

UBCH OR Suite Patient Selection Criteria

VA Department of Anesthesiology & Perioperative Care - May 2022

The purpose of these criteria is to ensure the perioperative staffing & resources at UBCH will be able to meet the expected requirements for safety and comfort for the particular patient for the booked surgical procedure. Prior to approval for a surgical procedure at UBCH, all patients should be screened for functional capacity and the presence of comorbidities. In addition, a patient may require a preoperative Anesthesiology Consultation Clinic (ACC) assessment to determine the extent of their comorbidities. Patients with multiple comorbidities must be considered as the sum of their parts before approval for surgery at UBCH.

The **UBCH OR Suite** serves an **ambulatory and short stay surgical patient population on weekdays**. **Internal Medicine** provides 24/7 coverage for medical management of patients at UBCH, and the **Code Blue team** at UBCH is led 24/7 by the on-site Emergency Medicine physician. While the ORs are operational, Anesthesiologists provide medical management of Code Blues in the OR suite.

After hours **emergency airway management** is performed by the Emergency Medicine physician on the UBCH code team. Emergency tracheotomies cannot be performed at UBCH after hours, since the ORs close when the last elective slate is completed. The **blood bank technician** staffing goes down from 2 to 1 at 16:00, making administration of a massive transfusion more of a challenge after that time. **Anesthesia Assistant** service in the UBCH OR Suite is available until 17:00 on weekdays, but can be extended beyond that time if ongoing cell saver use is required.

Perioperative resources at UBCH:

- The **UBCH OR Suite** is staffed & resourced to primarily perform elective surgery during weekdays. Slates are booked to be completed by 17:00. Currently 2 ORs are allowed to unexpectedly run past 17:00, provided the last case is estimated to realistically finish by 17:30. The **UBCH PACU** is staffed (Nursing Staff & Anesthesiology coverage) from 08:00 to 20:00 on weekdays, and is closed outside of those hours. Same day postoperative cases requiring **return to the OR** may do so if they will be completed by 17:30, or if it would be unsafe to transport them to VGH.

Avoiding slate overruns:

- Late running slates should be identified as early as possible during the day, to ensure mitigating steps are introduced early to decrease the likelihood of cancellation of subsequent cases on the slate. Timely discussion between the surgeon, anesthesiologist, and OR charge nurse is important.
- Noon update:** OR charge nurse to update U1 on slate progression around 12:00.
- 15:00 huddle** at the PACU desk: U1, OR charge nurse & PACU charge nurse come to a consensus regarding appropriate slate completion, including case cancellations if indicated.
- If last case on a slate would be entering the OR 30 minutes later than the booked time, the decision to proceed with that case must be approved by U1.

- UBCH **HAU** (High Acuity Unit):
 - There are presently **6 routinely staffed HAU beds**, with the **option to staff 2 additional HAU beds** with sufficient notice. The potential exists for cancellation of cases on day of surgery if an HAU bed is not available.
 - **Higher risk patients** must be **booked** in HAU at the time of their ACC visit by checking the relevant box on the ACC Orders. However, patients requiring **“OSA monitoring only”** **should be indicated as such** - an HAU bed is not required for such patients.
 - If there is a **concern** regarding **postoperative** maintenance of **airway patency, oxygenation, ventilation, or pain management**, the U1/POAU should **discuss** the optimal location for the patient with the HAU Intensivist. The HAU Intensivist should be contacted by U1 or POAU regarding any patient not electively booked in HAU, or if there is a problem with a previously booked patient.
 - The HAU Intensivist should contact U1 & UBCH slating as early in the day as possible when there are insufficient beds in HAU to meet the demand.
- UBCH **OSA Monitoring Pod**:
 - In addition to standard ward observation, continuous apnea monitoring can be provided by a nurse in the **4-bed** OSA pod at UBCH. Advance notice is required to staff the OSA monitoring pod.
 - Patients with mild OSA generally do not require apnea monitoring. The need for apnea monitoring in patients with moderate or severe OSA can further be stratified by calculating the “OSA Risk Score”, combined with observation for “Postoperative Risk Indicators” in the PACU. This risk prediction model is outlined on the reverse of the PACU OSA Orders document.
- **Transfer of patients from UBCH PACU to VGH**: Timely transfer of patients from UBCH PACU to VGH can be a challenge unless “life or limb” is at risk, and the UBCH PACU is only staffed until 20:00. **Elective surgery at UBCH with preplanned postoperative transfer to VGH thus not permitted.** This arrangement can also add impact the ability of the VGH PACU to accept the VGH OR output in a timely fashion.
- **Invasive monitoring and inotrope infusions**: can be utilized in the UBCH OR, PACU & HAU. However, postoperative transfer to VGH should be considered early for patients requiring significant or escalating inotropic or vasopressor support.
- UBCH is **not staffed & resourced** to provide **mechanical ventilation** beyond the OR Suite, or to provide on-site **dialysis**.
- There is a document with UBCH **OR slating guidelines** the Surgical MOAs should be aware of, and adhere to as far as possible.

