

Subject: Preoperative Elective Surgery Effective Date: 4/1/16
Revision Date: 12/22

PURPOSE

If an **emergency procedure** is required (e.g., for intra-abdominal hemorrhage, perforated viscus, necrotizing fasciitis), there is usually no time for a full preoperative evaluation. However, the patient's history should be reviewed as expeditiously as possible, particularly for allergies and to help identify factors that increase risk of emergency surgery (e.g., history of bleeding problems or adverse anesthetic reactions).

Before **elective surgery**, the surgical team may consult an internist for a formal preoperative evaluation to minimize risk by identifying correctable abnormalities and by determining whether additional perioperative monitoring and treatment are needed. Additionally, elective procedures should be delayed when possible so that certain underlying disorders (e.g., hypertension, diabetes, hematologic abnormalities) can be optimally controlled.

Routine preoperative evaluation varies from patient to patient because surgical risk varies depending on the patient's risk factors, and risks of the procedure.

Procedural risk is highest with the following:

- Heart or lung surgery
- Hepatic resection
- Intra-abdominal surgeries that are estimated to require a prolonged operative time or that have a risk of large-volume hemorrhage (e.g., Whipple procedure, aortic surgery, retroperitoneal surgery)
- Prostatectomy
- Elective orthopedic procedures (e.g., joint replacement, back surgery, etc.)

COVERAGE

Patient risk factors are stratified by clinicians using published criteria. Older age is associated with decreased physiologic reserve and greater morbidity if a complication occurs. However, chronic disorders are more associated with increased postoperative morbidity and mortality than is age alone. Older age is not an absolute contraindication to surgery.

The OSU Health Plan Medical Director will review elective, non-cardiac, non-oncologic surgery requests when any of the following are present:

- Significant obesity with uncontrolled diabetes (BMI greater than or equal to 40 kg/m² and A1C greater than or equal to 8%)
- Uncontrolled diabetes (A1C greater than or equal to 8%)
- More than 3 cardiac risk factors

- Risk factors include history of CAD, history of heart failure, history of cerebrovascular disease, diabetes requiring treatment with insulin, serum creatinine > 2.0 mg/dL)
- Undernutrition
 - O History of weight loss > 10% of body weight over 6 months or 5% over 1 month
 - Suggestive physical examination findings (e.g., muscle wasting, signs of specific nutritional deficiencies)
 - Low serum albumin levels (less than 2.8 g/dL)

For members with significant conditions or co-morbidities, the risk/benefit of the elective surgery should be appropriately addressed in the medical record.

REFERENCES

- American Academy of Orthopaedic Surgeons. (2015). Surgical management of osteoarthritis of the knee evidence-based clinical practice guideline. Rosemont, IL: American Academy of Orthopaedic Surgeons.
- Mohabir, P. K., & Gurney, J. (2015). *Preoperative evaluation*. Merck Manual. Retrieved from http://www.merckmanuals.com/professional/special-subjects/care-of-the-surgical-patient/preoperative-evaluation
- Underwood, P., Askari, R., Hurwitz, S., Chamarthi, B., Garg, R. (2014). Preoperative A1C and clinical outcomes in patients with diabetes undergoing major noncardiac surgical procedures. *Diabetes Care*, 37, 611-16.