



Interreg 
EUROPEAN UNION

2 Seas Mers Zeeën

DWELL

European Regional Development Fund

DWELL

DIABETES & WELLBEING

INSPIRATION AND TOOLS TO DELIVER THE 12-WEEK PATIENT PROGRAMME



About DWELL

Project partners

- The Health and Europe Centre (Lead Partner), United Kingdom
- The Blackthorn Trust, Kent, United Kingdom
- Artevelde University of Applied Sciences, Ghent, Belgium
- Kinetic Analysis, The Netherlands
- Medway Community Healthcare CIC, United Kingdom
- Kent County Council, United Kingdom
- Canterbury Christ Church University, United Kingdom
- Centre Hospitalier de Douai, France

Observer partners

- Diabetes UK, United Kingdom
- NHS West Kent, United Kingdom
- Diabetes Liga vzw, Belgium
- GGD West-Brabant, The Netherlands
- Care Innovation Centre West-Brabant, The Netherlands
- Avans Hogeschool, The Netherlands
- Hogeschool Utrecht, The Netherlands

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Authors

Ruben Vanbosseghem, Annelien Callens & Veerle Luyens (Artevelde University of Applied Sciences) in collaboration with Anna Best (The Health and Europe Centre), Nathalie Belmas (Blackthorn Trust), Maarten Gijssel & Linda van Wijk (Kinetic Analysis), Julie Webster & Anne Eltringham Cox (Medway Community Healthcare), Stephen Cochrane (Kent County Council), prof. Eleni Hatzidimitriadou, Sharon Manship, Thomas Thompson & Rachael Morris (Canterbury Christ Church University), Marie Duezcalzada (Centre Hospitalier de Douai).

Contact & more information

ruben.vanbosseghem@arteveldehs.be

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1 Introduction

1.1 Background

It is estimated that 537 million adults in the world are living with diabetes. In the EU Region, it affects more than 61 million people. In the countries of the Interreg 2 Seas region, more than 7.7 million adults have diabetes, and 90% have type 2 diabetes. It is expected that this number will rise in the future, with 69 million cases in the EU Region and 13% of the population by 2045, with more complications and higher costs for society as a result (International Diabetes Federation (IDF), 2021; Diabetes Liga, 2019).

The IDF reported that in 2021 more than 170 billion EUR was spent on treating this disease and its complications in Europe. Therefore, diabetes is a long-term non-communicable disease of huge clinical, societal and economic concern. Initiatives to increase effective, low cost self-management are needed.

1.2 Diabetes care in the Interreg 2 Seas Region

The Interreg 2 Seas Region covers the area along the Southern North Sea and the Channel. The United Kingdom, France, The Netherlands and Belgium are the four Member States of this area. With its 29 million inhabitants, it is one of the most densely populated areas in Europe (Interreg 2 Seas Programme, 2019).

Type 2 diabetes care is organised in both primary and secondary care. Each country has its own healthcare system. Diabetes care is therefore provided in different ways in the Interreg 2 Seas Region. In the United Kingdom, [DESMOND](#) and [X-pert](#) are well-known education programmes for people with type 2 diabetes. Such structured education programmes do not exist in Belgium, France and the Netherlands. Patient associations, health community centers, public health insurance funds, primary care zones, etc. do offer information or education sessions for their members, clients or citizens. Despite all good initiatives in diabetes care, a systematic referral to a well-structured long-term programme where interaction, peer-support and wellbeing are important cornerstones is missing.

