Tandem X2 Insulin Pump:
Information for School Nurses

Basal-IQ

- Conventional pump therapy
  - Basal delivery rates pre-programmed
  - User gives boluses for meals and high blood sugar correction

- Addition of Predictive Low Glucose Suspend technology (“PLGS”)
  - Automatically suspends basal insulin delivery when sensor glucose is predicted to be < 80 mg/dL in next 30 minutes
  - Automatically resumes insulin delivery when glucose starts to rise

**TIP:** If pump is suspended at meal-time, but glucose is not low, manually resume insulin delivery to give bolus for carbs

Control-IQ

- Hybrid Closed Loop (HCL) therapy
  - Basal delivery auto-calculated by pump
  - Auto-correction boluses calculated by pump
  - User gives boluses for meals and may give high blood sugar correction boluses

- Automatically increases or decreases programmed basal rate if glucose predicted to be > 160 mg/dL or < 112.5 mg/dL, respectively
- Automatically suspends insulin delivery if glucose predicted to be < 70 mg/dL
- Delivers auto-correction bolus if glucose predicted to be > 180 mg/dL (max. 1/hr.)

**TIP:** If sensor glucose is < 110 mg/dL, pump will prompt user to consider reducing bolus calculation. Press NO to get full insulin dose for carbohydrates

THE BIG PICTURE

**Important to give meal-time boluses before meal for both systems**
- Entering carbs for meals into bolus calculator required for Basal IQ AND Control IQ

**High BG correction boluses beneficial for both systems**
- Basal IQ does NOT increase insulin delivery in response to high blood glucose
- Auto-boluses in Control IQ are only 60% of the full correction dose
- CGM value will auto-populate into bolus calculator, making correction boluses easy to give as needed

**Dexcom G6 used for both systems**
- Dexcom G6 CGM can be used directly for treatment decisions, without the need for a fingerstick check with a BG meter

**Management of hyperglycemia and hypoglycemia will remain the same, per the Standards of Care for Diabetes Management in School**
- If ketones are present, a syringe injection should be given and Control IQ should be turned off

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