

Patient Portal

User Manual

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empowerment"Projekt-Kennzeichen:H2020-PHC-689444Projekt-Webseite:http://www.power2dm.eu/Dokument-Erstelldatum:2017-12-10

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1. Introduction

POWER2DM (Predictive model-based decision support for diabetes patient empowerment) is a Horizon 2020 project funded by the EU (ref. H2020-PHC-689444). The main objective of POWER2DM is to develop and validate a personalized self-management support system for Type 1 and Type 2 diabetes patients that combines and integrates:

- 1. A decision support system based on leading European predictive personalized models for diabetes interlinked with predictive computer models,
- 2. An automated e-coaching functionalities based on Behavioural Change Techniques, and
- 3. Real-time Personal Data processing and interpretation.

More information can be found at the POWER2DM website (http://www.power2dm.eu/about/)

This User Manual provides support for the usage of the POWER2DM patient portal, the so-called Action Plan Engine.

The Action Plan Engine guides the user through his/her diabetes self-management process supporting the specification of self-management goals based on the physicians' treatment goals and treatment plans, and the planning of self-management activities based on these goals. Based on recorded data from the web or mobile app, the Action Plan Engine will provide feedback about how successfully you have met your goals and activities as well as recommend interventions for optimising your self-management activities.

2. Login Patient Portal

The Patient Portal handles highly sensitive personal and medical data. Therefore, the login procedure protects your data from non-authorized access. Both username and password are provided to the patient during the patient registration. Depending on the used POWER2DM installation, either the Netherlands or Spain, the Login Page may differ slightly.

	POWER
gin to Your Account	
Username	
Password	
	Login

Figure 1: Login Page

Both username and password are provided to the patient during the patient/care provider registration or – depending on the integration with existing PHR system – are used from the external system. For login, please use the following URL:

Installation	URL
English Prototype	https://power2dm.salzburgresearch.at/psmss-
	secure
Dutch Prototype	
Spanish Prototype	

After successful login, you will be redirected to the POWER2DM Home Screen.

3. Home Page

After a successful login, you will be redirected to the POWER2DM home page.

In the upper area of the screen you find the menu. With the menu bar, all the functions of the POWER2DM patient portal are available.

POWER2DM Treatment Plan	Action Plan -	🛃 Journal 🗸	<pre> <user name=""> •</user></pre>
	 𝔅 Goals ☑ Calendar ☑ Review 𝔅 Charts ☑ Energy Battery ▲ Relaxation Tips 	 Blood Glucose Blood Pressure Comment Exercise Meal Problem Sleep 	 Profile Settings Sign out
		 Stress Weight Well-Done Diary 	

Figure 2: menu bar overview

The main menus also contain several sub-menus as shown in Figure 2. The distinct menu items are as follows:

- **Treatment Plan:** Lists the personal treatment goals and activities from your doctor. The treatment plan cannot be edited; instead, active ones (highlighted in blue) can be adopted to your self-management goals. Your self-management goals are the basis for planning self-management activities that can be scheduled and display in your calendar.
- Action Plan: Allows you to review and to specify your personal goals, typically based on the doctor's treatment plan, opens your calendar with your activities, offers you a review of the past activities and give access to charts. In addition, it contains two tools, the Energy Battery and the Relaxation Tips.
- Journal: Collects and reviews your data.
- **?**: Provides additional information with respect to diabetes and its implications and includes this user manual
- <user name>: Includes the user profile, the settings for the Action Plan Engine and the button to sign out

The POWER2DM logo (see Figure 2) within the menu bar opens the home screen again. The homepage includes a dashboard with an overview of your most important data for the current week. All items are colour coded using the following pattern:

- Green Everything is complete/okay
- Orange Something should be in progress at the moment
- Red Something is incomplete/wrong
- Grey Something to come up in the future / additional information