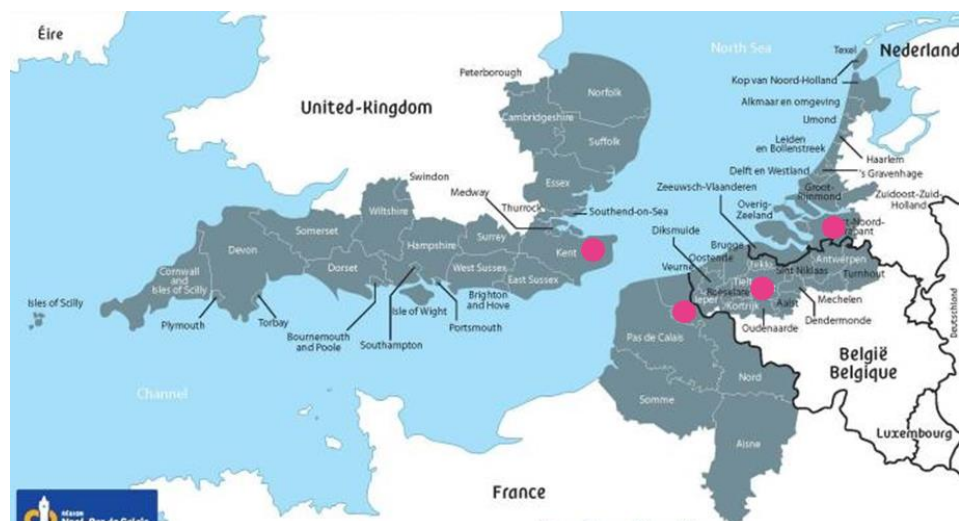


Figure 1 Interreg 2 Seas area

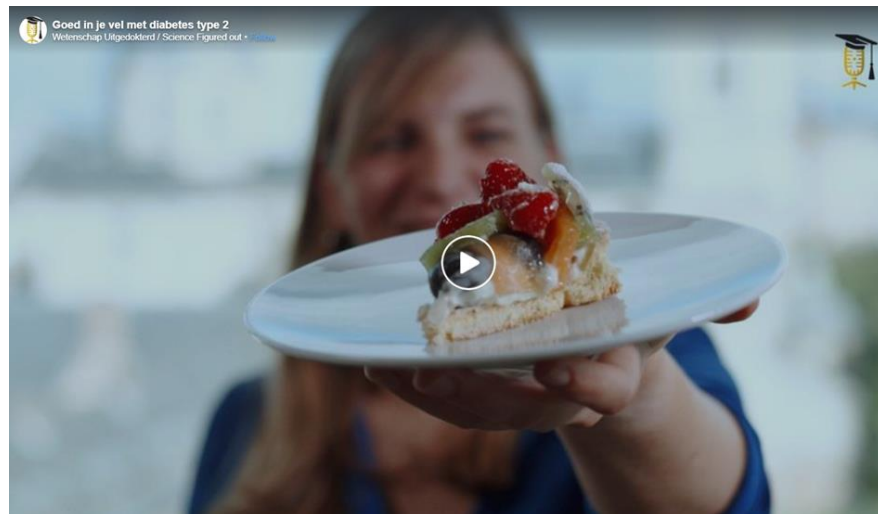
2 The DWELL project

2.1 Why DWELL?

The aim of the Diabetes & WELLbeing (DWELL) project is **to empower patients with type 2 diabetes to access tailored support and contact with peers to give them the mechanisms to control and self-manage their life, condition and improve their wellbeing.**

After diagnosis, people with type 2 diabetes are often prescribed metformin by their GP. Without questioning the effectiveness of medication in diabetes care, people with type 2 diabetes expect a more holistic approach. They have more questions than answers, are looking for information about diabetes, but often don't know where to start and how to apply this information in their daily life. People diagnosed for several years experience challenges to control their life and to change their behaviour long term.

The needs of people with type 2 diabetes differ from person to person. DWELL created five characters to illustrate their needs. Despite their individual differences, DWELL can be a solution for all.



Video 1 DWELL - Feeling good with type 2 diabetes

Pleased to meet you!



Bavo

Bavo has recently been diagnosed with type 2 diabetes. His GP prescribed oral medication, but didn't inform him about a healthy lifestyle or living with diabetes. He is motivated to change his life, but he is also scared and concerned for the future.

Bavo would like to learn more about diabetes. He has no clue how the human body functions and what diabetes does with his body. He is looking for theoretical information to understand his diabetes. He believes that he will learn more about his body if he starts measuring his blood glucose but he does not know how to do this.

Bavo is highly educated and is still working as an engineer.



Ivo

Ivo has also recently been diagnosed with type 2 diabetes. His GP prescribed oral medication. Ivo has a lot of questions about diabetes and nutrition. He is retired and reads about nutrition and food on the internet every day, but he **has more questions than answers at this moment**.

Ivo is looking for specific information about nutrition and wants answers to his questions.



Zora

Zora was diagnosed several years ago. Currently, she is on oral medication, but insulin injections are considered.

She has tried to change her behaviour, control her diabetes and life for many years. Visits to health care professionals, such as diabetes nurses, dieticians and doctors in the past were not very successful, although she received a lot of information from them. A sustainable behaviour change is a huge challenge for her.

Zora is looking for motivation to change her behaviour and life in the long run. Zora is retired and every Wednesday and Friday, she looks after her grandchildren.



Zoë

Zoë has type 2 diabetes, but also another chronic disease. Therefore she has specific questions and she is looking for tips and tricks, but also for more social contact. Recently, she has moved from another city and has a limited social network now. She has some limitations in terms of her mobility. She needs someone to assist her when she goes outside.

Zoë is looking for specific information about diabetes and her other chronic disease.



Colin

Colin has been diagnosed for more than 10 years and is on insulin. He received a lot of information in the past. Diabetes is not top of his priority list at this moment, due to family problems. He is a labourer and didn't have the chance to go to school very long when he was young. He considers his health and digital literacy to be rather limited and has some financial concerns.

Colin is looking for social contact and wants to have a nice and interesting time with peers.

2.2 What is DWELL?

DWELL is a offers a 12-week programme to support patients with type 2 diabetes using group sessions for 8 to 12 persons. **Four modules** were defined to create the DWELL programme: (1) **education**, (2) **nutrition**, (3) **physical activity**, (4) **wellbeing**. The modules are interconnected and therefore can not be omitted from the programme. Principles of motivational interviewing and peer-support are integral to the programme, using motivational interviews.



