

## Supplementary File

Results of the literature review to identify attributes used in DCEs to elicit preferences regarding lifestyle changes, coaching, and devices.

DCE Topic	Attribute	Levels	Reference
Devices	Comfort of wearing	<ul style="list-style-type: none"> <li>- Warm and squeezing</li> <li>- Breathing and not squeezing</li> <li>- Comfortable</li> <li>- Uncomfortable</li> </ul>	Bouman et al.,2016 [1] Bunge et al., 2010 [2]
Devices	Appearance	<ul style="list-style-type: none"> <li>- Thick material and skin colored</li> <li>- Thin material and color of choice</li> <li>- Visible</li> <li>- Not visible</li> </ul>	Bouman et al.,2016 [1] Bunge et al., 2010 [2]
Devices	Help Needed	<ul style="list-style-type: none"> <li>- Help needed</li> <li>- Independently</li> <li>- No help needed while emptying your bowels</li> <li>- You need less help than you did previously</li> <li>- You need as much help as you did previously</li> <li>- You need more help than you did previously</li> </ul>	Bouman et al.,2016 [1] Nafees et al.,2016 [3]
Devices	Duration of therapy	<ul style="list-style-type: none"> <li>- 6 months</li> <li>- 15 months</li> <li>- 24 months</li> </ul>	Bouman et al.,2016 [1]
Devices	Device Hygiene	<ul style="list-style-type: none"> <li>- Hand washed, dries slowly</li> <li>- Machine washed, dries quickly</li> <li>- Mouthpiece can be washed, but not replaced</li> <li>- Mouthpiece can be replaced, but not washed</li> <li>- Mouthpiece can be cleaned with a dry cloth, but not washed or replaced</li> </ul>	Bouman et al.,2016 [1] Hawken et al.,2017 [4]
Devices	Easy to Use	<ul style="list-style-type: none"> <li>- 1 step</li> <li>- 2 to 3 steps</li> <li>- More than 4 steps</li> <li>- You will use an automatic pump (process requiring ~15 steps)</li> <li>- You will use a manual pump (process requiring ~30 steps)</li> </ul>	Hawken et al.,2017 [4] Nafees et al.,2016 [3]
Devices	Flexibility of device handling	<ul style="list-style-type: none"> <li>- Inhaler can be held in any position throughout inhalation process</li> <li>- Inhaler must be held in certain position throughout inhalation process</li> </ul>	Hawken et al.,2017 [4]
Devices	Time to use per treatment	<ul style="list-style-type: none"> <li>- 5 minutes</li> <li>- 10 minutes</li> <li>- 15 minutes</li> <li>- 25 minutes</li> <li>- 30 minutes</li> <li>- You will spend up to 30 minutes</li> <li>- You will spend up to 1 hour</li> <li>- You will spend up to 1.5 hours</li> <li>- You will spend up to 2 hours</li> </ul>	Mohamed et al.,2015 [5] Nafees et al.,2016 [3]

DCE Topic	Attribute	Levels	Reference
Devices (Coaching)	Frequency of use	<ul style="list-style-type: none"> <li>- None</li> <li>- 2 pills 3 times a day (6 pills per day)</li> <li>- 3 pills 4 times a day (12 pills per day)</li> <li>- 2 times per day</li> <li>- 3 times per day</li> <li>- Once every two days on average</li> <li>- Once every day on average</li> <li>- Twice a day on average</li> <li>- Three times a day on average</li> <li>- Once per day</li> <li>- Once per week</li> <li>- Once per month</li> <li>- Once per 3 months</li> <li>- Once per 6 months</li> <li>- Once per year</li> </ul>	Marshall et al.,2017 [6] Mohamed et al.,2015 [5] Nafees et al.,2016 [3] Quaife et al.,2016 [7]
Coaching	Training of the IP (information provider)	<ul style="list-style-type: none"> <li>- Counselor with specialized training in use of medications during pregnancy only</li> <li>- Family doctor with general health training</li> </ul>	Hancock-Howard et al.,2012 [8]
Coaching	Method of counseling and waiting time	<ul style="list-style-type: none"> <li>- Make an appointment and meet with the IP in person in 3 days</li> <li>- Call a telephone service and receive the information within 30-minutes</li> </ul>	Hancock-Howard et al.,2012 [8]
Coaching	Knowing the IP	<ul style="list-style-type: none"> <li>- You have met the IP before and they know your medical history</li> <li>- You have never met the IP</li> </ul>	Hancock-Howard et al.,2012 [8]
Coaching	Confidence in the skills of the IP	<ul style="list-style-type: none"> <li>- You have confidence in the skills of the IP</li> <li>- You know nothing about the skills of the IP</li> </ul>	Hancock-Howard et al.,2012 [8]
Coaching	Helpfulness of information	<ul style="list-style-type: none"> <li>- Enough information has been provided that you believe your question has been answered to your satisfaction</li> <li>- Some information has been provided to you, but your question has not been completely answered to your satisfaction</li> </ul>	Hancock-Howard et al.,2012 [8]
Coaching	Time away from home/office/usual activities including travel	<ul style="list-style-type: none"> <li>- More than four hours</li> <li>- 3–4 h</li> <li>- 1–2 h</li> </ul>	Spinks et al.,2016 [9]
Coaching	Wait time to get result	<ul style="list-style-type: none"> <li>- Up to three days</li> <li>- Up to one day</li> <li>- Less than four hours</li> </ul>	Spinks et al.,2016 [9]
Coaching	Who reviews the result	<ul style="list-style-type: none"> <li>- GP</li> <li>- Telederm dermatologist</li> </ul>	Spinks et al.,2016 [9]
Coaching Diabetes	Feedback on physical activity performance	<ul style="list-style-type: none"> <li>- Patient receives feedback on his or her individual performance</li> <li>- Patient's performance is compared with that of other patients</li> </ul>	Ramirez et al.,2016 [10]
Coaching Diabetes	Physical activity behavior-change education	<ul style="list-style-type: none"> <li>- Patient's doctor recommends the educational content</li> <li>- Patient specifies the type of educational content he or she wants to receive</li> </ul>	Ramirez et al.,2016 [10]
Coaching Diabetes	Frequency of messaging	<ul style="list-style-type: none"> <li>- Patient's doctor recommends how often patient should receive messages</li> <li>- Patient specifies how often he or she wants to receive messages</li> </ul>	Ramirez et al.,2016 [10]

