Table 3
Individualized Health Plan (IHP) for Student with Diabetes Using Insulin Pump

Student: _____DOB:_____ School: _____ Grade: _____

Physician: _____Phone:_____

Diabetes Educator:_____

Parent name(s) and phone number(s) _____

_____

WHEN TO CHECK BLOOD GLUCOSE: *For provision of student safety while limiting disruption to learning*

☑ **Always for signs & symptoms of low/high blood glucose, when does not feel well and/or behavior concerns**

☐ Before School Program ☐ Before Snack ☐ Mid-morning ☐ After School Program/Extracurricular Activity

☐ Before Lunch ☐ After Lunch ☐ Recess ☐ Before PE ☐ After PE

☐ School Dismissal ☐ Before riding bus/walking home ☐ 2 hrs after correction

☐ Other: _____

TARGET RANGE – Blood/CGM Glucose: ☐ _____ to ☐ _____

☐ (suggested for < 6 y.o.) **70-150 mg/dL (3.9-8.3 mmol/L)**

☐ (suggested for 6 – 17 y.o) **70-130 mg/dL (3.9-7.2 mmol/L)**

☐ (suggested for > 17 y.o.) **70-130 mg/dL (3.9-7.2 mmol/L)**

Notification to Parents if blood/CGM glucose is less than _____ or greater than: _____

The following devices may be used for blood glucose in place of finger stick:
(See instructions in Table 1, Standards of Care, for instructions on when these may be used.)

☐ Dexcom G5/G6 ☐ Freestyle Libre ☐ Other:_____

The following two sections are discussed in more detail in the Standards of Care (Table 1)

HYPOGLYCEMIA: See Standards of Care (Table 1) for more information.

Student should be accompanied to health office if symptomatic or blood/CGM glucose below _____.

- If symptomatic but glucose meter not available, treat as indicated for mild symptoms below.
- If blood glucose in range _____ – _____ but symptomatic, treat with 10 to 15 gm carbohydrate snack.
- If mild symptoms (e.g., shaky, hungry, pale) test BG and if below _____, treat with juice, glucose tabs, etc. every 10-15 min until BG above _____. Then give 10-15 gm carb snack or give lunch.
- Do not give insulin for glucose used to treat hypoglycemia. If at lunchtime, wait to give meal insulin until after the meal.
- If moderate symptoms (e.g., not thinking clearly), they may be unable to drink independently. Test BG and administer sugar drink or glucose gel. If unable to administer, may use intranasal glucagon (Baqsimi, 3 mg) if available. Re-test every 15 minutes until BG above _____. Then give a snack that includes 10-15 gm carbs, or lunch.
- If severe reaction (seizure, unconscious), test BG and administer glucagon _____units (____cc/mL) IM into thigh; or, if available, intranasal glucagon (Baqsimi, 3 mg) may be used instead. ***Give nothing by mouth! SUSPEND OR DISCONNECT PUMP. CALL 911 AND PARENT.***
- Other: _____

HYPERGLYCEMIA AND KETONE TESTING: (see **Pump Insulin Dosing** orders below):

- If BG (by fingerstick or CGM) is above the target range, and it has been over 3 hours since the last dose of insulin, provide insulin for BG correction as indicated in the Correction Bolus orders below. If at lunchtime, include the insulin to cover the meal carbohydrates, as in the Insulin to Carbohydrate orders below.
- The school nurse should take into consideration upcoming activities, including PE, lunch dosing, walking home, after-school activities, etc., when giving insulin corrections for high BG (for both injections and pumps). *If the correction factor is not available, or there is not a sliding scale for insulin dosage, contact the diabetes care-provider for a one-time order.*
- If BG greater than 300 mg/dL (16.7 mmol/L) after two consecutive checks (≈ 1-2 hours apart), or if illness, such as nausea/vomiting, TEST KETONES. Check one: ☐ blood ☐ urine
  - ◊ If no method to check ketones is available, call parents to come to do the ketone check or to take student home to monitor and treat.
  - ◊ If ketones are below moderate in urine or 1.0 mmol/L in blood, student may require insulin injection. First, contact parent. If parents are not available, call diabetes care-provider for further instructions.
  - ◊ Recommend student be released to parents when ketones are moderate or large in urine or above 1.0 mmol/L in blood, **or** if student has symptoms of illness (e.g., nausea, vomiting), in order to be treated and monitored more closely by parent/guardian.
  - ◊ If ketones present, provide water and keep student from exercise.
- ***Potential pump malfunction:*** The concern for a student on a pump with prolonged hyperglycemia is the possibility of blocked insulin tubing and the risk of going into Diabetic Ketoacidosis (DKA). This can happen after 2 or 3 hours without insulin. Unlicensed assistive personnel should contact school nurse or diabetes care-provider for further instructions regarding insulin by injection or new infusion set by parent or independent student.
- Other: _____

PUMP INSULIN DOSING ORDERS (Insulin-to-Carb Ratios Plus the High BG Correction): Enter BG and approximate grams of carbs to be eaten. A suggested insulin dose will appear. Then just press "accept" or "enter" to give bolus.