Figure 2 DWELL modules

Every module has its own objectives and learning outcomes. The development is characterised by the **principles of constructive alignment** (Briggs & Tang, 2011). Constructive alignment is frequently used in education for curriculum design. The teaching strategy and assessment methods are developed in order to meet the predetermined learning outcomes and objectives. First, the learning outcomes and objectives of the programme are formulated. Secondly, the assessment criteria are developed and then, the activities are developed. The way in which the objectives and learning outcomes are successfully reached may vary depending on both the facilitator delivering the session and the needs of the participants. Therefore, different activities can result in the same outcome.

“The cornerstone of type 2 diabetes management is the promotion of a lifestyle that includes a healthy diet, regular physical activity, smoking cessation and maintenance of a healthy body weight.” (IDF, 2019)

Furthermore, the design is based on principles of **health promotion and self-management**.

Self-management interventions should include more than information about the chronic disease and treatment, drug and symptom management. Management of psychological consequences, social support and communication strategies, coping mechanisms and lifestyle are essential elements of self-management support interventions. Disease acceptance, stress management, overcoming barriers for a healthy lifestyle, family support, career planning, goal setting, problem solving, etc. are important elements to integrate into a programme (Barlow et al., 2002; Van Hecke et al., 2016).

“Self-management refers to the individual’s ability to manage symptoms, treatment, physical and psychosocial consequences and life style changes inherent in living with a chronic condition.” (Barlow et al., 2002)

Moreover, the 12-week programme is based on a variety of models for behaviour change and health promotion, such as the **Transtheoretical model (stages of change)** (Prochaska & DiClemente, 1983) and the **Behaviour Change Wheel** (Gezond Leven, 2020).

3 How is DWELL delivered?

Each delivery partner in the participating countries implemented the DWELL programme based on the cornerstones, the capacity and resources of the organisation and the local needs. To be able to connect with the target group and work locally, there are some differences in the way DWELL has been run in the four countries.

3.1 Schedule

The programme is delivered over 12 weeks. Every week, an interactive group session of one of the four modules is organised. A motivational interview takes place in the programme at least twice, once at the start and once at the end. In week 1 and week 12, participants are asked to complete a questionnaire for evaluation purposes.

At the end of every cohort, a focus group is conducted to qualitatively evaluate the programme. Furthermore, facilitators are offered a lot of information and insights from the participants during the 12-week programme, as there is a continuous feedback loop.

When implementing DWELL or any other similar programme, it is best practice to include evaluation activities, e.g. using a focus group (led by an independent person) and/or a questionnaire covering all themes of the programme. Extra elements such as cost effectiveness can be added if required.

Figures 3 and 4 illustrate how the 12-week programme was delivered in the four countries.

Belgium	
Week 1	 Introduction & motivational interview 1
Week 2	 Diabetes education 1
Week 3	 Nutrition 1
Week 4	 Physical activity 1
Week 5	 Wellbeing 1
Week 6	 Motivational interview 2
Week 7	 Diabetes education 2
Week 8	 Physical activity 2
Week 9	 Nutrition 2
Week 10	 Wellbeing 2
Week 11	 Cooking workshop
Week 12	 Motivational interview 3 & close

United Kingdom	
	 Motivational interview
	 Introduction to diabetes education & goal setting
	 What is diabetes
	 Weight management & mindfulness
	 Carbohydrate awareness & meditation
	 Supermarket tour
	 Physical Activity & relaxation
	 Complications & gratitude journals
	 Health checks & chair based exercise
	 Mental Health & Talking Therapies
	 Motivational interview
	 Mindfulness workshop & close