I. **SURGICAL PROCEDURE CONSIDERATIONS:**

1. **Major procedures at UBCH includes:**

- a. Nephrectomy, MIS
- b. Bowel resection, MIS or open
- c. Major joint arthroplasty
- d. Open prostatectomy
- e. Hysterectomy

2. Surgical procedures impacting the airway:

- Mandatory preoperative ACC assessment ≥ 1 week prior to surgery. Video consult required if in-person assessment not performed.
- Any airway procedure that can precipitate postoperative airway compromise with swelling, hematoma or bleeding in an already challenging airway is contraindicated at UBCH.
- In the absence of a sleep study, a STOPBANG score ≥ 5 suggests a significant likelihood of moderate to severe OSA, requiring a sleep study prior to surgery impacting the airway.
- **Airway surgery to treat OSA:**
 - **The results of a formal sleep study must be available** prior to proceeding with surgery for OSA; to do otherwise would expose patients to needless risk.
 - **Maxillo-mandibular advancement (MMA):** Consistent reductions in the AHI have been observed following MMA, & adverse events are uncommon.
 - However, in the literature, varying degrees of lateral pharyngeal wall edema have been identified after MMA, as well as some instances of hypopharyngeal hematomas, partially obstructing the airway.
 - **Recommendations:**
 - a. **MMA for severe OSA contraindicated** at UBCH - should be performed in a centre where advanced airway rescue techniques (including tracheotomy) are available 24/7.
 - b. **MMA for moderate OSA allowed** at UBCH, **unless other concern regarding airway difficulty** (e.g. morbid obesity, or large neck circumference, or significant craniofacial abnormalities).
 - **Otolaryngology procedures for OSA:** The reduction in AHI after pharyngeal surgeries is less consistent, and adverse events have been reported more commonly.
 - More favorable outcomes have been associated with non-obese patients under 60 yrs old, with mild to moderate OSA, and an oropharyngeal (rather than hypopharyngeal) site of obstruction.
 - Complication rates may be higher with multiple airway procedures performed simultaneously (e.g. combination of uvulopalatopharyngoplasty & nasal procedure). Additional lateral pharyngeal wall edema observed if a tonsillectomy added to a UPPP. Patients undergoing UPPP are at risk of postoperative hemorrhage, especially if done concurrently with tonsillectomy.
 - **Recommendations:**
 - a. **Otolaryngology procedures for severe OSA contraindicated** at UBCH.
 - b. **Combination of UPPP with tonsillectomy or nasal procedure contraindicated** at UBCH.
 - c. **Single-site otolaryngology procedures for mild to moderate OSA allowed** at UBCH, **unless other concern regarding airway difficulty** (e.g. morbid obesity, or large neck circumference, or significant craniofacial abnormalities).

