

Step 1: Is the patient having low, moderate or high-risk surgery? (defined below)

The following separates common procedures into **low, moderate, and high risk** categories. Final designation should still consider the patient's clinical status, anesthesia plan, and urgency.

LOW RISK:

- **BREAST (MINOR)**
 - All except extensive reconstructive (oncologic)
- **CATARACT/EYE**
- **DENTAL**
- **ENT PROCEDURES**
- **GYN (MINOR)**
 - Hysteroscopy, D&C, elective salpingectomy
- **ORTHOPEDIC (MINOR)**
 - Arthroscopic/diagnostic, carpal tunnel release, ORIF of non-major joints (major joints are: Humerus, Femur, & Tibia)
- **PLASTIC SURGERY**
- **SUPERFICIAL SKIN PROCEDURES**
- **UROLOGIC (MINOR)**
 - Cystoscopy, lithotripsy
- **ENDOSCOPY**
- **CARDIAC CATHETERIZATION**

MODERATE RISK:

- **BREAST (MAJOR)**
 - Extensive reconstructive
- **GYN (MODERATE)**
 - Total Hysterectomy
- **HEAD & NECK**
- **INTRAPERITONEAL (INSIDE THE BODY)**
- **INTRATHORACIC (INSIDE CHEST)**
- **NEUROLOGICAL/SPINE SURGERY**
- **ONCOLOGIC GENERAL SURGERY**
- **ORTHOPEDIC (MAJOR)**
 - Total joints. ORIF of major joints (Humerus, Femur & Tibia)
- **PULMONARY**
- **KIDNEY/LIVER TRANSPLANT**
- **UROLOGIC (MAJOR)**
 - Nephrectomy, prostate surgery

HIGH RISK:

- **CAROTID ENDARTERECTOMY**
- **AORTIC/MAJOR VASCULAR SURGERY**
 - CABG, valve replacement, Cardiac pacemaker, AICD, Aorta-Bifemoral Bypass, AV shunt (if general anesthesia is required).
- **PERIPHERAL VASCULAR SURGERY**

Step 2: What category is the most applicable to the patient's medical history?

Category 1: Healthy- No disease. No smoking or alcohol (ETOH) abuse.

Category 2: Current smoker, social drinker, pregnant, obesity > 30 BMI <40. Well controlled Diabetes (DM), Hypertension (blood pressure) and/or mild lung disease.

Category 3: One or more diseases, such as poorly controlled Diabetes or blood pressure, BMI ≥40, Alcohol abuse, pacemaker, on dialysis, history of heart attack, stroke, TIA (mini-stroke), Coronary Artery Disease (CAD), or cardiac stents. Ejection Fraction (E.F.) on cardiac testing of 30-44%.

Category 4: Recent < 3 months heart attack, stroke, TIA (mini-stroke), open heart surgery or CAD/cardiac stents. Severe heart valve disease, sepsis, end-stage kidney disease not having regular dialysis. E.F. on cardiac testing < 30%, BMI ≥ 50.

STEP 3: Find the surgery risk and category to determine if PreOp Evaluation & Testing is needed.

Low Risk Surgery + Category 1 or 2 = **No** PreOp Evaluation & No testing needed. No further steps

Low Risk Surgery + Category 3 or 4 = **Yes** PreOp Evaluation needed and move to **step 4**.

Moderate or High-Risk Surgery + Category 3 or 4 = **Yes** PreOp Evaluation needed and move to **step 4**.

Moderate or High Risk Surgery + Category 1 = **No** PreOp Evaluation, but **yes** testing needed.

Moderate or High Risk Surgery + Category 2 = **Yes** PreOp Evaluation needed and move to **step 4**.

Step 4: Evaluate tests indicated based on medical history.

*Please see cardiac and pulmonary evaluation guidelines on **pages 5 and 6**.