Figure 3 Example of the 12-week programme in Belgium and the United Kingdom

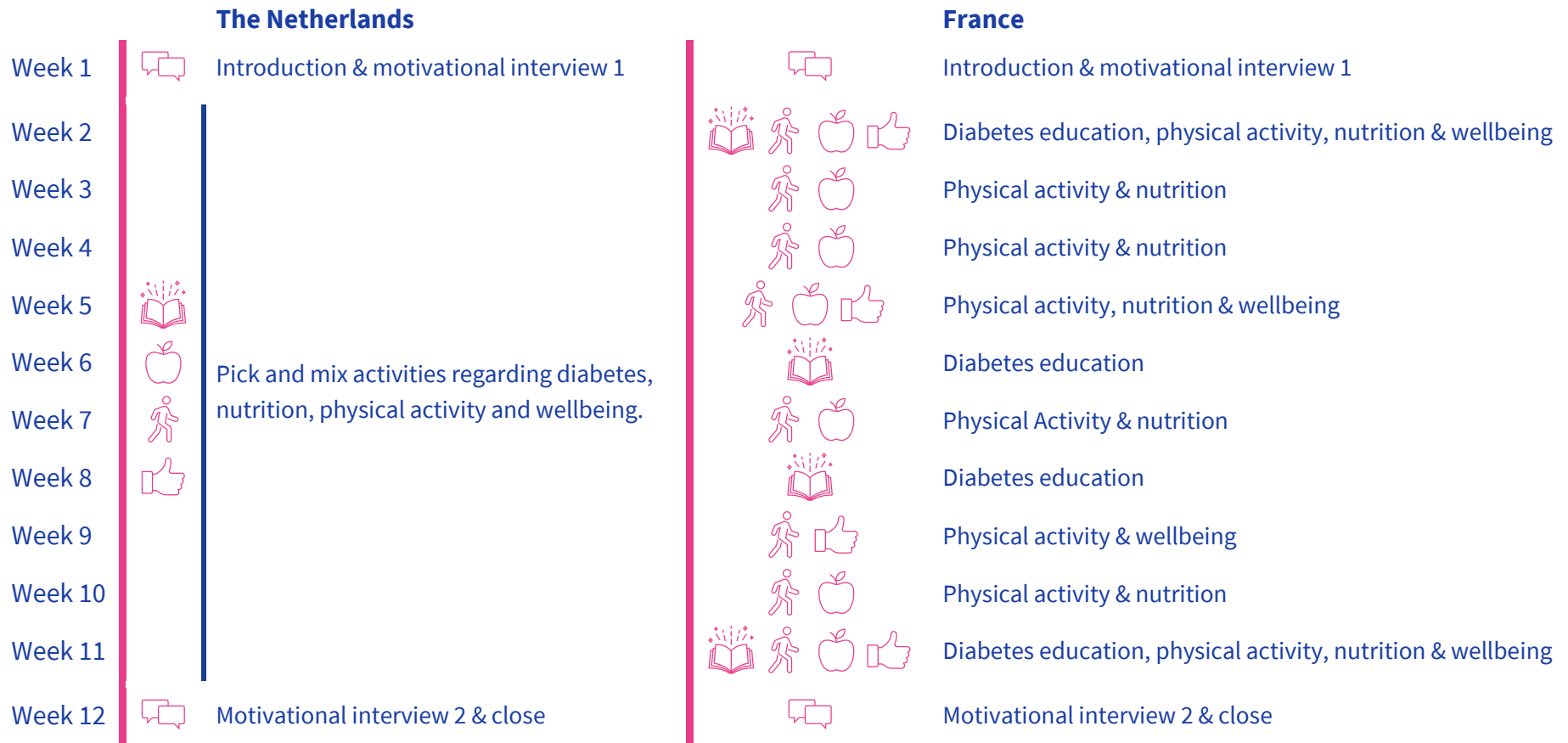


Figure 4 Example of the 12-week programme in The Netherlands and France



Video 2 DWELL in the United Kingdom and France



Video 3 DWELL in the Netherlands

3.2 Lessons learned in delivering the 12-week programme

The sequence of the sessions can differ from group to group, depending on the planning and availability of the venue, target audience, facilitators and experts. Participants, experts, facilitators and researchers suggest a certain logical order to the programme. Therefore we have created **seven lessons learned** that may help you to design or implement your own programme:

1. Take enough time in the first weeks for both participants and facilitators to get to know each other, and in the last week to close down the programme.
2. Listen to the participants, their concerns and their questions. The facilitator can share information with the experts in order to have this integrated into the sessions later in the programme. This will allow you to deliver the programme in a more demand driven way.
3. Some participants suggested that it was necessary to start with a session of the theme 'Diabetes' in the first and second week, as these are the fundamentals to understand why physical activity, nutrition and wellbeing are important.
4. Schedule the 'Nutrition 2' session not too far from the end of the 12-week programme. A few weeks between the nutrition sessions is recommended.
5. Schedule the cooking workshop towards the end of the 12-week programme. Participants already have more insight and knowledge from previous nutrition sessions and it is a pleasant way to end the 12-week programme.
6. Schedule the wellbeing sessions in the second half of the programme. Participants indicated that it is beneficial to know each other well for these sessions, as personal information can be shared here.
7. Integrate tiny habits in the sessions, e.g. take a break to stretch the legs in all sessions, not just in the sessions regarding physical activity.

3.3 Facilitator and experts

The sessions are led by a facilitator and/or an expert in (at least) one of the four modules, such as a diabetes educator, dietician, physical activity coach, podiatrist, psychologist, wellbeing coach, etc. The facilitator is a key person for both participants and experts. He/she follows the group in each session during the 12-week programme, is the contact person and confidant for participants. Depending on the staff availability, the facilitator role can be combined with the role of the expert.

In preparation of the sessions, the facilitator collects all necessary materials (hand-outs, info sheets, etc.) from the experts and informs the experts about specific questions of the group.

At the start of the sessions, the facilitator welcomes the participants and introduces the expert. During the session, the facilitator is a coach and listens to the questions, concerns and goals of the participants. The facilitator conducts the motivational interviews. Additionally, he/she informs participants about the next session and what to bring (e.g. food labels, shoes, towel and knife for cooking workshop, etc.).