DCE Topic	Attribute	Levels	Reference
Lifestyle Diabetes	Menu schedule	<ul style="list-style-type: none"> <li>- <i>Flexible</i> you set your own goals and develop your own menu schedule to reach these goals without the assistance of a lifestyle coach</li> <li>- <i>General</i> your lifestyle coach informs you about health and unhealthy foods, using food information and examples of recipes</li> <li>- <i>Elaborate</i> your lifestyle coach develops a menu schedule that meets your needs and wishes</li> <li>- Flexible: primarily based on the participants' own initiatives and ideas</li> <li>- General: includes general information on a healthy diet and provides example recipes</li> <li>- Elaborate: a patient tailored schedule that is completely prepared by the lifestyle coach</li> <li>- Flexible (you composed this schedule)</li> <li>- General (with information about diet and examples of recipes)</li> <li>- Elaborate (this schedule is composed for you and tailored to your needs)</li> </ul>	Salampessy et al.,2015 [11] Veldwijk et al.,2013 [12] Wanders et al.,2014 [13]
Lifestyle Diabetes	Physical activity schedule	<ul style="list-style-type: none"> <li>- Patient's doctor recommends physical activity goals</li> <li>- Patient selects his or her own personalized physical activity goals</li> <li>- <i>Flexible</i> you set your own goals and develop your own activity schedule to reach these goals without the assistance of a lifestyle coach</li> <li>- <i>General</i> your lifestyle coach informs you about what physical activities would be good for you, using information about physical activity and examples of exercises</li> <li>- <i>Elaborate</i> your lifestyle coach develops a physical activity schedule that meets your needs and wishes</li> <li>- Flexible: primarily based on the participants' own initiatives and ideas</li> <li>- General: includes general information on PA, and provides example exercises</li> <li>- Elaborate: a patient tailored schedule that is completely prepared by the lifestyle coach</li> <li>- Flexible (you composed this schedule)</li> <li>- General (with information about physical activity and examples of exercises)</li> <li>- Elaborate (this schedule is composed for you and tailored to your needs)</li> </ul>	Ramirez et al.,2016 [10] Salampessy et al.,2015 [11] Veldwijk et al.,2013 [12] Wanders et al.,2014 [13]

DCE Topic	Attribute	Levels	Reference
Coaching Lifestyle Diabetes	Consultation Structure / Social support	<ul style="list-style-type: none"> <li>- Family members learn how to offer support</li> <li>- Patient meets other patients so they can support one another</li> <li>- <i>Individual</i> the consultations of the lifestyle program are individually</li> <li>- <i>Consultation 5</i> the consultations of the lifestyle program are in groups of 5 other patients</li> <li>- <i>Consultation 10</i> the consultations of the lifestyle program are in groups of 10 other patients</li> <li>- Individually</li> <li>- Groups with 5 other T2DM patients</li> <li>- Groups with 10 other T2DM patients</li> <li>- individual</li> <li>- in a group with 5 other people</li> <li>- in a group with 10 other people</li> </ul>	Ramirez et al.,2016 [10] Salampessy et al.,2015 [11] Veldwijk et al.,2013 [12] Wanders et al.,2014 [13]
Lifestyle Diabetes	Time spent on the program	<ul style="list-style-type: none"> <li>- 2.5 hours per week</li> <li>- 4 hours per week</li> </ul>	Van Gils et al.,2011 [14]
Lifestyle Diabetes	Arrangement physical activity lessons	<ul style="list-style-type: none"> <li>- Individually with men and women</li> <li>- With people of the same gender</li> </ul>	Van Gils et al.,2011 [14]
Lifestyle Diabetes	Group activity	<ul style="list-style-type: none"> <li>- Only with people without diabetes</li> <li>- Only with other diabetes patients</li> </ul>	Van Gils et al.,2011 [14]
Lifestyle Diabetes	Sports activity	<ul style="list-style-type: none"> <li>- Walking/cycling</li> <li>- Fitness (treadmill, rowing machine, bicycle)</li> </ul>	Van Gils et al.,2011 [14]
Lifestyle Diabetes	Counseling	<ul style="list-style-type: none"> <li>- None</li> <li>- Physical therapist/sports teacher</li> </ul>	Van Gils et al.,2011 [14]