3. Upper abdominal procedures:

UBCH is not staffed and resourced to offer an epidural analgesia service

- Open upper abdominal procedures, or MIS upper abdominal procedures with a reasonable likelihood of requiring conversion to open, is contraindicated at UBCH.

4. Procedures with transfusion rates > 10%:

Group & Screen* cannot be performed at UBCH - specimen has to be transported to VGH
Blood products available at UBCH: PRBC, FP, fibrinogen, Octaplex, albumin, Rhogam
No platelets[†] available at UBCH - have to be transported from VGH
No other factor concentrates available at UBCH

*Group & Screen required preoperatively for all revision ortho recon procedures

[†]ordered stat from VGH if Massive Transfusion Protocol activated

Each morning, the UBCH blood inventory is replenished with a delivery from VGH. With this delivery, patient-specific blood (e.g. patient with antibodies) is delivered. It is also possible to add platelets or factor concentrates that have been pre-arranged for the patient. If a patient is seen in ACC, & platelets need to be ordered, the order should be faxed to the blood bank (fax number: 604-875-5284) with the surgery date & indication.

Procedures with historic transfusion rates > 10% include:

- Revision hip arthroplasty
- Large volume myomectomy (>5 cm)
- Total Abdominal Hysterectomy & BSO
- Nephrectomy (MIS)
- Splenectomy
- Major open colon procedures (partial, colectomy, total colectomy, APR)
- Breast reconstruction with myocutaneous flap (e.g. DIEP or TRAM)

Arrangements:

- Patients undergoing procedures at UBCH with the potential for blood loss & having significant **red blood cell antibodies**, may have surgery at UBCH if an appropriate number of units of red blood cells are on-site at UBCH (current incidence of RBC antibodies is 3% in ortho recon population). For example: 2 U of PRBC on-site for 1° joint replacements & 4 U of PRBC on-site for revision joint surgery or myomectomies. If there are **no RBC antibodies** (screen negative), the provision of banked blood is not a problem.
- Patients undergoing procedures with the **potential for significant blood loss** should have those **procedures done earlier in the day** (optimum availability of resources), and **cell saver** option should be **considered**. There are presently staffing issues regarding AA's and laboratory personnel which make this prudent.
- Ortho recon:** data going back to 2010 suggest the following transfusion rates in ortho recon patients: 1° THR/TKR < 1%; revision TKR 4.3%; revision THR 19.8%. Transfusion in this patient population rarely requires more than RBCs.

- d. **Myomectomies:** allowed in the afternoon under the following conditions: open procedures, and uterus < 16 weeks in size, and Hb > 100, and < 5 myomas, and patient will accept a blood transfusion.
- e. As the overall **complexity of cases increases** at UBCH, presumably the % of patients getting transfused will also increase. We will be following the situation to ensure that the appropriate supply of blood products is available in the UBCH blood bank.

5. Orthopedic Reconstructive Procedures (CSI):

- All ASA 1 and 2 patients are acceptable for a major joint arthroplasty at UBCH if all other UBCH OR selection criteria are met. ASA 3 patients must be assessed in the ACC.
- All patients ≥ 80 yo must have an ACC assessment & be approved by an Anesthesiologist.
- All patients for bilateral joint replacements, revision hips, or revision knees must have an ACC assessment & be approved by an Anesthesiologist. An automatic referral to the peri-operative blood management program (PBMP) will occur in ACC for these patients.
- A medical consult does not approve the patient for surgery at UBCH.
- Major hip revisions or femoral component revisions must be started by 10:30 am (equipment issues should be anticipated & should not limit starting by 10:30). **Revision hip arthroplasties, other than simple liner changes, are not appropriate for swing rooms.**
- **Peri-prosthetic fractures** may be done at UBCH on an urgent basis, displacing elective cases on the slate. The arrangements for allowing direct admissions of COVID green category patients to UBCH from facilities other than VGH are under development.

II. PATIENT CONSIDERATIONS

A. GENERAL:

1. ASA

- **ASA 1, 2 & selective ASA 3** patients may be acceptable for all procedures currently done at UBCH.
- **ASA 4** patients only acceptable for minor day surgery procedures which can be performed under local anesthesia, regional techniques or sedation.