Interaction is a key element in all sessions. The experts inform the participants on the specific theme, while participants are asked and encouraged to share experiences in the group, ask questions if anything is unclear to them. This may result in group discussions.

3.4 Time and location

The 12-week programme is organised on a weekly basis, and at the same time. One session lasts three hours. Based on our experience of recruiting and delivering the programme, we present the following recommendations:

1. Find a **good venue**.
 - The venue should have a capacity of at least 15 people, the facilities for presentations, tables and chairs and enough space for physical activity exercises (at least 1m² per person).
 - Make sure the venue is easily accessible and is familiar for the target audience. This will make them feel at home and comfortable.
 - Running the programme in social centres or city/town centres has proved to be a good idea. Coming to a hospital, a university or a school is often a barrier and may result in losing participants. Running the programme as close as possible to where the participants live, has a positive effect on their involvement in the programme. The risk of running this programme in a hospital is that it feels 'medical'.
2. Find a **good time** to organise the sessions for the target group. Be aware that you might have a different audience on evening sessions compared to day sessions.
 - Evening sessions can be more suitable for people who work. It can be hard for some facilitators and experts to attend the sessions in the evening.
 - Some days prove more popular than others. Be flexible when planning sessions and try to find out which days would work for your audience and which not. Therefore consider local school schedules which may affect the availability of both participants and experts. e.g. In Belgium, Wednesday afternoon is often not ideal, as participants might not be able to attend the session due to childcare commitments. Experts might not work on these moments either for similar reasons.
 - Avoid organising sessions in holiday periods. Both participants and experts might be on annual leave.

- Are you considering running the programme during the weekend? Check if your staff and target audience are available.
3. Not all participants will be able to join all sessions. Do not exclude them from the programme, but try to inform them about what they have missed and listen to their questions.



Bavo

“Because the DWELL programme was organised in the evening, I was able to combine this with my full time job.”

Venue set-up

The programme is aimed at groups of 8 to 12 participants. Therefore, the requirements for the room capacity are rather limited. A room set-up in U-shape is recommended, as experts often use a presentation. This allows the participants to follow the information and illustrations presented by the facilitator or expert. Participants often prefer to occupy the same seats, as this can contribute to a safe environment.

3.5 Recruitment

Every person aged 18 or over with type 2 diabetes can be recruited to attend the DWELL programme. People with other types of diabetes, e.g. type 1 diabetes or gestational diabetes are not considered part of the target group for this programme. They should be referred to other programmes if applicable.

DWELL used various communication and recruitment strategies. It can be challenging to recruit participants, depending on your type of organisation, network, the target audience and existing communication strategies. The following recommendations can help you to get participants on board.

- **Create a referral pathway** in line with the type of your organisation: if you are organising DWELL for your own clients or members (e.g. as a hospital or a health community centre), doctors, nurses and paramedics can help you to spread the word and invite people from their clinic. In case you are looking for participants who are not yet known in your organisation, you can create a referral pathway in collaboration with other local organisations, GP's, etc. Take time to go and meet local services and groups that have contact with your target audience. Include in the referral pathway how participants should register, where they can find further

information, etc. Don't expect too much from competitors in the field providing their own specific programmes for this target group.

- Make use of your organisation's **communications team**. They can help you with the recruitment and communication strategy, develop offline and online promotion, etc.
- **Offline promotion** includes the use of leaflets, posters at GP's, community areas, supermarkets, etc. Do not underestimate the power of local ambassadors (peers) and word of mouth from satisfied participants or members. Press communication can help you to reach the target audience using an advertisement in local newspapers or magazines.
- **Online promotion** includes e-mails, newsletters from your own or external organisations, advertising on social media or apps, connect via online communities, etc.

4 The 12-week programme

4.1 Motivational interview

The motivational interview is an individual conversation between the participant and the facilitator. It takes place at the start and at the end of the programme. Both participants and facilitators need to get to know each other. The facilitator gets more insight in the background and motivation of the participant. At the end of the 12-week programme, a second motivational interview takes place to evaluate the goals, look back at the past 12 weeks, look ahead to the future and set new goals if necessary.

Motivational interview techniques such as ‘establish willingness to engage’, ‘express empathy’, ‘reflective listening’, ‘address ambivalence between goals, values and/or behaviour’, ‘adjust to resistance’, ‘evoke intrinsic motivation’ and ‘use affirmations’ (Miller & Rollnick, 2013) are applied to set realistic goals and talk about efforts, progress and barriers.

Make sure that the facilitators are trained in motivational interviewing and ensure enough time is allocated for these conversations.



