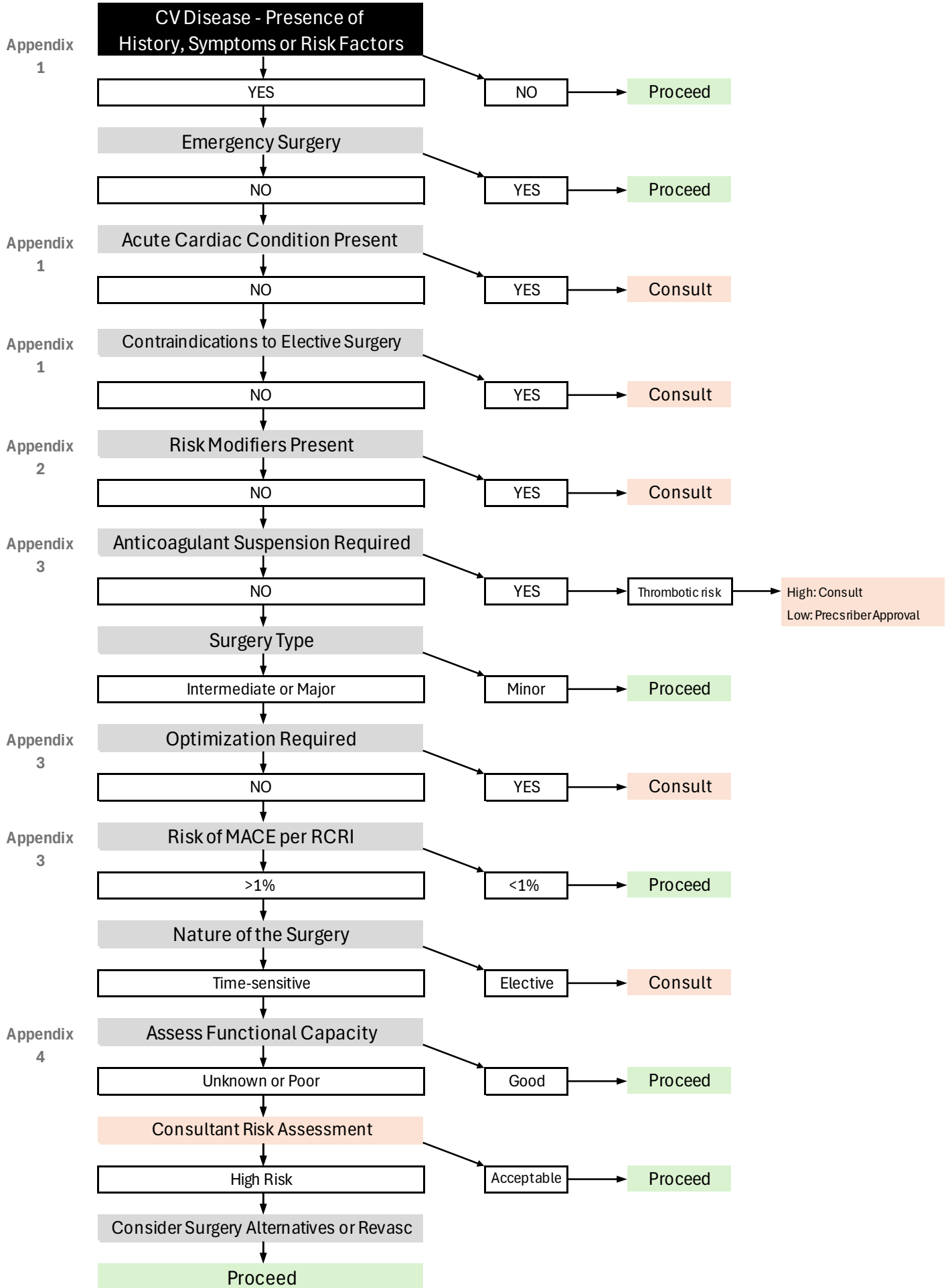


SW Anes Pre-Op Referral Guideline 2026



CVD Pre-Op Algorithm - APPENDIX 1

CVD Risk Factors:

