**METHODS**

An integrative literature review was conducted using Cochrane, CINAHL Plus, PubMed and the National Guideline Clearing House. Key words searched included hyperglycemia, inpatient diabetes, pre-operative, surgical, NPO, hospitalized, Type 1, Type 2 diabetes.

**Bolus (Prandial/meal time)**: A fast acting insulin given at meal time to prevent hyperglycemia (hold if NPO).

**Correction**—should not be confused with "sliding scale insulin". Should be customized to match insulin sensitivity for each patient, based on weight or total daily insulin requirement (AHRQ 2012).

**Sliding Scale**—refers to a set amount of insulin administered for hyperglycemia without regard to the timing of food. Presence or absence of pre-existing insulin administration, or individualization of patient’s sensitivity to insulin. Intensive Control—attempt to mimic the body’s normal pattern of insulin secretion to achieve tighter glucose control.

**THEORETICAL FRAMEWORK**

- Basal—a constant source of insulin to maintain blood glucose levels while fasting. Suppresses gluconeogenesis and ketogenesis.

**DEFINITIONS**

- Basal—a constant source of insulin to maintain blood glucose levels while fasting. Suppresses gluconeogenesis and ketogenesis.

**RESULTS**

- Insulin therapy is the preferred method for achieving glycemic control in hospitalized patients.
- All patients with diabetes treated with insulin at home should be treated with a scheduled subcutaneous insulin regimen in the acute care setting.
- For patients who are not eating, basal insulin is continued once daily (glargine or detemir) or twice daily (detemir/neutral protamine Hagedorn), plus correction doses of a rapid insulin analog (aspart, lispro, glulisine) or regular insulin every 4-6 hours as needed. Withhold mealtimes insulin. (AHRQ 2012)

**CONCLUSION**

- Prolonged use of sliding scale insulin (SSI) therapy be avoided as the sole method for glycemic control in hyperglycemic patients with history of diabetes during hospitalization.
- Treatment with insulin glargine and glulisine resulted in significant improvement in glycemic control compared with that achieved with the use of sliding scale alone.
- A basal insulin plus correction regimen is the preferred treatment for non-critically ill patients, not eating or drinking. The implementation of standardized insulin order sets requires key concepts promoting the use of basal and correction/sliding scale insulin, with the patient who is NPO, preventing the single use of sliding scale (Maynard et al., 2008). The above interventions are key to reducing complications associated with severe hyperglycemia and hypoglycemia in hospitalized patients.