Ivo

- **Name:** Ivo
- **Age:** 67
- **Diagnosed with type 2 diabetes since:** two months
- **Medical treatment:** metformin pills
- **Already participated other education programmes?** No
- **Goals:** “By the end of the programme, I want to...
 - lose weight. Every kilogram matters.
 - understand what the impact of nutrition on diabetes is.
 - be able to read the food labels when I go the supermarket
 - have a better level of HbA1c
 - feel more in control of my life again”

4.2 Diabetes

For those with diabetes and those at risk of developing diabetes, education is necessary to prevent the disease from progressing and/or developing complications. Studies have shown that diabetes education is effective, although educational services are underutilised. This module is led by a diabetes nurse. A podiatrist is involved in the topic of foot care.

4.2.1 What are the objectives of this theme?

Participants completing this module will:



- have knowledge about type 2 diabetes, its complications, treatment, rights, reimbursements and a healthy lifestyle
- know how to prevent acute and chronic complications
- be able to define their barriers for healthy lifestyle
- be able to define how to overcome these barriers
- be able to set their own goals for achieving a healthy lifestyle



Zora

“Diabetes nurses, doctors and dieticians informed me about type 2 diabetes years ago, but it was good to have it refreshed again.”

4.2.2 What does this module consist of?

In these sessions, participants explore diabetes. The physiology of the human body is explained to help them understand what is going on in their body. It is often unclear for participants what type 2 diabetes is: the causes, consequences, symptoms, complications, treatment, medication and recommendations. Beside this, information is given regarding their rights and obligations, reimbursements, health care professionals they can visit, etc. The diabetes nurse teaches participants how to measure their blood glucose. The podiatrist informs the participants about the requirements of good and safe shoes and how to take care of their feet to prevent them from foot problems.



Bavo

“At the start of the DWELL programme, I didn’t even know the difference between type 1 and type 2 diabetes. Now I understand what is going on in my body.”

4.3 Physical activity

Physical activity is one of the key elements in both diabetes education and in achieving a healthy lifestyle. The focus of this module is to engage participants in physical activity. The main objective of this module is to get people to be physically active, feel safe and enjoy it. This module is led by a physical activity coach.

4.3.1 What are the objectives of this theme?

Participants completing this module will be able to:



- do a proper warm-up, stretch and exercises
- quantify their physical activity and compare their activity to what is recommended
- set a daily physical activity goal
- list their strengths and barriers and find solutions to overcome these barriers



Ivo

“In this session I learned that I am less active than I thought. Now, I go for a walk with my neighbour twice a week. Even when it’s raining!”

4.3.2 What does this module consist of?

The sessions consist of both theoretical and practical information based on the national and international guidelines and recommendations for physical activity. Exercises are integrated in order to raise awareness of the participants’ physical activity and behaviour. Furthermore, exercises for a proper warm-up and stretch are demonstrated and practised in the group. Participants exchange experiences, tips and tricks to be more physically active during their daily activities at home, at work, in their spare time, household activities and at different intensity levels.



Colin

“When there is a commercial break on television, I get up and do some exercises that we learned during the sessions.”

Participants are asked to reflect on this, set new goals, and describe actual and/or potential barriers. Some of the participants are curious to quantify their physical activity and have questions regarding smartphone apps, activity trackers and smart watches. These tools will be presented and discussed during the sessions in order to familiarise the participants with this technology and to have realistic expectations .



Zoë

“During the day, I try to stand up every hour and interrupt my sedentary behaviour. I often sit in my chair or sofa far too long. During the DWELL sessions I even notice the experts and the group stand up every 30 minutes.”

4.4 Nutrition

Nutrition is also one of the key elements of diabetes education and of achieving a healthy lifestyle. It affects the blood glucose and blood pressure directly. Making the right decisions for healthy nutrition and a healthy lifestyle is complex.

This module consists of multiple sessions with theoretical and practical information and a cooking workshop. The sessions are led by a dietician.

4.4.1 What are the objectives of this theme?

Participants completing this module will...



- be able to read and understand food labels correctly
- be able to make healthier choices when buying food in a grocery store or supermarket
- be able to cook a healthy meal
- be aware of their eating pattern and habits in daily life
- know the recommendations, standards and benefits of healthy nutrition



Ivo

“I try to eat more vegetables and keep control of the portions I eat. When I drink alcohol, I try to keep it to one glass and enjoy it even more.”

4.4.2 What does this module consist of?

Participants are asked to explore their eating behaviours. There are a lot of myths regarding nutrition and people read a lot about healthy food and products, so during these sessions they have a lot of questions that need to be answered. The key message is to take small steps to change the eating pattern and behaviour. This increases their chances for a sustainable behaviour change.



Colin

“Because I now understand the food labels, I take my time in the supermarket to find the right products for me. “

Participants are encouraged to discuss food labels and how to read them. This enables healthier choices when shopping in a grocery store or supermarket and when cooking a meal.

The cooking workshop is a way to inspire the participants to cook a healthy and delicious meal and to integrate the learning outcomes of previous sessions.



Bavo

“I used to drink a lot of coke and diet coke before I started DWELL. I didn’t fancy a glass of water. Now I drink one litre of water a day. It is delicious with some fresh mint. My wife can’t believe her eyes!”