The items to be shown at your dashboard can be configured in the settings (see section 8.2.). Figure 3 gives an overview about the dashboard items:

- Time selection window allows the current time window to be viewed on suitable pages (shown on the top right)
- Overall performance of the current week
- Upcoming activites lists current and upcoming events of today and tomorrow. The user can enter results for incomplete events by clicking the corresponding activity.)
- Charts the user can display a chart for the past week by selecting a chart type

rall Performance						
1.1.1.1.1.1	11111		10/34 (25	196)		
ming Activities						
iy Activities		< > today G	o to			
diabetes pills (0%			Tu, 2017-12-05		VVe, 2017-12-06	
measure blood glucose (0%) Nordic Walking (0%)		7:00 measure blood gluco 7:00 diabetes pills		97:00 measu 97:50 diabes	ure blood glucose es plits	
		er-ek-Nordic Valking 12:se Nordic Valking 12:se Fordic Valking 12:se recording cars Intale		12.00 fish		
				12:80 record 18:00 power	Sing carb Intake	
		1:00 paint		re:00 power	1992	
power yoga (0%)						
recording carb intake	(0%)					
check weight (in Fut	ure)					
fish (in Future)						
paint (in Future)						
ts						
Chart Type	Blood Glucose					
150.0					Les set	0.0
					Blood Gluc	ose
	-				- insuth	
120.0						
90.0						B
8						(tilm "sure") (illusi
2						
Bland Clucce(Img/db)						1



4. Treatment Plan

This menu item lists the patient's personal Treatment Plan from his/her doctor (see Figure 4). A Treatment Plan consists of one or more Treatment Goals. A Treatment Goal can in turn include one or more Treatment Activities suggested by your doctor to help achieve your treatment goal. The Start Date and the Target Date indicate the valid period for a Treatment Goal. The Target Value indicates what the Treatment Goal aims to achieve.

reatment P	lan				
Start Date	Target Date	Target Value	Treatment Goal	Treatment Activities	Ordered By
2017-01-08	2017-12-31	Medication Adherence 90%	Adhere to your medication plan and log your insulin intakes!	-	Javier Delgado
2017-0 <mark>1-</mark> 08	2017-12-31	BGM Adherence 90%	Adhere your blood glucose monitoring schedules!	Measure Blood Glucose	Javier Delgado
2017-01-08	2017-12-31	HbA1c 7%	Our main aim is to decrease your HbA1c to 7.0	-	Javier Delgado
2017-0 <mark>1-</mark> 02	2017-12-31	Medication Adherence 100%	Adhere to your medication plan and log your insulin intakes precisely	-	Javier Delgado
2017-01-02	2017-12-31	Average Daily Carbs 90g	Log your carbohydrate intakes precisely!	-	Javier Delgado
2017-0 <mark>1</mark> -02	2017-12-31	Log Exercises	Log your exercises (walking, running, swimming, etc)!	-	Javier Delgado
2017-0 <mark>1</mark> -02	2017-12-31	HbA1c 7%	Our goal of HbA1c for your next visit	-	Javier Delgado
2017- <mark>01-0</mark> 2	2017-12-31	HbA1c 7%	Our goal of HbA1c for your next visit	-	Javier Delgado
2017-0 <mark>1-</mark> 02	2017-12-31	BGM Adherence 100%	Strictly adhere the KADIS BG monitoring protocol as planned!	Measure Blood Glucose	Javier Delgado
2017-01-02	2017-12-31	-	Strictly adhere the KADIS Data Collection action plans to be ready for KADIS Metabolic Fingerpring identification process	-	Javier Delgado

Figure 4: Treatment Plan

To adopt a Treatment Goal as one of your personal self-management goals or to schedule a Treatment Activity in your calendar, just click on the Treatment Goal. You can then also refine the planning, e.g. adding a more detailed description to the goal or adapting the schedule for the activity. Afterwards, your scheduled activities will appear in calendar.