HonorHealth Perioperative Evaluation Guidelines & Testing Guidelines

	H/H	CBC	BMP	CMP	PT/INR PTT	TSH	T&S	T&C	UA	Urine HCG (POCT)	EKG	CXR
DISEASE STATES												
Alcohol Abuse > or equal to 2 drinks/day		X	X								X	
Anemia Hemoglobin < 10		X										
Autoimmune Disease Rheumatoid Arthritis, Systemic Lupus Sjogren's Disease, Myasthenia Gravis, Multiple Sclerosis (M.S.), Type I Diabetes, Job Syndrome, Crohn's Disease		X	X									(Only if suspected active process) X
Bleeding history Factor V, Protein S, Protein C, thrombocytopenia		X			X							
Cardiovascular (CV) Disease HTN, High Cholesterol, CAD, CHF, Chest pain, palpitations, irreg. HR, ICD/Pacer, Pulm. HTN.	X			X							X	(Only if active CHF symptoms) X
Cerebrovascular Diagnosis/Disease Stroke (CVA), Parkinson's Disease, Mini stroke (TIA),		X	X								X	
Diabetes Mellitus Type I or II			X								X	
Hepatic (Liver) Disease Cirrhosis, Hepatitis, Hepatic failure		X		X	X							
Malignancy Active Cancer		X										(Malignancy in thorax or active lung process) X
Morbid Obesity BMI > 40			X								X	
Poor exercise Tolerance Shortness of breath with going up a flight of stairs or walking around the block.		X	X								X	
Pregnancy Screening Childbearing females age 10-55. Hx of Hysterectomy and no menses in 3 yrs are exempt. Preg test must be within 48 hrs of surgery										X		
Pulmonary (Lung) Disease COPD, Asthma, recent bronchitis or smoking >20pk yr (in last yr)	X		X								X	(Only if suspected active process) X
Renal (Kidney) Disease Any stage, Dialysis		X	X								X	
Vascular Disease PVD, AAA, PAD, Atherosclerosis, embolism		X	X		X							

HonorHealth Perioperative Evaluation Guidelines & Testing Guidelines

	H/H	CBC	BMP	CM P	PT/INR PTT	TSH	T&S	T&C	UA	Urine HCG	EKG	CXR
MEDICATION CLASSES												
Antiarrhythmic											X	
Anticoagulant		X			X							
Diuretics			X or iSTAT if DOS.								X	
Immunosuppressant/ Chemotherapy		X										
NSAIDS/Cox 2 On three or more times/week			X									
Steroids Chronic steroid use			X									
PROCEDURE												
Potential for blood loss > 500cc See chart on page 4.		X					X					
Surgical Implants												
Missed Abortion	X											

Testing and Evaluation Timeframes

Preop Evaluations are acceptable within 6 months unless otherwise indicated by the provider conducting the exam or change in health status since exam.

Labs within 3 months are acceptable unless health status change. If on Dialysis/Diuretic iStat day of surgery to check K+.

CXR within 6 months is acceptable unless health status change.

EKG Normal EKG's within 1 year are acceptable unless health status change. If abnormal, within 6 months.

Pacemakers- Need interrogation within 1 year.

Defibrillators-Need interrogation within 6 months.

Who needs a Type and Screen?

Vascular Surgeries:

- Aortic aneurysm repair
- Aortic dissection
- Aorta-iliac femoral bypass
- Endarterectomy of aorta or large (i.e.) femoral artery
- Axillary/femoral bypass
- Femoral-popliteal bypass

Cardiothoracic Surgeries:

- Any surgery requiring cardiopulmonary bypass
- Annuloplasty
- CABG
- Valve Replacement or Repair
- Laser Lead removal
- Mediastinoscopy
- **Lung:** Pneumonectomy, lobectomy

Spine Surgery:

- Anterior Cervical Spine and Posterior Cervical Spine surgeries
- Multi-level (3 or more) – continuous levels regardless of region
- Corpectomies
- Spine Deformity Surgeries
- Spine Tumor Surgeries
- Anterior Lumbar
- Anterior Thoracic
- Lateral Lumbar
- Lateral Thoracic

- Hysterectomy whose **Hemoglobin is <10 (CBC within 30 day of Sx done outpatient before surgery)**
- Nephrectomy
- Splenectomy
- Adrenalectomy
- Pancreatectomy
- Total Hip Revisions
- Bowel Resections

Patients with a history of blood transfusion:

Type and Screen needs to be completed within **2 days** before outpatient surgery as they are at high risk for positive antibodies or pregnant within the last 90 days. If antibodies are found day of surgery, this will potentially delay the surgery as it takes hours to get the blood prepared.

