

CLOSING THE LOOP: IS THE MEALTIME INSULIN APPROACH WORKING?

THINGS TO THINK ABOUT AND POINTS TO MAKE

ASSESSING PATIENT ADHERENCE



It is recommended that physicians evaluate patient adherence utilizing the principles of motivational interviewing in order to better understand barriers to adherence. These principles include using open-ended questions, reflecting patient answers, and summarizing your discussion to clarify any miscommunication. Specific examples of motivational interviewing questions can be found below.

- **Use open ended questions.**
 - What insulin are you taking and when do you take it?
 - How often do you miss a shot?
 - How did the extra insulin shots work out?
 - What went well? What were the problems?
 - What is your plan for when you have hypoglycemia?
 - Have you had any problems with your diet and exercise plan?
 - What are your concerns about this plan?
 - Which shots are you having the most difficulty remembering to give?
- **Reflect what the patient is telling you when following up on their answers. Start sentences with phrases like:**
 - It sounds like you...
 - You mean that...
 - You're wondering if...
 - So you feel...
- **Summarize what you heard the patient tell you.**
 - Demonstrates attentiveness
 - Allows patients to clarify their statements
 - Provides direction and saves time
- **Reiterate why the approach that you're recommending would benefit the patient or adjust the plan based on what you've heard the patient tell you.**

EVALUATING BLOOD GLUCOSE LOGS

Review the blood glucose logs with the patient and assess if a dose adjustment is needed based on the following patterns:

Recommended Adjustments Based on Blood Glucose Patterns	
If improved as expected	• Continue current action plan
If fasting blood sugar is above range	• Increase basal insulin dose • Consider getting a 3AM blood sugar
If fasting blood sugar is below range or nocturnal hypoglycemia	• Decrease basal insulin dose
If both bedtime blood sugars and fasting blood sugars above range	• Increase pre-dinner insulin dose
If fasting blood sugar varies or If erratic pattern	• Indicates issue with diet/carb intake, injection technique/timing, or missed insulin doses. Suggest referral to CDE or specialist.

While evaluating the logs, ask the patient what they see. A long-term goal should be for patients to be able to identify glucose patterns and what they mean.

- If the patient sees a pattern, use it to reinforce suggested changes.
- If the patient does not see a pattern, show them what you see and ask what they think they can do to improve things further.

DECIDING WHEN TO REFER TO A CERTIFIED DIABETES EDUCATOR OR AN ENDOCRINOLOGIST

CERTIFIED DIABETES EDUCATOR

- If possible, it is recommended that all patients see a dietician or diabetes educator when first starting mealtime insulin.
- If the patient continues to have difficulty adhering to their treatment plan, a subsequent visit is recommended.
- A diabetes educator is also recommended if there are significant:
 - Patient apprehension
 - Learning barriers (e.g. matching food and insulin)
 - Skill barriers (e.g. injection technique)



ENDOCRINOLOGIST/DIABETOLOGIST

- The patient is not at goal after 6 months (e.g. consistent A1c of 9% or greater)
- Difficulty breaking hyperglycemia
- Severe or recurrent hypoglycemia despite cautious insulin therapy
- Complications arise (e.g. gastroparesis)
- Confusing or erratic patterns
- Suspect type 1 diabetes
 - Suggest first checking anti-GAD and anti-islet cell antibodies
 - Also ask patient about carb avoidance which often delays diagnosis of latent autoimmune diabetes or slowly progressive type 1 diabetes



For more information, visit www.AccurateInsulin.org

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