4.5 Wellbeing

Anger, denial, depression and stress often occur in people living with diabetes. Wellbeing is personal and self-determined. Diabetes affects the whole way of living, including mental health and psychosocial life. This module is about finding a good life balance.

4.5.1 What are the objectives of this theme?

Participants completing this module will be able to:



- describe their own feelings and accept having diabetes
- describe their own strengths, talents, barriers and pitfalls to self-manage their diabetes successfully
- feel confident, supported and empowered
- feel happy and relaxed

4.5.2 What does this module consist of?

Ideally, the sessions are led by a psychologist, a psychotherapist or a social nurse. During the sessions, participants are asked to explore how well they know themselves. Participants use triggers to get insight in their own strengths and talents to feel more in control of their life and their diabetes. Consequently, barriers and actual or potential pitfalls are described. Experiences exchanged in these sessions help participants to learn from each other how to cope with diabetes, communicate with their environment about their diabetes and accept their situation. A safe and respectful environment is even more crucial in these sessions in comparison to the other sessions, as very personal stories can be told here.



Zora

“I have learned a lot about myself and how I cope with my diseases. I feel more confident, and I have the courage to get out of my house again.”



Colin

“It really helped me to listen to the experiences and tips from the other participants. We had a good time in the sessions. I have learned a lot. Having diabetes is a serious thing, but we also had a lot of fun!”

5 Tools to deliver DWELL

5.1 Types of tools

A variety of tools have been used to deliver the 12 week programme. First, lesson plans were developed for experts and facilitators who delivered the programme. Furthermore, specific tools were created in the different countries to support experts, facilitators and participants. In this chapter, various examples are shown.

5.2 Examples

5.2.1 Infographics

Following infographics (in Dutch) have been used in Belgium to inform participants, e.g. about their rights (see figure 5) or about how a mobile app can help (see figure 6).



Figure 5 Infographic rights (part 1)



Figure 6 Infographic mobile apps

5.2.2 Worksheets

Following worksheets (in Dutch) have been used in Belgium to support participants to achieve a healthier lifestyle.

Figure 7 Worksheet nutrition

Figure 8 Worksheet Physical activity (part 1)

Figure 9 Worksheet physical activity (part 2)

Figure 10 Worksheet physical activity (part 3)

5.2.3 Online community

During or after the programme, participants take the initiative to stay in touch with participants of their own cohort, other cohorts and/or ambassadors. Therefore, Facebook groups and WhatsApp groups have been created. Other participants prefer to stay in touch using e-mail or a community page at the DWELL website.

5.2.4 Online information

All delivery partners created a DWELL website to offer online support and information for their participants. At these websites, information regarding the four DWELL themes can be found, e.g. recipes, information of local organisations and events, ambassadors, information to read, links to external videos,... A few examples are shown below.

Website links:

- www.dwelldiabetes.eu
- [Website Belgium](#)
- [Website France](#)
- [Website United Kingdom](#)
- [Website The Netherlands](#)



The screenshot shows the DWELL Diabète Type 2 website. At the top, there are logos for 'Centre Hospitalier de DDUA1', 'DWELL Diabète Type 2', and 'Interreg 2 Seas Mers Zeeën DWELL European Regional Development Fund'. Below the logos is a navigation menu with items: DWELL, Diabète de type 2, Activité Physique, Alimentation, Bien-être, and Communication. The main content area features a quote: "Les émotions sont faites pour être partagées." by Marc LEVY. Below the quote is a section titled 'Emotions' with a small image of colorful pills. The text explains that emotions are innate and essential for protection and change. It lists four main emotions: Fear (Peur), Anger (Colère), Sadness (Tristesse), and Joy (Joie), each with a brief description and a link to related content. To the right of the text are four emoji icons representing these emotions: a sad face, an angry face, a laughing face, and a happy face. At the bottom right, there is a button that says 'Vous souhaitez discuter ?'.

Figure 11 Online information: Wellbeing (<https://www.dwell-diabete.com/emotions>)

