# Overcoming Barriers to the Initiation of Insulin Therapy

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ew recommendations for the management of type 2 diabetes call for more rapid initiation of both oral medications and insulin therapy. Although most providers agree that insulin is an efficacious approach to the management of type 2 diabetes, many still consider insulin therapy as the last resort and indicate that their patients are hesitant to take insulin. In addition, the initiation of insulin therapy is difficult in the confines of a 10-minute office visit.

#### **Assessment of Barriers**

The first step is to determine the patient's view of insulin therapy and correctly identify barriers from the patient's perspective. The discussion about the need for insulin therapy affects people differently. Some may feel angry or betrayed, others fear that insulin will add to the burden and stress of managing diabetes, and still others may feel overwhelmed or frightened.<sup>3</sup>

To determine a patient's concerns, ask questions such as:

- What do you need to know to consider insulin therapy?
- What problems do you think you will encounter?
- What do you see as the biggest negative of insulin? The greatest benefit?
- What would help you overcome your concerns?
- Are you willing to try insulin? If not, what would cause you to consider insulin?

The first response to such questions is very rarely a full accounting of the patients' true concerns. Continuing to ask questions, such as "Why do you think that is?" or "Can you tell me more about that?" will help both you and the patient better understand the existing barriers so that you can best support patients in the decision-making process.

### Patient-Identified Barriers to Insulin Therapy

The decision to initiate insulin therapy ultimately belongs to the patient with type 2 diabetes. Common barriers among patients include beliefs that insulin is a personal failure, that insulin is not effective, that insulin causes complications or even death, or that insulin injections are painful, as well as fear of hypoglycemia, loss of independence, weight gain, and cost. There are, however, strategies providers can use to decrease patient barriers to insulin therapy and assist patients with the decision-making process.<sup>4</sup>

#### Insulin as a personal failure

A common belief among patients is that the need for insulin therapy is indicative of a personal failure to manage their diabetes appropriately.<sup>2</sup> Explaining type 2 diabetes as a progressive disease of insulin resistance and β-cell failure from the onset will help to diminish or even prevent this erroneous belief. Point out to patients that they have not failed but that the other treatment options have failed them. Although many providers use insulin as a "threat" to promote meal planning and exercise behaviors,<sup>2</sup> this strategy ultimately backfires when the patient does need insulin, despite having made recommended mealtime and physical activity changes. Instead, describe

insulin as a logical step in the continuum of treatment.

#### Insulin is not effective

A surprising number of patients who participated in the Diabetes Attitudes, Wishes, and Needs study indicated that they did not believe insulin was effective for treating diabetes.<sup>2</sup> Although the reasons behind this lack of belief were not assessed, this barrier could stem from personal experiences in which friends or family members were prescribed insulin in doses insufficient to lower blood glucose levels, but still resulting in side effects such as weight gain or hypoglycemia. Although most patients think of diabetes as a "sugar" problem, pointing out to them that diabetes is actually an insulin problem and that the insulins used in therapy today are very similar to the insulin that the body naturally makes may be helpful.

In addition, providers tend to base the decision to recommend insulin on hemoglobin  $A_{\rm Ic}$  levels, whereas patients are often more concerned about the effects of diabetes and its treatment on their current lives. Assessing patients' concerns and goals is necessary to frame the messages about insulin to match their goals beyond glucose control. For example, patients who want more flexibility in their lives or more energy for activities they enjoy may be more amenable to insulin therapy if they are taught how it can be used to achieve those goals.

Insulin causes complications or death Many patients with type 2 diabetes have had experiences with diabetes through relatives or friends. The belief that dia-

betes causes complications or death often stems from these experiences. Although it is more likely that insulin might have delayed or prevented these complications, their beliefs about insulin in terms of its cause of and effect on these events continues. Although it is tempting to provide information about insulin to counteract these beliefs, facts alone often do very little to allay patients' fears. It is generally more helpful to respond by acknowledging the patient's fears and then providing information about the provider's experiences. For example, "I understand your concern, but would it help to know that I have cared for many patients with type 2 diabetes, and I have never known anyone who became impotent as a result of insulin therapy?"

Insulin injections are painful Many patients equate insulin injections with inoculations or injections of antibiotics that they have experienced in the past. Point out that insulin needles are smaller and thinner than ever before and that most patients find it less painful than testing their blood glucose levels. Other strategies that educators often use to overcome this barrier are to give a dry injection to themselves in front of the patient or to ask patients to give a dry injection to themselves at the time of the initial education, regardless of whether insulin is indicated. Insulin pens can also be helpful for patients who are concerned about the pain of injections. Although these patients are often described as "needle phobic," very few patients have true needle phobias. For those who do, psychological counseling is often needed and effective.