### References of supplementary material

- [1] Bouman AC, Cate-Hoek AJ ten, Dirksen CD, et al. Eliciting patients' preferences for elastic compression stocking therapy after deep vein thrombosis: potential for improving compliance. *J Thromb Haemost* 2016;14:510–7. doi:10.1111/jth.13228
- [2] Bunge EM, Bekker-Grob EW de, van Biezen FC, et al. Patients' preferences for scoliosis brace treatment: a discrete choice experiment. *Spine* 2010;35:57–63. doi:10.1097/BRS.0b013e3181bdeaa6
- [3] Nafees B, Lloyd AJ, Ballinger RS, et al. Managing neurogenic bowel dysfunction: what do patients prefer? A discrete choice experiment of patient preferences for transanal irrigation and standard bowel management. *Patient Prefer Adherence* 2016;10:195–204. doi:10.2147/PPA.S96082
- [4] Hawken N, Torvinen S, Neine M-E, et al. Patient preferences for dry powder inhaler attributes in asthma and chronic obstructive pulmonary disease in France: a discrete choice experiment. *BMC Pulm Med* 2017;17:99. doi:10.1186/s12890-017-0439-x

- [5] Mohamed AF, Johnson FR, Balp M-M, et al. Preferences and Stated Adherence for Antibiotic Treatment of Cystic Fibrosis Pseudomonas Infections. *Patient* 2016;9:59–67. doi:10.1007/s40271-015-0124-1
- [6] Marshall T, Pugh A, Fairchild A, et al. Patient Preferences for Device-Aided Treatments Indicated for Advanced Parkinson Disease. *Value Health* 2017;20:1383–93. doi:10.1016/j.jval.2017.06.001
- [7] Quaipe M, Eakle R, Cabrera M, et al. Preferences for ARV-based HIV prevention methods among men and women, adolescent girls and female sex workers in Gauteng Province, South Africa: a protocol for a discrete choice experiment. *BMJ Open* 2016;6:e010682. doi:10.1136/bmjopen-2015-010682
- [8] Hancock-Howard RL, Ungar WJ, Marshall D, et al. Public preferences for counseling regarding antidepressant use during pregnancy: a discrete choice experiment. *Birth Defects Res Part A Clin Mol Teratol* 2012;94:532–9. doi:10.1002/bdra.23042
- [9] Spinks J, Janda M, Soyer HP, et al. Consumer preferences for teledermoscopy screening to detect melanoma early. *J Telemed Telecare* 2016;22:39–46. doi:10.1177/1357633X15586701
- [10] Ramirez M, Wu S, Beale E. Designing a Text Messaging Intervention to Improve Physical Activity Behavior Among Low-Income Latino Patients With Diabetes: A Discrete-Choice Experiment, Los Angeles, 2014-2015. *Prev Chronic Dis* 2016;13:E171. doi:10.5888/pcd13.160035
- [11] Salampessy BH, Veldwijk J, Jantine Schuit A, et al. The Predictive Value of Discrete Choice Experiments in Public Health: An Exploratory Application. *Patient* 2015;8:521–9. doi:10.1007/s40271-015-0115-2
- [12] Veldwijk J, Lambooi MS, van Gils PF, et al. Type 2 diabetes patients' preferences and willingness to pay for lifestyle programs: a discrete choice experiment. *BMC Public Health* 2013;13:1099. doi:10.1186/1471-2458-13-1099
- [13] Wanders JOP, Veldwijk J, Wit GA de, et al. The effect of out-of-pocket costs and financial rewards in a discrete choice experiment: an application to lifestyle programs. *BMC Public Health* 2014;14:870. doi:10.1186/1471-2458-14-870
- [14] van Gils PF, Lambooi MS, Flanderijn MH, et al. Willingness to participate in a lifestyle intervention program of patients with type 2 diabetes mellitus: a conjoint analysis. *Patient Prefer Adherence* 2011;5:537–46. doi:10.2147/PPA.S16854