2. Age

a. Geriatric: no upper age restriction for surgical procedures at UBCH.

- **However, patients ≥ 80 yo:**
 - Must be approved by Anesthesiology.
 - Must be assessed in ACC if booked for major or inpatient surgery.
 - Internal Medicine consults must be done prior to, or concomitant with, ACC visit.

b. Pediatric (< 16 yo): must fulfill all criteria below:

- Age ≥ 13 yo, and
- Weight ≥ 30 kg, and
- ASA 1-2, and
- At least preoperative chart screen by Anesthesiologist.

3. BMI

- a. Absolute weight limit 180 kg.
- b. All patients with BMI ≥ 35 booked for a major procedure at UBCH, or BMI ≥ 50 booked for any procedure at UBCH must be assessed in ACC.
- c. BMI of ≥ 60 : only allowed to have superficial procedures under local anesthesia in the UBCH OR suite.
- d. BMI 35-59: may be acceptable for all minor procedures, & some major procedures at UBCH (e.g. those that would not adversely impact respiratory dynamics postoperatively).
- e. Postoperative airway management concerns &/or significant cardio-respiratory comorbidities as outlined in other sections of the selection criteria may make some of these patients unacceptable for UBCH.
- f. Potential for prolonged PACU stay may make some of these patients inappropriate last cases on slate, especially for ambulatory procedures.

4. Pregnancy

Patients with gestational age ≥ 16 weeks gestation not acceptable for surgical procedures at UBCH (Fetal Health Surveillance required as per BCWH protocol under direction of Maternal Fetal Medicine physician).

B. SYSTEMIC:

1. Difficult airway:

- Patients with a documented/suspected difficult airway should be identified on the relevant checkbox in the slating comments in the ACC Orders.
- Patients with a known or suspected difficult airway should not undergo procedures at UBCH with the potential for postoperative airway compromise, including:
 - more complex maxillo-facial surgery (e.g. osteotomies of the maxilla or mandible), or
 - pharyngeal ENT procedures

2. Obstructive sleep apnea:

- **Identifying moderate to severe OSA:**
 - If diagnosed with OSA (especially in an accredited facility), the recommendation for CPAP use suggests at least moderate OSA.
 - In the absence of a previous sleep study, a patient with a STOPBANG score ≥ 5 should be considered to have at least moderate OSA.
 - Although overnight oximetry alone cannot differentiate between OSA and Central Sleep Apnea, the oxygen desaturation index can help to exclude sleep apnea, or roughly indicate the severity of sleep apnea.
- Patients with **diagnosed/suspected moderate to severe OSA should have an ACC assessment** to identify potential comorbidities and facilitate appropriate booking arrangements:
 - If booked for **inpatient procedure, postoperative OSA monitoring** is required, independent of CPAP device use. If the HAU is full, there is the potential for apnea monitoring in the 4 bed **OSA pod** adjacent to the HAU.

- Patients with an **OSA Risk Score of 4 or less, and no concerning Postoperative Risk Indicators**, can potentially be observed on the ward or discharged home after discharge from the PACU (please refer to OSA risk prediction model on reverse side of PACU OSA Orders).
- These patients should be **booked as early on the slate** as possible, especially for outpatient cases, to allow for extended daytime monitoring in the PACU if required.
- No patient with moderate or severe OSA who requires surgery which has the potential for supraglottic edema or hematoma formation may be done at UBCH.

3. Increased risk of requiring postoperative mechanical ventilation:

UBCH does not offer the option of mechanical ventilation or BiPAP outside of the OR suite

- Patients with existing, or at increased risk of, hypoxemic &/or hypercapnic failure, should not undergo a surgical procedure at UBCH with the potential to adversely impact respiratory dynamics.