Vos recettes

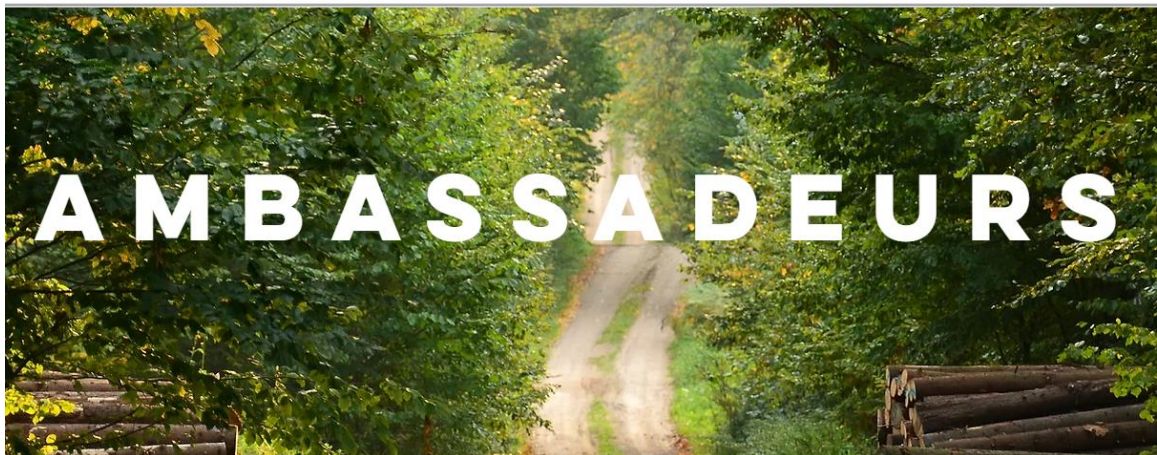


Les recettes salées



Les recettes sucrées

Figure 12 Online information: Nutrition - recipes (<https://www.dwell-diabete.com/recettes>)



Op deze pagina vindt u de verhalen van onze ambassadeurs. Indien zij hier toestemming voor hebben gegeven, kunt u hier ook hun contactgegevens vinden. Wanneer u vragen heeft, kunt u met hen persoonlijk contact opnemen.

Figure 13 Online information: Ambassadors (<https://www.dwelldiabetes.nl/ambassadeurs> and <https://www.dwell-diabetes.co.uk/ambassadors>)



What is Diabetes?



Diabetes is a disease in which your blood glucose (blood sugar) levels are too high.

There are several different types of diabetes. There are also several sub types of diabetes with more being identified as we become able to test in greater detail.



Figure 14 Online information: What is diabetes? (<https://www.dwell-diabetes.co.uk/>)

Websites & apps

Er bestaan heel wat websites en applicaties die je kunnen helpen om je diabetes onder controle te krijgen en om een gezonde(re) leefstijl te bereiken en vol te houden. We geven op deze website voorbeelden van websites en applicaties. Deze oplistijng maakt het mogelijk om met de apps aan de slag te gaan. Wil je zelf nog een app aanbevelen? Laat het ons weten via het [contactformulier](#).

Dé app bestaat niet



Aangezien dé app niet bestaat en iedereen eigen verwachtingen heeft van een applicatie, is het mogelijk dat niet alle apps op deze website voldoen aan jouw verwachtingen. Misschien hecht jij meer belang aan de gebruiksvriendelijkheid, lay-out, privacy,... van de app dan iemand anders.

Apps met een certificaat



Er zijn heel wat apps te vinden in de app stores van oa. Google, Apple en Microsoft. De meeste van hen zijn niet medisch getest en bijgevolg niet steeds nauwkeurig en accuraat. Toch zijn er ook apps die ondertussen wel gevalideerd zijn en een CE gecertificeerd medisch hulpmiddel zijn. Dit betekent echter niet dat hun verbinding steeds veilig is, of ze hun sociaal-economische meerwaarde bewezen hebben en terugbetaald worden door het RIZIV. Meer info kan je terugvinden via <https://mhealthbelgium.be>.

Figure 15 Online information: Websites and apps (<https://dwelldiabetesbelgium.wixsite.com/dwell-be/websites-apps>)

References

- Barlow, J., Wright, C., Sheasby, J., Turner, A., & Hainsworth, J. (2002). Self-management approaches for people with chronic conditions: a review. *Patient Education and Counseling*, 48 (2), 177–187.
- Biggs, J., & Tang, C. (2011). *Teaching for Quality Learning at University*. Maidenhead, UK: Open University Press.
- Diabetes Liga (2019). *Leven met diabetes*. <https://www.diabetes.be/nl/leven-met-diabetes>
- Gezond Leven (2020). *Gedragswiel*. <https://www.gezondleven.be/gezond-leven-gezonde-omgeving/gedragswiel>
- Miller, W.R. & Rollnick, S. (2013) *Motivational Interviewing: Helping people to change* (3rd Edition). Guilford Press.
- Prochaska, J. O., & DiClemente, C. C. (1983). Stages and processes of self-change of smoking: Toward an integrative model of change. *Journal of Consulting and Clinical Psychology*, 51(3), 390–395.
- International Diabetes Federation (2021). *IDF Diabetes Atlas*. <https://diabetesatlas.org/>
- Interreg 2 Seas Programme (2019). *Programme area*. <https://www.interreg2seas.eu/en/content/programme-area>
- Van Hecke, A., Heinen, M., Fernández-Ortega, P., Graue, M., Hendriks, J. M. L., Høy, B., Köpke, S., Lithner, M., & Van Gaal, B. G. I. (2016). Systematic literature review on effectiveness of self-management support interventions in patients with chronic conditions and low socio-economic status, *Journal of Advanced Nursing*, 73 (4), 775–793.