Patients with no history of blood transfusion:

Type and Screen can be completed within **30 days** before outpatient surgery.

HonorHealth Perioperative Evaluation Guidelines & Testing Guidelines

Does the patient need a Cardiac Consult before surgery?

Any **Yes** determines the need for cardiac evaluation.

Functional/Cardiac Status from Duke Activity	Yes	No
Does the patient currently see a cardiologist to manage a heart problem such as heart failure, heart valve problems, or irregular heart rhythm?		
Does the patient get chest pain/tightness or significant shortness of breath while: - Walking up two flights of stairs? - Walking up one flight carrying two bags of groceries? - While doing yardwork? - Swimming? - With sexual relations? (METS > 4.0)		
Has the patient had a heart attack, stroke, TIA, or had a cardiac stent place in the last 12 months or had a hospitalization for CHF in the last 6 months?		
Does the patient have active chest pain at rest or with activity?		
Does the patient have a known history of pulmonary hypertension, cardiac pacemaker/defibrillator, or congenital heart disease?		

PAT will need a copy of any Preop Consultations or Optimizations and any testing completed to do so prior to surgery. If Cardiology and/or Pulmonary Optimizations occurred, we will need some additional information listed below if applicable:

- Preop Consultation (office) Note with letter of optimization.
- Preop Lab testing results
- EKG if available
- Echocardiogram (most recent) if patient sees Cardiologist.
- Stress test (most recent) if patient sees Cardiologist.
- Cardiac Catheterization if within the last year.
- Pacemaker/Defibrillator (AICD) interrogation report if applicable
 - Pacemaker- Interrogation must be within **1 year**.
 - Defibrillator (AICD)- Interrogation must be within **6 months**.
 - **Pacemaker interrogation reports need to include:** type, model, manufacturer, current setting, if the patient is dependent on pacing, battery longevity and how the unit reacts to magnet placement, any recommendations, any alert status on the device from the manufacturer.

* For patients with **recent coronary artery stenting** and scheduled for elective, non-cardiac surgery will need to be deferred, until after the minimal recommended duration of dual antiplatelet therapy for each type of stent, to minimize adverse cardiovascular events. Our recommended minimum duration of antiplatelet therapy for the general population, is **at least six months** after either bare metal stenting or drug-eluting stenting."

*For patients who have had a **recent stroke**. Elective surgery is usually delayed for **8-9 months** post-stroke.

*For patients with recent coronary artery bypass graft surgery (CABG) recovery is recommended for **2 to 3 months** before undergoing elective non-cardiac surgery

*Fax copies to HonorHealth Centralized Scheduling at # 480-882-7874

HonorHealth Perioperative Evaluation Guidelines & Testing Guidelines

Does the patient need a Pulmonary Consult before surgery?

Any **Yes** determines the need for pulmonary evaluation.

	Yes	No
Chest X- Ray Does the patient have any of the following? • Acute exacerbation of Asthma • Acute exacerbation of COPD • Symptomatic pneumonia • Acute congestive heart failure (CHF)		
Pulmonary Consultation Does the patient have any of the following? • an active process such as an acute exacerbation of asthma or COPD • symptomatic pneumonia • scoliosis with restrictive lung function • is the patient on continuous Oxygen?		
Does the patient have a new cough or shortness of breath (SOB) with No diagnosis?		

All patients undergoing Pulmonary Consultation or testing (CXR, PFTs) will need copies of the most recent evaluation/testing results forwarded to Preadmission Testing (P.A.T.)*

*Fax copies to HonorHealth Centralized Scheduling at (480) 882-7874