4. Significant heart disease:

UBCH has an 8 bed HAU under 24/7 coverage by an Intensivist
UBCH has 24/7 Internal Medicine coverage
UBCH does not have an ICU, CCU, or on-site Interventional Cardiology service

- **Surgical procedures at UBCH contraindicated if:**
 - **Significant CAD:**
 - Unstable CAD, or workup of symptoms suggestive of CAD have not been completed.
 - Elective surgical procedures within 6 months after MI or ACS.
 - Cardiology opinion required to discontinue antiplatelet therapy (e.g. ADP receptor inhibitor such as Clopidogrel) for surgery post coronary artery stenting.
 - **Significant valvular heart disease:**
 - Severe aortic stenosis with a valve area < 1 cm², mean gradient ≥ 40 mmHg.
 - Severe (mean gradient > 10 mmHg), or symptomatic moderate (mean gradient > 5 mmHg) mitral or tricuspid stenosis.
 - Severe insufficiency of any valve.
 - **Cardiomyopathy with an LVEF < 30%**
 - Must be worked up, diagnosed & medically optimized.
 - Must be reasonably stable (not significantly deteriorating).
 - **Moderate to severe pulmonary hypertension** (PASP > 45 mmHg), or pulmonary hypertension with evidence of RV compromise.
 - **Moderate to severe RV dysfunction**, or signs of RHF.
 - **Significant LV outflow tract obstruction** (LVOT ≥ 30 mmHg).
 - **Complex congenital heart disease with functional impairment.**
 - History of **malignant dysrhythmias** (e.g. out-of-hospital VF, or recurrent sustained VT, or torsade de pointes VT in long QT syndrome).

5. Pacemakers & Automatic Implanted Cardiac Defibrillators

UBCH does not have an on-site pacemaker/AICD programming technician service

a. Pacemakers:

- All patients with pacemakers must be assessed in ACC. Their most recent pacemaker clinic assessment must be in the chart at the time of ACC assessment.
- Any patient requiring reprogramming of their pacemaker (= pacemaker dependent and surgery in immediate area of pacemaker where a sterile magnet cannot be used) is unacceptable for UBCH.
- To determine if patient is pacemaker dependent:
 - Check “Pacemaker/AICD Assessment” request form in chart. If form has been completed there is a line: patient is pacemaker dependent: “Yes/No”.
 - If patient always paced and has no native beats on EKG assume pacemaker dependence.

b. **AICDs:** patients with AICDs are not acceptable for surgical procedures at UBCH.

6. Bleeding & Coagulation disorders:

UBCH does not have an on-site hematology service

- a. Patients with a documented coagulation disorder (e.g. hemophilia) or thrombocytopenia (platelets < 80,000) may only undergo superficial, minor, soft tissue surgery at UBCH. These patients may **not** undergo major procedures at UBCH.
- b. Patients with von Willebrand’s disease who are known responders to DDAVP may have their surgery at UBCH, but only after a hematology consult at VGH.

7. Refusal to accept blood products:

- Patients who refuse blood transfusion for any reason are only acceptable for procedures associated with a minimal chance of excessive bleeding. Patients who refuse blood transfusion are e.g. **not acceptable for revision THR, bilateral THR, or bilateral TKR** at UBCH.
- A current Hb ≥ 140 in men, or ≥ 125 in women, is acceptable for surgical procedures at UBCH. If current Hb < 140 in men, or < 125 in women, then such patients must meet the following requirements:
 - a. Seen ≥ 4 weeks in advance by the Blood Utilization Program [BUP] with a current Hb.
 - b. Seen ≥ 2 weeks in advance of procedure in ACC.
 - c. Accept erythropoietin & iron therapy as recommended by BUP.
 - d. Accept use of cell saver as indicated.
 - e. Booked as 1st or 2nd case of day.
 - f. Appropriate response to item 7.c with hemoglobin level in acceptable range.
 - g. ASA 1 or 2.
- *Please note:*
 - Patients referred to BUP < 4 weeks out, or seen in ACC < 2 weeks out, may be cancelled at discretion of the attending anesthesiologist in consultation with a BUP physician.
 - Conversely, they may be accepted if deemed optimized for the proposed surgery by the ACC physician in consultation with a BUP physician.

