Pre-operative and Pre-procedure Insulin Guidelines
(Adults with type 1 or type 2 diabetes)

General guidelines
1. Assessment of the patient’s baseline control will help in decision-making (home blood glucose measurements, HbA1c, hypoglycemia episodes etc).
2. Most patients with Type 1 diabetes should be using a combination of a basal (intermediate /long-acting) insulin and bolus (rapid/short-acting) insulin. Type 1 or type 2 patients with unusual insulin regimens, or with poor control, may benefit from having their endocrinologist or internist assist with preoperative insulin dosing. Alternatively, a preoperative endocrine or medicine consultation may be in order for elective procedures.
3. Blood glucose should be checked every 1-2 hours before, during and after procedure.
4. Preoperative insulin infusions along with dextrose containing fluids (e.g., D5W) are appropriate for patients undergoing procedures over 2 hours long, or if a prolonged NPO status is expected. Target blood glucose on insulin drip to 100-140mg/dl.

For Patients with Type 1 Diabetes
Basal insulin must not be withheld in patients with type 1 diabetes, or they will go into diabetic ketoacidosis.

For Patients with Type 2 Diabetes
Oral diabetes medications are generally held on the day of surgery.

A. Night before procedure
   1) Patient taking evening or bedtime insulin
      • NPH/Levemir® (detemir) – Give usual dose
      • Mixed insulins (70/30, 75/25 etc) – Give usual dose
      • Lantus® (glargine) – Give 80% of usual dose
   2) Patients using insulin pump
      • Continue basal rate

B. Morning of procedure (for patients who are NPO)
   1) Morning insulin injections
      Morning intermediate or long-acting insulin
      • NPH/Levemir® (detemir) – Give 1/2 of usual morning dose
      • Lantus® (glargine) - Give 80% of usual morning dose
      • Mixed insulin – Give 1/3 usual morning dose

      Morning short-acting insulin (Novolog®, Humalog®, Apidra®, Regular)
      • Hold all short acting insulin

   2) Patients using insulin pump
      • Continue basal insulin rate
      • Intra-operative and postoperative use of the pump needs to be addressed on an individual basis.