GUIDELINES FOR INPATIENT DIABETES MANAGEMENT

These recommendations do not take into account individual patient situations, and do not substitute for clinical judgment. Changes in diet, activity, medications (i.e.: steroids), and acuity of illness (i.e.: infection, renal insufficiency) may quickly change treatment requirements

Inpatient Blood Glucose Targets: 80-180mg/dL (In the ICU setting: 80-150 mg/dL)

Initiate Hypoglycemia Treatment Protocol (HTP) for capillary blood glucoses <70mg/dL

Suggested timing of Capillary Blood Glucose (CBG) Monitoring:
- Q 4 hours: patients with consistent oral intake at mealtimes
- BID (before breakfast and supper): stable patients receiving oral agents or one insulin injection daily
- Q 6 hours: patients who are NPO or receiving continuous nutrition over 24 hours
- Q 4 hours: patients who are NPO or receiving continuous nutrition with fluctuating blood glucoses requiring close monitoring
- Q 3 AM: added to QID or BID regimens for patients at risk for nocturnal hypoglycemia

Initiating Subcutaneous Insulin: Usual starting dose is 0.2-0.4 units/kg/day
- If NPH used as the basal insulin, give 1/2 to 2/3 of total daily dose in AM and 1/3 to 1/2 in PM
- If insulin glargine (Lantus®) is used as the basal insulin, start once daily in AM or PM
- 30-50% of total daily dose is given as short or rapid acting insulin as Nutritional/Prandial in 2-3 divided doses with meals

Managing Subcutaneous Insulin Therapy: General Guidelines for the prescriber (all insulin MUST be ordered in number of units to be given)

Adjusting subcutaneous insulin
- If 2 or more CBG were < 80 mg/dL – use 80% of previous day’s total daily dose
- If 2 or more CBG were > 180 mg/dL and none were < 80 mg/dL, increase total daily dose by 10%
- If patient is made NPO
  - NPH insulin: Give ½ usual dose plus correction insulin
  - Insulin glargine (Lantus®): Give 50-80% of usual dose plus correction insulin
  - Pre-mixed insulin: Give 1/3 of the usual dose as NPH (for example: for 30 units 70/30, give 10 units NPH)—this approximates ½ the usual NPH component of the pre-mixed insulin dose
  - When full doses of basal insulin are given, and patient is made NPO
    - For patients previously eating: begin IV of D5 at 75-100 ml/hour (if able to tolerate IV fluids)
    - For patients previously on enteral feedings: begin D10W at the same rate of enteral feeding,
    - Continue IV fluid for 12 hours following last NPH dose or 24 hours following last glargine (Lantus®) dose

Suggested Correction Scale based on clinical presentation
- Very Low Dose Scale: Suggested starting point for thin and elderly and those on nutritional insulin with each meal
- Low Dose Scale: Usual suggested starting point for most patients, including those being initiated on TPN
- Moderate Dose Scale: Suggested for insulin-resistant patients and those receiving high dose corticosteroids
- High Dose Scale: Used rarely except for patients with severe insulin resistance

Oral Diabetes Medications:
- May be continued during hospitalization unless contraindicated
- To avoid hypoglycemia, hold sulfonylureas and nonsulfonylurea insulin secretagogues (repaglinide [Prandin®] or nateglinide [Starlix®]) if patient is NPO or has significantly lower nutritional intake or renal function from baseline
- Discontinue metformin and thiazolidinediones (pioglitazone [Avandia®] or rosiglitazone [Actos®]) for acute exacerbations of CHF
- Discontinue metformin for renal insufficiency and hold at the time of and for at least 48 hours after iodinated contrast dye; restart when serum creatinine <1.5 in men and <1.4 in women

Pre-mixed Insulin: HumuLIN® 70/30; NovoLOG® Mix 70/30; HumaLOG® Mix 75/25; HumuLIN® 50/50
- Pre-mixed combination of intermediate acting and short or rapid acting insulin (basal and nutritional/prandial)
- Pre-mixed formulations do not allow for precise dose adjustments

Suggested Correction Scale based on clinical presentation
- Very Low Dose Scale: Suggested starting point for thin and elderly and those on nutritional insulin with each meal
- Low Dose Scale: Usual suggested starting point for most patients, including those being initiated on TPN
- Moderate Dose Scale: Suggested for insulin-resistant patients and those receiving high dose corticosteroids
- High Dose Scale: Used rarely except for patients with severe insulin resistance

Oral Diabetes Medications:
- May be continued during hospitalization unless contraindicated
- To avoid hypoglycemia, hold sulfonylureas and nonsulfonylurea insulin secretagogues (repaglinide [Prandin®] or nateglinide [Starlix®]) if patient is NPO or has significantly lower nutritional intake or renal function from baseline
- Discontinue metformin and thiazolidinediones (pioglitazone [Avandia®] or rosiglitazone [Actos®]) for acute exacerbations of CHF
- Discontinue metformin for renal insufficiency and hold at the time of and for at least 48 hours after iodinated contrast dye; restart when serum creatinine <1.5 in men and <1.4 in women