8. Patients on Dialysis:

UBCH does not offer on-site hemodialysis or peritoneal dialysis

- Patients on dialysis booked for a surgical procedure that may require postoperative admission thus not acceptable for UBCH.
- Ambulatory non-invasive procedures of patients on dialysis such as creation/revision of AV fistulae at, or distal to the antecubital fossa, would be acceptable at UBCH. Patients are to be dialyzed the day before, and will have stat electrolytes drawn on arrival the day of surgery.

9. Pain Management at UBCH:

Epidural analgesia is not available for patients at UBCH, since it is frequently indicated for procedures associated with a postoperative impact on the dynamics of breathing, and mechanical ventilation is also not an option at UBCH. An epidural analgesia service would also require a 24/7 anesthesia footprint at UBCH, when the UBCH OR suite is currently primarily resourced for elective daytime surgery. Thus, any patient having a procedure for whom an epidural would normally be indicated, or who would benefit from an epidural due to comorbidities or opioid tolerance, is not acceptable for a surgical procedure at UBCH.

Expansion of pain management resources at UBCH:

In addition to the current on-site POPS coverage during weekdays, and after hour off-site POPS coverage by phone:

- a. Morning POPS rounds will be introduced on weekends & statutory holidays.
- b. CPAS already available on-site at UBCH on Mondays & Fridays, & available for telehealth patient consults for UBCH patients on Tuesdays, Wednesdays & Thursdays (if volume of CPAS patients at UBCH reliably exceeds 4 per day, it would generate sufficient funding for members of CPAS to consider introducing an on-site presence at UBCH every weekday).
- c. Psychiatry (consult liaison) coverage now available 24/7 through the UBCH switchboard to help manage patients with withdrawal, delirium or agitation.
- d. Lidocaine infusions will be introduced as a pain management option in the UBCH PACU & HAU.

Recommendations for opioid tolerant patients:

- **Inpatient surgery** at UBCH:
 - Patients on morphine > 250 mg/24 hrs (or equivalent) now also considered for inpatient surgery at UBCH.
 - **Contraindications:**
 - On **suboxone** > 12 mg per 24 h
 - On **prescribed heroin** (diacetyl morphine)
 - Use of **street opioids** (equivalent dose of prescribed opioid impossible to determine).
 - Postoperative **infusions of ketamine, or lidocaine, or continuous opioids** can only be used in the **PACU & HAU**.
- **Outpatient surgery** at UBCH:
 - Patients on **suboxone > 12 mg per 24 h, or prescribed heroin** (diacetyl morphine), or **using street opioids**, can be considered for **outpatient** surgery at UBCH, but must be referred to CPAS & booked as 1st case of day.

- Patients on **methadone, suboxone, or taking > 250 mg morphine (or its equivalent) per 24 hours must have an ACC assessment, referred to CPAS, and, if inpatient, booked in HAU & followed by POPS.** These patients should ideally be booked as 1st case on slate*
 - *However, if on supervised opioid maintenance therapy, procedure may have to be booked later in the morning to allow administration of morning maintenance dose. To avoid the risk of double-dosing, supervised administration of preadmission morning dose should be confirmed with case worker or relevant pharmacy.
- **Methadone:**
 - Anesthesiologist or Surgeon can order methadone when CPAS not available. Dose & frequency must be unchanged from patient's regular dosage regimen (this dictum may soon change to allow splitting of daily dose into a Q8H regimen postoperatively). Methadone must be ordered on the forms available in PACU.
 - These patients must be on POPS & must have HAU bed.
- **Suboxone:**
 - **Outpatient** surgery: remain on usual dose; additional agonists may be required perioperatively.
 - **Inpatient** surgery:
 - Maintenance dose > **12 mg per 24 h not acceptable** for inpatient surgery at UBCH.
 - **Hold suboxone on day of surgery** (regardless of dose), **& request CPAS consult.** Multimodal & regional techniques would be beneficial. Additional opioid agonists may be required. CPAS will see these patients postop & initiate agonist micro-dosing to help these patients start back on their suboxone before discharge.
- **Naltrexone:**
 - < 25 mg: last dose 1 day prior to procedure
 - 25-49 mg: last dose 1-3 days prior to procedure (at discretion of practitioner & patient)
 - ≥ 50 mg: last dose 3 days prior to procedure
- The consulting anesthesiologist will consider patient's degree of opioid tolerance, comorbidities & planned procedure before making a final determination regarding suitability for surgery at UBCH.

