Appendix D

Examples of Strategies for Overcoming Psychological Barriers to Insulin Use (for People with Type 2 Diabetes)

There is no single strategy to address psychological barriers to insulin. The examples in this table may work for some, but not for others. However, the strategies may help you reflect on how you can support someone who experiences one or more of these barriers. Select the strategies that are appropriate for the individual and their needs.

TABLE D.1 Examples of Strategies for Overcoming Psychological Barriers to Insulin Use (for People with Type 2 Diabetes)

Explore the barrier through conversation	Inform about the barrier	Together, develop an action plan	
Explore what they know and how they feel about insulin. Enquire about their overall concerns about and problems with diabetes (e.g., the side effects of hyperglycemia could be a motivator to change). Ask whether: they know other people with type 2 diabetes using insulin or they have shared their (negative and positive) experiences, as this could influence their own beliefs/ feelings.	 Dispel misconceptions about insulin (e.g., correctly used, insulin is not the cause of complications, but can actually help to prevent them). Emphasize that diabetes is a progressive condition, and insulin is almost inevitable. Counterbalance their concerns with benefits (e.g., insulin helps to improve glycemic outcomes/gives more flexibility/energy levels/well-being/treatment satisfaction, gives more flexibility, and prevents long-term complications). Dispel the belief that not having symptoms of high blood glucose levels indicates that insulin is not needed. 	 Invite the person to complete the "Decisional balancing tool" (see Box 5.3 on page 81), as it will hel the cognitive process of weighing up pros and cons. After completing the tool, ask them to talk about their responses. This will inform the action plan. NB: It is best to postpone other changes to their treatment regimen while they process the new information and come to a decision. 	

Barrier: Concerns about Injecting (e.g., lack of confidence, pain, or worries)

Explore the barrier through conversation	Inform about the barrier	Together, develop an action plan		
 Explore in more detail the cause(s) of their concern. Ask if they have seen an insulin injection pen. Ask about previous experiences with injections or needles. If pain is experienced, explore what the reason may be. NB: For information about fear of injections, see Box 4.2 on page 56. 	Explain: > that many people fear injecting at first, but with practice this fear disappears > how to reduce pain (e.g., deep breath relaxation before injecting, or using less sensitive sites) > and the reason for the treatment regimen (type of insulin and number of injections, such as why two injections are recommended rather than one).	 If the person is experiencing pain while injecting: invite them to do an injection with you, so you can observe/talk about the technique. check their insulin sites discuss insulin use (e.g., storage) and consider new technologies and treatments (e.g., finer needles, insulin pump, and longeracting insulins). If the person is new to insulin: show them how small the needle is of an insulin injection pen demonstrate the injection (see ASSIST on pages 61 and 62) invite them to do their first injection at the appointment with you (for reassurance/encouragement) for their first injection, leave them time to feel comfortable check if they would like to make appointments for a few consecutive days, until they feel confident injecting on their own. and suggest a short "trial" period of insulin use (see ASSIST on pages 61 and 62) Assist in referring them to a certified diabetes educator to learn or improve injection techniques and work through the barriers. 		

Explore the barrier through conversation	Inform about the barrier
> Ask about their general	> Reassure the person that
concerns about their	although some people

Barrier: Concerns about Weight Gain

- weight and body shape.
- > Explore what the main obstacles are to maintaining or reducing weight.
- Ask about their expectations in relation to weight gain.
- For those already using insulin, ask about their experiences of the impact of insulin on their weight.
- although some people gain weight when they begin insulin, the weight gain is often (a) short term, and (b) counteracted with small changes to lifestyle.
- Emphasize that most people feel better physically once they begin insulin use.
- Explain that a collaborative approach (involving their PCP/endocrinologist, dietitian and/or diabetes educator) can help in minimizing the impact.

Together, develop an action plan

- Assist in developing an action plan to minimize the impact of insulin on weight (e.g., optimizing their insulin regimen and/or meal plan).
- Explain how to titrate insulin doses based on blood glucose readings and meals.
- Suggest they consider asking for help from their partner or family member in maintaining healthy eating and/or exercising.
- Assist in referring them to another health professional (e.g., a dietitian).

