged from a higher level of care • Patients requiring interventions which cannot be met on a normal ward • Patients requiring a greater degree of observation and monitoring that cannot be safely provided on a ward.	1:2 ** may revert to 1:1 if presenting signs of clinical deterioration*
2	• Patients needing extended post-operative care • Single organ support Example: low dose vasopressor (phenylephrine infusion of 50 mcg/min or less or norepinephrine infusion of 10 mcg/min or less) • ECG monitoring or invasive line monitoring (e.g. arterial line or CVP) • Non-invasive ventilation (BiPAP/CPAP) • FiO_2 requirement greater than 50% • Lumbar Drain for CSF leak repair • Free Flap monitoring frequency Q1H. • Fresh tracheostomy patients requiring frequent suctioning Q2H or more	1: 2 **may revert to 1 :1 if presenting signs of clinical deterioration*
2 to 3	• Post-thrombolysis requiring close monitoring and frequent assessments (For example : Neurovascular and cordis site checks Q30 mins x 6, signs of new bleeding)	1:2 or 1:1
3	• Ventilated (24 hours or less) • Monitoring and support for 2 or more organs Example: 50% FiO_2 and vasopressor (phenylephrine infusion greater than 50 mcg/min or norepinephrine infusion greater than 10 mcg/min) • Vasopressors requiring frequent titrations (more than once an hour) • Identified post-operative bleeding • Pain crisis management • Patient is a risk to self or others – For example: hyperactive delirium or ideations of self-harm	1:1
4	• Ventilated (24 hours or longer) • Patient requiring long-term multi-organ support	1:1

Adapted from NAPAN 2023 Guidelines and the Intensive Care Society
*Suggested Nurse-Patient Ratio as per NAPAN 2023 Standards of Care

References

1. National Association of PeriAnesthesia Nurses of Canada (NAPAN). (2023). *Standards for Practice* (5th ed.). Oakville, Ont: Author
2. The Intensive Care Society. (2021). Levels of Adult Critical Care Second Edition: Consensus Statement. https://ics.ac.uk/resource/levels-of-care.html
3. The Intensive Care Society. (2009). Level of Care Critical Care for Adult Patients. Intensive Care Society Standard. United Kingdom: Author

Persons/Groups Consulted

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