5. Action Plan

The Action Plan menu enables you to list, evaluate, edit and review the relevant personal information. This includes the management of personally defined goals, the management of planned activities (to achieve the defined goals), the review for your activities and the charts. Additionally, this menu item includes two tools, the Energy Battery and the Relaxation Tip Editor.

5.1. Self-Management Goals

Sometimes the treatment goals of the medical care providers are more general, e.g. "Do some sports" or "Reduce weight". To react to those treatment goals, the POWER2DM patient's portal allows you to define concrete individual goals tailored to your specific requirements and needs, e.g. "10 km running each week". To finally achieve your personal goal, you may later assign planned activities to the personal goals.

Boals					
+ Add					
Start Date	Target Date	Goal	Related Treatment Goals	Description	Motivation
2017-10-20	2017-12-03	walking 3x	-	-	-
2017-10-19	2017-12-03	Eat fish more often	-		-
2017-08-29	2017-12-10	relaxing	a -	some relaxation exercises	I want to reduce my stress
2017-01-08	2017-12-03	Adhere to your medication plan and log your insulin intakes!	 Adhere to your medication plan and log your insulin intakes! (Medication Adherence 90%) 	Ŧ	-
2017-01-08	2017-12-03	Adhere your blood glucose monitoring schedules!	Adhere your blood glucose monitoring schedules! (BGM Adherence 90%)	daily	-
2017-01-02	2017-12-31	record carb intake	Log your carbohydrate intakes precisely! (Average Daily Carbs 90g)	-	-
2017-01-02	2017-12-03	Log your exercises (walking, swimming, etc)!	 Log your exercises (walking, running, swimming, etc)! (Log Exercises) 	-	-

Figure 5: Personal goals

First, all of your saved self-management goals are listed:

- Start Date and Target Date indicate the valid period of your Goal
- Goal describes the goal itself
- Related Treatment Goal refers to the related Treatment Goal specified by your doctor
- Description includes a more detailed description of your goal for your reference.
- Motivation write down what motivates you to fulfil this goal (e.g. motivating ideas for when you finally have reached your goal).

By using the button "+Add", new goals can be added. By clicking on existing goals you can edit or delete them.

5.2. Calendar

The purpose of the Calendar is twofold – It serves for the planning of activities supposed to help to achieve the goals defined before and if the planning of activities is done it gives an overview of already planned activities.

The Calendar Application lists all planned activities (see Figure 6). The week may be adjusted by using the navigation arrows. New activities can be added by choosing the button "+Add" or clicking on an empty calendar slot. Existing activities can be edited/deleted by choosing the corresponding activity on the left side of the Calendar.

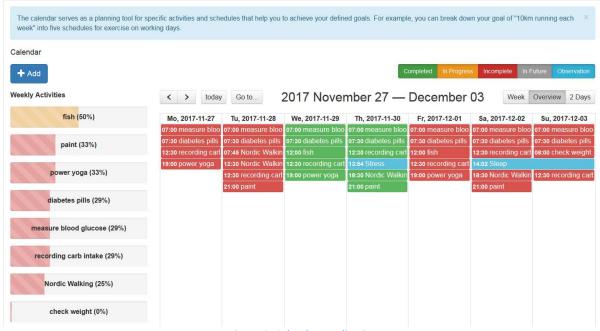


Figure 6: Calendar Application

The buttons on the top right side represent different states of an activity:

- Completed (green) activities effectively performed
- In Progress (yellow) activities that are currently performed
- Incomplete (red) activities planned, but not performed
- In Future (grey) upcoming and future activities
- Observations (blue) additional observations recorded in a journal

You can enable and disable these states by clicking on the appropriate button.

By clicking on a calendar event, you can insert data (e.g. your blood glucose values) to complete an activity for that scheduled time. When completed, the colour of the activity will turn from e.g. red to green.