NB: Optimize their insulin dose to avoid over-treating.

NB: Explore weight-neutral or weight-reducing diabetes therapies (e.g., incretin-based therapies, or metformin).

Barrier: Self-Perception (e.g., feelings of failure or guilt)			
Explore the barrier through conversation	Inform about the barrier	Together, develop an action plan	
 Ask how they feel about living with diabetes. If appropriate, assess for diabetes distress (see Chapter 3), depression (see Chapter 6), and/or an anxiety disorder (see Chapter 7). 	 Dispel feelings of failure, blame, shame, etc. Emphasize that: diabetes is a progressive condition many people with type 2 diabetes need insulin and insulin is a powerful way to prevent long-term complications. 	 See Chapter 3 about how to help a person who has negative feelings around diabetes. Refer them to a mental health professional if negative feelings are persistent. 	

Barrier: Impact on Lifestyle (e.g., reduced flexibility or spontaneity, time consuming, having to give up other activities, effect on work, or cost) **Explore the barrier through** Inform about the barrier Together, develop an action plan conversation Ask about how they believe Explain the benefits of insulin, relating Problem-solve situations in which they insulin will affect their back to their specific concerns (e.g., would feel uncomfortable to inject (e.g., lifestyle. more flexibility in the timing of meals with colleagues, or in public) or how to or food choices; and feeling more continue activities after starting insulin. > Explore in more detail what energetic, allowing more activities aspect(s) of their lifestyle > Explain how to titrate insulin doses instead of less). will be impacted, as this will based on blood glucose readings and inform the action plan to > Explain that being active will have a planned activities and meals to avoid address the barrier. positive effect on insulin sensitivity. giving up activities. Suggest a short "trial" period of insulin If they are experiencing discrimination because of their diabetes (e.g., at use (see **ASSIST** on page 82). work), encourage them to contact the **NB:** For some people, a once-daily American Diabetes Association at (800) injection would reduce the impact on their DIABETES for advocacy support. lifestyle, while, for others, multiple daily Provide information about the costs injections can increase flexibility. of insulin and what subsidies are **NB:** Consider the method of insulin delivery available/how to access them. (e.g., pen versus pump).

Explore the barrier through conversation	Inform about the barrier	Together, develop an action plan	
Ask whether: they have discussed going on insulin with other people and what the reaction was others support them in going onto insulin or if they feel comfortable about injecting in front of others.	 Talk about how we cannot control what others think or say but we can control how we react to it. Discuss how other people sometimes make fun or ridicule because they don't understand or are fearful. Advise that they explain to people their need for insulin and suggest they show others their insulin pen. This may deter other people from making any further negative comments about insulin. 	If a close family member or friend does not understand the need for insulin or is worried about it, suggest they: invite them to attend the next appointment or to attend a diabetes information session (if available) and give the family member or friend an information leaflet about insulin. Inform them about online and face-to-face diabetes peer support services in their loca area and encourage them to participate to strengthen their support networks. See Appendix B.	

Barrier: Risk of Hypoglycemia			
Explore the barrier through conversation	Inform about the barrier	Together, develop an action plan	
Ask about: > their understanding of hypoglycemia > their concerns about the risk of hypoglycemia > and what they fear most about hypoglycemia (see Chapter 4).	 Explain that: hypoglycemia is a side-effect of insulin use there are strategies to prevent low glucose levels (e.g., checking blood glucose and timely treatment) the risk of severe hypoglycemia (very low blood glucose) is low in people with type 2 diabetes and training in hypoglycemia prevention/management is available. 	 Assist the person in accessing appropriate hypoglycemia prevention and management training. Implement/adapt the insulin regimen step-by-step, so that the person is safe and feels confident in their insulin use. NB: Consider lower-risk treatments (e.g., longer-acting insulin, or alternatives to insulin). 	

