### Preoperative Care Algorithm

Review preoperative content map

### Assess for the presence of risk factors, both major and minor or contributing

<table>
<thead>
<tr>
<th>MEDICATIONS</th>
<th>MEDICAL HISTORY</th>
<th>PRIOR SURGICAL HX</th>
<th>HEALTH HISTORY</th>
<th>FAMILY HISTORY</th>
<th>SURGERY PLANNED</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Age greater than 65 years</td>
<td>□ Anticoagulants</td>
<td>□ Anesthesia reactions</td>
<td>□ Malnutrition</td>
<td>□ Malignant hyperthermia</td>
<td>□ Neck, oral or facial procedure</td>
</tr>
<tr>
<td>□ Antihypertensive therapy</td>
<td>□ NSAIDS/ASA</td>
<td>□ Cardiac disease</td>
<td>□ Alcohol use</td>
<td>□ Anemia</td>
<td>□ Chest or high abdominal procedure</td>
</tr>
<tr>
<td>□ OTC medications</td>
<td></td>
<td>□ Decreased immunity</td>
<td>□ Substance abuse</td>
<td>□ Dehydration</td>
<td></td>
</tr>
<tr>
<td>□ Herbal supplements</td>
<td></td>
<td>□ Diabetes/Endocrine</td>
<td>□ Bleeding disorder</td>
<td>□ Any chronic disease</td>
<td></td>
</tr>
<tr>
<td>□ Pulmonary disease</td>
<td></td>
<td>□ Infection</td>
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### Are Risk Factors Present?

#### YES

**Initiate the plan of care for a Risk for Ineffective Therapeutic Regimen management:**

Teaching focuses on instruction in:

- Preoperative preparation:
  - Dietary restrictions (NPO after midnight)
  - No Smoking/alcohol and OTC meds/supplements (aspirin, NSAIDS, or vitamins/herbal supplements)
  - Do Preps (colon) as instructed
- Teach post-op equipment:
  - cough and deep breathe (C&DB), Diaphragmatic breathing, splinting, DVT prophylaxis, Incentive spirometer and post-operative exercises according to type of surgery
- Instruct client to notify surgeon and center if client develops s/s of illness (esp. respiratory) on day of surgery
- Bring hearing aids, glasses, dentures, assistive devices to hospital with you
- Remove eye makeup and nail polish
- Leave valuables with family members
- Arrange to have a family member present for the duration for communication and for transportation if same day discharge.

#### NO

**Follow collaborative plan of care based on risk factor:**

- **Advanced age:**
  - PC: respiratory insufficiency
  - PC: cardiovascular insufficiency
- **Medications therapy**
  - PC: medication therapy adverse effects
- **Medical History**
  - PC: Surgical Site Infection
  - PC: electrolyte disturbance
  - PC: acute respiratory failure
  - PC: decreased cardiac output
  - PC: bleeding
  - PC: anemia
  - PC: hypovolemia
  - PC: renal failure
- **Surgical Hx**
  - PC: malignant hyperthermia
  - PC: respiratory
- **Malnutrition/Obesity Social Hx**
  - PC: wound dehiscence
  - PC: apnea
  - PC: respiratory
  - PC: Delirium tremens
- **Oral/facial Thoracic or abdominal surgery**
  - PC: airway obstruction
  - PC: hypoventilation
<table>
<thead>
<tr>
<th>RISK FACTORS</th>
<th>COLLABORATIVE PROBLEM</th>
<th>NURSING CONSIDERATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced age:</td>
<td>PC: respiratory insufficiency PC: cardiovascular insufficiency</td>
<td>Expect that anesthesia will use the least sedation/anesthesia required to avoid respiratory complications post-operatively whenever possible. Expect clients to get a chest Xray and 12 lead EKG to identify CV disease and be monitored postoperatively more carefully for CV complication.</td>
</tr>
<tr>
<td>Medications therapy</td>
<td>PC: medication therapy adverse effects</td>
<td>Antihypertensive agents are taken with small sips of water. Anticoagulants are held for up to 7 days prior to most surgeries. If OTC medications/herbal agents are taken, monitor closely for side effects. NSAIDS/Aspirin increase risk for bleeding.</td>
</tr>
<tr>
<td>Medical History</td>
<td>PC: Surgical Site Infection (SSI) PC: electrolyte disturbance PC: acute respiratory failure PC: decreased cardiac output PC: bleeding PC: anemia PC: hypovolemia PC: renal failure</td>
<td>Clients with decreased immunity are at greater risk for SSI and sepsis. Prophylactic antibiotics may be used and increased surveillance for infection initiated. Assess carefully for undetected infection prior to surgery. Diabetics are at great risk for hypo/hyperglycemia and take insulin as usual the night before. Early AM booking of surgery is arranged. If fasting, Insulin therapy is reduced as per MD; they generally do not take oral antidiabetics &amp; check their blood sugar every two hours. Clients with respiratory disease, frequently have baseline pulmonary function tests and bring inhalers with them on day of surgery. Clients with CV disease frequently have a medical clearance for surgery, take cardiac meds according to Rx with small sips of water and may require telemetry or ICU care post-operatively depending on type of surgery. Clients with coagulopathy may require pre-procedure transfusion of clotting factors and Vit K administration especially if induced by coumadin therapy. Clients with anemias may require blood transfusion and iron, folic acid and B12 supplementation. Dehydrated clients require fluid resuscitation with IV therapy and careful monitoring of renal perfusion. Clients at risk for renal failure require hourly I/O and vital sign measurement. Serial BUN creatinine levels may be drawn.</td>
</tr>
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<td>Surgical Hx</td>
<td>PC: malignant hyperthermia PC: respiratory</td>
<td>Expect that if a client reports that a family member had an adverse anesthesia event, the client will either be tested or an alternative to general anesthesia will be explored.</td>
</tr>
<tr>
<td>Malnutrition/ Obesity Social Hx</td>
<td>PC: impaired wound healing PC: apnea PC: respiratory PC: Delirium tremens</td>
<td>Expect that both malnourished and obese clients are at high risk for impaired wound healing. Obese clients are at greater risk for apnea that is exacerbated by anesthesia and sedation. Obese clients are at greater risk for impaired breathing events. Alcohol (ETOH) abuse can trigger complication of DTs with abrupt sustained withdrawal.</td>
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<tr>
<td>Oral/facial Thoracic or abdominal surgery</td>
<td>PC: airway obstruction PC: hypoventilation</td>
<td>Surgical site impacts restoration of spontaneous breathing postoperatively.</td>
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