Insulin Pump: (Type of pump: _____; type of insulin in pump:_____)

- Pump settings are established by the student's healthcare-provider and should not be changed by the school staff. All setting changes to be made at home or by student authorized to provide self-care.
- Parents will set alarms for pumps and CGMs sparingly to avoid unnecessary disruption of school activities (i.e., set alarms for blood glucose levels that require immediate action). Parents will notify school nurse of the parameters (e.g., alarm set for BG below 70 mg/dL [3.9 mmol/L]).
- Alarms set for this student : Lower limit _____ High glucose alarm:_____

Correction Bolus:

- Provide correction bolus per pump calculator. Corrections should not be given more frequently than every 2 hours. The blood/CGM glucose level should be entered into the pump for calculation of pump-calculated correction bolus. Press "enter" or "accept" to give the bolus. See below if pump not working.

Sensitivity/Correction Factor: (The correction factor below is to be used only if pump is not working.)

Time	Correction Dose
_____ to _____	Give _____ units of insulin for every _____ above _____.
_____ to _____	Give _____ units of insulin for every _____ above _____.
_____ to _____	Give _____ units of insulin for every _____ above _____.
_____ to _____	Give _____ units of insulin for every _____ above _____.

Carbohydrates and Insulin Dosage per pump at: ☐ Breakfast ☐ Snack ☐ Lunch ☐ Other:

Bolus for carbohydrates should occur: ☐ Approximately 20 minutes prior to lunch/snack

☐ Immediately before lunch/snack ☐ Immediately after lunch/snack ☐ Split ½ before lunch & ½ after lunch

☐ Other: _____

Insulin to Carbohydrate (I/C) ratio dose (to use if food to be consumed; typically programmed into pump):

Time	Carbohydrate ratio
_____ to _____	1 unit of insulin per _____ grams of carbohydrate
_____ to _____	1 unit of insulin per _____ grams of carbohydrate
_____ to _____	1 unit of insulin per _____ grams of carbohydrate
_____ to _____	1 unit of insulin per _____ grams of carbohydrate

☐ Parent/guardian authorized to increase or decrease insulin to carb ratio 1 unit +/- 5 grams of carbohydrates

Insulin Pump Basal Rates: (The pump gives these doses automatically and they are included only for information.)

Start Time:	Units per Hour:

Copy as needed.

PUMP MALFUNCTIONS: Disconnect pump when malfunctioning (usually due to plugged pump tubing).

- Check ketones if needed (see Hyperglycemia and Ketone Testing section above)
- If ketones are moderate/large (urine) or greater than 1.0 mmol/L (blood), follow instructions in Hyperglycemia and Ketone Testing section above.
- If pump calculator is operational, the insulin dosing should be calculated by using the pump bolus calculator and then insulin given by injection.
- If pump calculator is not operational, give insulin by injection using Insulin to Carbohydrate Ratio and Correction Factor above.

Student's Self Care: (Ability level determined by school nurse and parent with input by healthcare-provider)

Independently monitors blood/CGM glucose	☐ Yes	☐ No
Independently treats mild hypoglycemia	☐ Yes	☐ No
Independently counts carbohydrates	☐ Yes	☐ No
Independently tests urine/blood ketones	☐ Yes	☐ No
Independently manages pump boluses	☐ Yes	☐ No
Self-injects with verification of dosage	☐ Yes	☐ No, injections to be done by trained staff
Independently inserts infusion sets	☐ Yes	☐ No
Troubleshoots all alarms	☐ Yes	☐ No

Additional Information/Comments:

Signatures:
My signature below provides authorization for the written orders above and exchange of health information to assist the school nurse. I understand that all procedures will be implemented in accordance with state laws and regulations and may be performed by unlicensed designated school personnel under the training and supervision provided by the school nurse. This order is for a maximum of one year.

Physician: _____ Date: _____

Parent: _____ Date: _____

School Nurse: _____ Date: _____