Barrier: Concerns about Regimen Complexity			
Explore the barrier through conversation	Inform about the barrier	Together, develop an action plan	
Ask about: > what aspects of their regimen they find complex or challenging > how adding insulin to their treatment plan would impact on this complexity > and the experienced challenges (for those already using insulin).	Recognize that at first insulin may seem to be a more complex regimen, but that they can take it step-by-step (e.g., starting off with a once-daily long-acting injection).	 Discuss and decide on a regimen that will suit the person's lifestyle, health needs, and confidence levels. Provide or assist the person to access training/resources about how to manage diabetes (e.g., how to administer insulin and check blood glucose), with specific attention to the aspects of their regimen that they find most challenging. Suggest a short "trial" period of insulin use (see ASSIST on page 82). 	

Barrier: Loss of Independence				
Explore the barrier through conversation	Inform about the barrier	Together, develop an action plan		
Explore: how they perceive loss of independence what part of their life is most likely going to change and any effects on their "freedom."	 Reassure them that using insulin does not mean loss of independence. Explain that using insulin most likely means they will gain more independence (e.g., more energy and more flexibility in when and what they eat) and be able to live a normal, healthy life. 	 Discuss and decide on a regimen that will suit the person's lifestyle, health needs, and confidence levels. Provide or assist the person to access training/resources about how to manage diabetes (e.g., how to administer insulin/check blood glucose/ avoid hypoglycemia), with specific attention to the aspects of their regimen that they find most challenging. Suggest a short "trial" period of insulin use (see ASSIST on page 82). 		

At the End of the Conversation about **Psychological Barriers to Insulin Use:**

- Ask the person how they are feeling now that you have talked about their concerns.
- Summarize the conversation and any actions you have agreed on. As part of this:
 - · Check that they feel confident and are willing to implement the action plan, and whether they expect major obstacles.
 - · Reassure them that the plan can be revised if needed.
 - Suggest some information to read at home. At the end of Chapter 5 (see page 89), there is a list of resources that may be helpful for a person who is experiencing psychological barriers to insulin use. Select one or two of these that are most relevant for the person; it is best not to overwhelm them with too much information.

References

- Barag SH. Insulin therapy for management of type 2 diabetes mellitus: strategies for initiation and long-term patient adherence. Journal of the American Osteopathic Association. 2011;111(7 suppl 5):S13-6.
- Brunton SA, Davis SN, et al. Overcoming psychological barriers to insulin use in type 2 diabetes. Clinical Cornerstone. 2006;8(Suppl 2):S19-26.
- 3. Funnell MM. Quality of life and insulin therapy in type 2 diabetes mellitus. Insulin. 2008;3(1):31-6.
- Hajos TRS, Pouwer F, et al. The longitudinal association between glycaemic control and health-related quality of life following insulin therapy optimisation in type 2 diabetes patients. A prospective observational study in secondary care. Quality of Life Research. 2012;21(8):1359-65.
- Korytkowsk M. When oral agents fail: practical barriers to starting insulin. International Journal of Obesity and Related Metabolic Disorders. 2002;26:S18-24.
- Marrero DG. Overcoming patient barriers to initiating insulin therapy in type 2 diabetes mellitus. Clinical Cornerstone. 2007;8(2):33-43.
- Peyrot M, Barnett A, et al. Factors associated with injection omission/non-adherence in the Global Attitudes of Patients and Physicians in Insulin Therapy study. Diabetes, Obesity and Metabolism. 2012;14(12):1081-7.
- Polonsky WH. Jackson RA. What's so tough about taking insulin? Addressing the problem of psychological insulin resistance in type 2 diabetes. Clinical Diabetes. 2004;22(3):147-50.
- 9. Polonsky WH, Fisher L, et al. Identifying solutions to psychological insulin resistance: an international study. Journal of Diabetes and its Complications 2019;33(4):307-14.
- 10. Wilson M, Moore MP, et al. Treatment satisfaction after commencement of insulin in type 2 diabetes. Diabetes Research and Clinical Practice. 2004; 66(3):263-7.