- HTN
- Smoking
- HL
- DM
- Obesity
- Age > 65
- FMH premature CAD

Acute Cardiac Conditions:

- Acute coronary syndrome, e.g. unstable angina
- Decompensated HF – pulmonary edema, DOE, etc.
- Unstable Arrhythmia, e.g. tachycardia > 115, new onset a-fib, symptomatic bradycardia
- Uncontrolled HTN - SBP \geq 185 or DBP \geq 110

Contraindications to Elective Surgery:

- Recent CVA/TIA (< 3 months)
- Recent MI (< 6 months)

CVD Pre-Op Algorithm - APPENDIX 2

Mitral Stenosis – Any degree of stenosis requires consult

Severe or Symptomatic Aortic Stenosis - requires consult:

- | | | |
|--|--|--|
| <ul style="list-style-type: none">○ DOE, PND, orthopnea○ Syncope○ HF | | <ul style="list-style-type: none">○ Max Vel > 4 m/sec○ Area < 1 cm²○ Mean Gradient > 40 mmHg |
|--|--|--|

Moderate Aortic Stenosis - Elective surgery is reasonable if the patient is asymptomatic and has been seen within 6 months. Echo required within 12 months of non-minor surgery

Mitral and/or Aortic Regurgitation – if there are no symptoms:

- Proceed with minor procedures
- For regurgitation documented as mild, or MVP with no documentation of regurgitation - can proceed with non-minor procedures
- For regurgitation documented as moderate or severe, or of unknown degree, non-minor procedures need evaluation within: 24 months if uncomplicated; 12 months if complicated by HF, known decreased EF, or known PH

PAH (pulmonary arterial hypertension or precapillary PH) – specifically WHO Group I: Intermediate or major procedures require consult at SW PH Clinic or tertiary referral

Adult CHD (congenital heart disease) – Can proceed without consult in asymptomatic patients with small defects or repaired defects. Need evaluation if there is a known residual shunt. Notify anesthesia of unrepaired PFO.

HCM (hypertrophic cardiomyopathy) – Any degree of LVOT/SAM requires consult. Can proceed if no LVOT/SAM documented within 6 months

Undefined Heart Murmur – It is reasonable to proceed with minor or intermediate surgery in asymptomatic patients. Audible murmur needs evaluation prior to major surgery (No evaluation needed if murmur is inaudible)

Vascular Disease

- Aortic aneurysms of unknown size or > 4.5cm need evaluation within 24 months for non-minor procedures
- Carotid stenoses of unknown degree or > 70% need evaluation within 12 months for non-minor procedures
- Carotid stenoses of any degree need evaluation within 12 months for shoulder (sitting) cases

CVD Pre-Op Algorithm - APPENDIX 3a

High Thrombotic Risk:

- DAPT initiated within 12 mo.
- On Coumadin for AF and CHADSVASc ≥ 3

Optimization Required for Intermediate or Major Surgery if:

- CIED with no check within 12 months
- History of HF with no follow up within 12 months
- Non-CVD conditions - see Appendix 3b

RCRI – Revised Cardiac Risk Index – Predictors:

- Known CAD
- HF
- CVA/ TIA
- IDDM
- CKD: Cr ≥ 2 or Stage 4 (GFR < 30 ml/min)
- Intraoperative, intrathoracic, or suprainguinal vascular surgery

Risk of MACE – Major Adverse Cardiac Event

- 0 predictors = low risk 0.04%
- 1 predictor = low risk 0.9%
- 2 predictors = moderate risk 6.6%
- 3 predictors = high risk 11%