#### Fear of hypoglycemia

The fear of hypoglycemia often stems from observing people with diabetes who take insulin. Assessing what they have observed and the outcome of the hypoglycemic event is needed to address the patient's specific fear. Point out that with the use of newer rapid-acting and

long-acting insulins, hypoglycemia is less likely to occur and that very few patients with type 2 diabetes actually have severe hypoglycemia. Reassure patients that you can teach them strategies so that they can prevent, recognize, and treat hypoglycemia and thus avoid severe events.

#### Change in lifestyle

A concern among older adults or patients who live alone is that once they begin insulin therapy, it will adversely affect their independence, either because of hypoglycemia or because they fear they will not be able to draw up or administer their own injections. Providing information about insulin pens or other devices to increase accuracy and ease of administration and about local home-care resources may help to diminish these barriers. Teaching patients to correctly identify symptoms of hypoglycemia and strategies to facilitate insulin use is also often helpful.

Other lifestyle concerns are related to timing, difficulty in traveling, and loss of spontaneity and flexibility. If patients identify these concerns, provide information about insulin regimens that offer maximum flexibility, strategies for traveling with insulin, or other identified lifestyle barriers.

Some of these barriers result from concerns about injecting insulin away from home, for example in public places or at work. Some patients worry that if they inject in public places they will be perceived as injecting illegal drugs. Insulin pens can be very helpful for overcoming this barrier by increasing patients' ability to inject discretely. Using only morning and/or bedtime insulin regimens can also eliminate this barrier for some patients.

Some patients have justifiable concerns about the loss of their jobs if they need to begin insulin therapy. Although there are some occupations for which this is true, the Americans With Disabilities Act requires employers to make reasonable accommodations for patients with diabetes, including those who take insulin. In addition, the regimen may be adjusted to allow for insulin injections to be given while patients are at home instead of at work.

Insulin causes weight gain
It is true that many patients who begin insulin therapy gain weight with improved glycemia and greater meal plan flexibility. If this is a barrier, offer to arrange a meeting with a dietitian before the initiation of insulin to identify

Insulin is too expensive

strategies to prevent weight gain.

There is no question that diabetes is expensive, particularly for patients who have limited drug coverage or no insurance at all. Generally, however, insulin is less expensive than using multiple oral medications to produce the same glycemic outcomes. The regimen may also be adjusted to decrease this barrier by using premixed insulins if co-pays are a concern or less expensive insulins for patients with no or limited drug coverage. Other strategies to reduce this barrier include teaching patients to reuse insulin syringes, adjusting the monitoring schedule to reduce the cost of strips and other supplies, providing information about the least expensive sources for insulin and other supplies in your area, prescribing less expensive insulins, and referring patients to pharmaceutical company assistance programs. Because prices can vary a great deal at different pharmacies, provide a list of prices for pharmacies in your area or suggest to patients that they shop around for the best prices. This is also a good opportunity to review all medications to determine if any could be eliminated, decreased, or provided in combination form to lower out-ofpocket expenditures.

## Provider-Identified Barriers to Insulin Therapy

Although patient-identified barriers are the most common reasons cited for delay in initiating insulin therapy, many providers also are hesitant to initiate insulin. Because provider attitudes are crucial for patient acceptance of insulin, it is important to determine whether "clinician inertia" is affecting your practice. Along with overcoming patient barriers, there are also strategies providers can use to overcome their own barriers to insulin therapy.

Refer patients for diabetes self-management education and medical nutrition therapy

Diabetes educators can be powerful allies in helping patients make the decision to initiate insulin therapy and assisting with insulin dose titration. Recent changes in Medicare, Medicaid, and other insurance packages have greatly increased the likelihood of reimbursement for these essential services.

Provide ongoing self-management support

Patients need not only initial education about insulin but also continued followup and support to sustain gains in diabetes self-care behaviors. Office staff can be extremely helpful in supporting and reinforcing patients' self-management efforts related to insulin therapy, particularly in the early phases, when doses are being titrated frequently.

Adopt successful strategies
Consider implementing strategies used by other successful practices, such as creating collaborative relationships with patients and designing systems to facilitate chronic disease care. Create proactive methods to evaluate outcomes and monitor results so that the time spent with patients can be used most efficiently and effectively. Establishing a plan with patients for follow up of blood glucose results by telephone or in person will also facilitate the appropriate titration of insulin and its effectiveness.

Address emotional issues

Although it is important to address concerns about diabetes in general, when discussing the initiation of insulin therapy, it is essential to ask patients about their thoughts or feelings about insulin. This is the most efficient way to ensure that the messages about insulin are supportive, tailored for each individual patient, and effective.

#### REFERENCES

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Note of disclosure: Ms. Funnell has served on advisory panels and received honoraria or consulting fees from Novo Nordisk, Eli Lilly and Co., and Sanofi-Aventis. These companies manufacture insulin products for the treatment of diabetes.