CONTRAINDICATIONS FOR SURGICAL PROCEDURES AT UBCH: QUICK REFERENCE

Procedure considerations	Contraindications
Surgery potentially impacting airway	Any procedure that can precipitate postop airway compromise with airway swelling, or hematoma, or bleeding in an already challenging airway If STOPBANG ≥ 5 & no sleep study available on chart Severe OSA
Surgery to treat OSA	If no sleep study available on chart
Maxillo-mandibular advancement for OSA	All patients with severe OSA (AHI ≥ 30) Moderate OSA if BMI ≥ 35 , or large neck circumference, or significant craniofacial abnormalities
Otolaryngology procedures for OSA	All patients with severe OSA Moderate OSA if BMI ≥ 35 , or large neck circumference, or significant craniofacial abnormalities Any combination of procedures: tonsillectomy/UPPP/septoplasty
Upper abdominal procedures	Open upper abdominal procedures, or MIS upper abdominal procedures with > 10% chance of conversion to open

Patient considerations	Contraindications
Major surgery & functional capacity	Major surgery in ASA 4 patient
Lower limit age & weight	Age < 13 yo, or wt < 30 kg for any procedure
Upper weight limit	Wt > 180 kg for any procedure
Upper limit BMI	BMI ≥ 60 for any procedure other than minor & superficial that can be done under local anesthesia
Morbid obesity	Postop airway management concerns &/or significant cardio-respiratory comorbidities as outlined in other sections of selection criteria may make some of these patients unacceptable for surgery at UBCH
Pregnancy	Gestational age ≥ 16 wks for any procedure
Existing, or at $\uparrow$ risk of, hypoxemic &/or hypercapnic failure	Surgical procedure with potential to adversely impact respiratory dynamics
Significant CAD	Unstable, or incompletely worked up MI/ACS within last 6 months
Significant Valvular Heart Disease	Severe AS with AVA < 1 cm ² or MG ≥ 40 mmHg Severe, or <i>symptomatic</i> moderate, MS or TS Severe MR or TR
Cardiomyopathy	LVEF < 30%, or deteriorating LVEF
Pulmonary hypertension	Moderate to severe pulmonary HTN (PASP > 45 mmHg)
RV dysfunction	Moderate to severe RV dysfxn, or signs RHF
LV outflow tract obstruction	LVOT ≥ 30 mmHg
Dysrhythmias	Malignant dysrhythmias
Pacemakers	Pacemaker dependent & sterile magnet cannot be used in area of surgery
AICD	All procedures contraindicated at UBCH
Coagulation disorder or thrombocytopenia	Any surgery other than minor, superficial, soft tissue procedures
Bleeding disorder	Any surgery if Von Willebrand's Disease not responsive to DDAVP (preop hematology consult required)
Refusal blood products	Any procedure with more than minimal chance of excessive bleeding, (including revision THR, or bilateral joint replacement, & other procedures with > 10% risk transfusion)
Dialysis	Inpatient surgery in patients on hemodialysis or peritoneal dialysis
Suboxone > 12 mg/24 h, prescribed heroin, or street drug use	All inpatient surgery at UBCH

The ACC anesthesiologist will decide each patient's suitability for surgery at UBCH.

The final decision to proceed with anesthesia always lies with the attending anesthesiologist on the day of surgery.