CVD Pre-Op Algorithm - APPENDIX 3b

Non-CVD Conditions Requiring Pre-Op Optimization

ACUTE MEDICAL CONDITIONS

- Unexplained SOB
- Room air SaO₂ below 94% with no history of chronic lung disease
- Poorly controlled asthma
- Unexplained findings on lung auscultation

ABNORMAL LAB VALUES

- Random BS over 350
- K⁺ under 3.0
- K⁺ over 5.4 without ESRD
- HCT under 24 without ESRD
- Abnormal INR/PTT without anticoagulants
- Platelet count < 90

HIGH RISK FOR POST-OP PULMONARY COMPLICATIONS

- Major surgery and severe chronic lung disease
- Major surgery and Frailty as defined by an index
- Robotic/Laparoscopic surgery and BMI > 50

HIGH RISK FOR INFECTION: Random BS > 200 or HbA_{1C} ≥ 9% prior to the following:

- Instrumented lumbar or thoracic fusions
- Abdominal GYN surgery
- Abdominal colorectal surgery
- Open vascular surgery on abdomen or lower extremities
- Total knee or total hip

CVD Pre-Op Algorithm - APPENDIX 4

Functional Capacity is Poor if Either:

- Duke Activity Status Index (DASI) ≤ 34
- Unable to obtain 4 METS
- Negative cardiac biomarkers are reassuring if unable to assess functional capacity

Cardiac troponins are very sensitive to cardiac infarction or ischemia, but they are not specific

B-type or brain natriuretic peptides (BNP) are released from myocytes when stretched, ischemic or inflamed. BNP is more sensitive than CXR to diagnose acute HF

Normal BNP < 100. BNPs over 500 are strongly suggestive of HF.

Preop risk stratification:

- A preop BNP < 20 indicates lower risk (as does a normal Tn)
- A preop BNP > 200 indicates higher risk
- A postop BNP > 400 indicates very high risk

	MINOR	INTERMEDIATE	MAJOR
ENT	Biopsy (ASC) Tonsils, Adenoids, Ear Laryngoscopy Nasal closed reduction	Biopsy (EXRC/TBA), parotid Nasal, sinus, rhinoplasty Thyroid, parathyroid UPP	Neck dissection Tracheostomy
GEN SURG	Biopsy (ASC) Breast biopsy w/o nodes Superficial Masses I&D, pilonidal Anorectal (non-abdominal)	Biopsy (EXRC/TBA) Breast lump w/nodes Breast reduct or reconstruct Cholecystectomy Hernias	Abdominal colorectal Nissen
GYN	D&C Hysteroscopy Perineal (ASC)	Urogyn procedures Hysterectomy (no CA) Laparoscopies ASC	Abdominal procedure involving cancer or lymph node dissection
MISC	Plastics (MAC)	Plastics (GA) All Maxillofacial/Oral	All Cardiothoracic
NEURO / PAIN	Pain pumps Stimulator - percutaneous	Cervical - anterior Kyphoplasty, vetebroplasty Lumbar w/o fusion Stimulator - open	Cervical - posterior Thoracic lam or fusion Lumbar spine w/ fusion
ORTHO	Closed reduc, manipulation Hand, wrist, elbow Knee athroscopy w/o ACL Hardware removal	ACL, Achilles, quad repairs Fracture of ankle Fracture arm prox to wrist Fracture patella, quad repair Shoulder athroscopy	Fracture of humerus Fracture leg prox to ankle Total joint replacement
PODIATRY	All other procedures	Ankle athrodesis Gastroc recession	
UROLOGY	Cystoscopy w/o TURP Interstim ESWL Uronav TRUSP TURBT	Bladder suspension Cystocele Penile implants Perineoplasty Testicular TURP / TUVF	Adrenalectomy Cystectomy Nephrectomy Prostatectomy Pyeloplasty
VASC	Arteriograms (MAC) AV grafts and fisulas (MAC) Medports VC filter	Arteriograms (GA) AV grafts and fisulas (GA)	AAA AKA, BKA Bypass - open Carotid