

## HITS Questionnaire for T1DX-QI:

This questionnaire to only trigger for patients with a diagnosis of Type 1 Diabetes in the patient's problem list and the following visit types: NP, NP DIABETES, NP PEDIATRICS, NP URGENT, NP VIDEO VISIT, PHONE VISIT, RV, RV EXTENDED, RV EXTENDED VIDEO VISIT, RV SPECIAL, RV VIDEO VISIT

1). Is your visit today for Type 1 Diabetes (yes/no)? *If no, then questionnaire ends. If yes, proceed to questions 2-9 below.*

2). Have you had any Emergency Department (ED) Visits and/or Inpatient Admissions for Diabetic Ketoacidosis (DKA) OR severe low blood sugar since the last office visit? [severe low blood glucose defined as: glucose < 54 mg/dL with inability to eat/drink with any of the following symptoms: unconsciousness, convulsions (seizures), assistance from another person (bystander/medical personnel)] (yes, no)

- *If No, end this series of questions for question 2 only.*
- *If Yes, please answer the questions below:*

Number of ED visits due to DKA: a). 0; b). 1; c). 2; d). 3; e). 4; f). 5; g). 6; h). 7; i). 8; j). 9; k). 10 or more.

Number of Inpatient hospitalizations due to DKA: a). 0; b). 1; c). 2; d). 3; e). 4; f). 5; g). 6; h). 7; i). 8; j). 9; k). 10 or more.

Number of ED visits due to severe hypoglycemia: a). 0; b). 1; c). 2; d). 3; e). 4; f). 5; g). 6; h). 7; i). 8; j). 9; k). 10 or more.

Number of Inpatient hospitalizations due to severe hypoglycemia: a). 0; b). 1; c). 2; d). 3; e). 4; f). 5; g). 6; h). 7; i). 8; j). 9; k). 10 or more.

4). Do you have a continuous glucose monitor (CGM)? (yes/no).

*If No, end this series of questions for question 4 only.*

*Only appear if Answer to Question 4 is "yes":*

- 4a. In the last 2 weeks, how many days have you used a Continuous Glucose Monitor (CGM)? A). 10-14 days; b). 1-9 days; c). 0 days
- 4b. Brand of CGM: a). Dexcom; b). Medtronic; c). Abbott; d). Senseonics; i). Other
- 4c. Do you have access to your CGM report with Time in Range (defined as the time spent in the last 14 days with a blood sugar between 70-180 mg/dL)? (yes, no or I don't know.)

*Only appear if answer to question 4c is "yes":*

- 4d. Ensure the report is showing the last 14 days. Enter the percent time in range (70-180 mg/dL) and the percent time in low range (< 70 mg/dL) based on the download (of note: Low range should be the sum of "low" and "very low").

Percent (%) Time-in-Range (70-180 mg/dL) in the Last 14 Days:

Percent (%) Time Below Range (< 70 mg/dL) in Last 14 Days:

5). In the last 2 weeks, on average, how many times per day are you checking your blood sugar using a meter? a). 0; b). 1; c). 2; d). 3; e). 4; f). 5; g). 6; h). 7; i). 8; j). 9; k). 10 or more; l). Not using meter because I use a CGM.

6). In the last 2 weeks, on average how many rapid-acting insulin (e.g., Humalog, Novolog, or Fiasp) boluses per day are you giving? *If you use a pump, count the number of times per day you typically give yourself a bolus, but do not count “automatic” boluses given by the pump. For example, an individual who eats 3 times a day who gives insulin at each meal would answer 3.* a). 0; b). 1; c). 2; d). 3; e). 4; f). 5; g). 6; h). 7; i). 8; j). 9; k). 10 or more.

7). In the last 2 weeks, how did you take your insulin? (If you used a pump for 12 days and pens for 2 days, then you would select what you used most commonly during the period, “Insulin Pump Therapy”) A). Insulin Pump Therapy; b). Multiple Daily Injections (both short-acting and long-acting insulin); c). Basal Insulin Only; d). Rapid Acting Insulin Only; e). No Insulin.

- *Only appear if Answer to 7 is “A). Insulin Pump Therapy”:* 7). a. In the last 2 weeks, how many days have you used your insulin pump? a). 10-14 days; b). 1-9 days; c). 0 days.
- *Only appear if Answer to 7 is “A). Insulin Pump Therapy”:* 7). b. What type of pump are you using? a). Medtronic 670G; b). Medtronic 770G; c). Medtronic 780G; d). Tandem T-slim:x2; e). Tandem T-Slim Mobi; f). Beta Bionics iLet; g). Omnipod Eros; h). Omnipod Dash; i). Omnipod 5; j). Do-It-Yourself (DIY) Pump (e.g., Open APS or Looping)); k). Other?
- *Only appear if Answer to 7 is “A). Insulin Pump Therapy”:* 7). c. In the last 2 weeks, if your pump automatically adjusts insulin doses by communicating with a continuous glucose monitor, how many days have you used the automatic insulin adjustment feature of your pump? a). 10-14 days; b). 1-9 days; c). 0 days.

8). In the last 2 weeks, on average when do you give the majority of your rapid-acting insulin injections (e.g., Humalog, Novolog, or Fiasp, etc.) (If you bolus several minutes before the meal for 2 meals but you bolus after you eat for one meal then select “At least several minutes before the meal”.)

- At least several minutes before the meal
- Immediately before the meal
- During the meal
- After the meal

9). Since your last endocrinology visit, how many times have you reviewed your glucose data (e.g., using tools like Dexcom Clarity, T:connect, Glooko, Carelink) to identify high or low glucose patterns? a). 0; b). 1; c). 2; d). 3; e). 4; f). 5; g). 6; h). 7; i). 8; j). 9; k). 10 or more times

10). Since your last endocrinology visit, how many times have you or your healthcare team changed your insulin doses (for example basal or long-acting insulin doses, or carbohydrate

ratios, or correction factors)? a). 0; b). 1; c). 2; d). 3; e). 4; f). 5; g). 6; h). 7; i). 8; j). 9; k). 10 or more times