Stored activities may be shown in different views:

- Week presents a calendar view (see Figure 7)
- Overview presents an overview of all activities for each day of a week (see Figure 6)
- 2 Days presents an overview of two days (today and tomorrow)

lendar								
Add					Con	npleted in Progres	s Incomplete In	Future Observatio
ekly Activities	< :	today 0	Go to 20	17 Novem	oer 27 — D	ecember)	03 Week	Overview 2 Day
fish (50%)		Mo, 2017-11-27	Tu, 2017-11-28	We, 2017-11-29	Th, 2017-11-30	Fr, 2017-12-01	Sa, 2017-12-02	Su, 2017-12-03
	all-day							
paint (33%)	08:00		Nordic Walking					^{08:00 -} che
power yoga (33%)	09:00							
diabetes pills (29%)	10:00							
	11:00							
measure blood glucose (29%)	12:00			^{12:00 -} fish		^{12:00 -} fish		
recording carb intake (29%)	13:00	^{12:30 -} recording ca	^{12:30 -} No ^{12:30 -} rec	^{12:30 -} recording ca	12:30 - recording ca	^{12:30 -} recording ca	12:30 - recording ca	12:30 - red
Nordic Walking (25%)	14:00				13.54 - Stress		14:02 - 00:00 Sleep	
	15:00						-	
check weight (0%)	16:00							

Figure 7: Calendar view (Week)

Add an activity

By clicking on "+Add" or on an entry in the left column "Weekly Activities" a window for managing activities opens (see Figure 8). You can add new entries or edit or delete the respective entries. The fields required for the entry are marked with "*", add or edit must be confirmed with "Save", a delete with "Delete".

Activity

Start Date * 2017-10-16 Target Date * 2017-12-31 Activity * measure blood glucose Category * Blood Glucose walking 3x Eat fish more often relaxing Adhere to your medication plan and log your insulin intakes! **Related Goals** Adhere your blood glucose monitoring schedules! Log your exercises (walking, swimming, etc)! record carb intake Description Reminder Off Schedule * 07:00 - 07:05 Mo, Tu, We, Th, Fr, Sa, Su

Add schedule
 Required field
 Cancel X Delete Save

Figure 8: Add an activity

The activity-related schedule is created in a separate window. Click on "+Add schedule" or on a table entry in "Schedule" to open the window (see Figure 9) in which you can add new entries or edit or delete the respective entries. The fields required for the entry are marked with "*", and add or edit must be confirmed with "Save", a delete with "Delete". Please note that you must include at least one schedule to finally save an activity.

Х

•

Schedule

All-day *	Yes No
Weekdays *	Mo Tu We Th Fr Sa Su Working days Daily
From *	07:00
To *	07:05
* Required field	Cancel X Delete Save

Figure 9: Scheduling an activity

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5.3. Review

The review provides you with comprehensive feedback on your performance and should be reviewed regularly – at least once a week. The review aims at examining past activities and their recordings in order to evaluate your progress and how successfully you have met your goals. It covers your overall performance, feedback on the different categories of activities, feedback on additional recorded data in your journals and feedback on each goal. You can receive specific tips for each point.

Starting the review & Overall Performance

The review starts with selecting the review period in the top right corner (see Figure 10). The default period is the past week, however longer periods are also possible (e.g. last month). Before you perform the review, you should check whether you have recorded all the data for the review period. For this reason, click on the button "Show/hide calendar" and fill in any forgotten entries. The Overall Performance indicates how successfully you have completed your planned activities in total within the review period.

Review		• Week
Show/hide calendar		
017-11-29 - 2017-12-05		
Overall Performance		
UNNUN	10/34 (29%)	
Tips		
with smaller intermediate steps	ach your goal. Can it be that you have set you consider whether it is useful to reduce your hallenging for you, but still achievable in everyo	goal in such a way that you need to achieve the



Activity Feedback

Next, the system provides feedback how successfully you have completed your planned activities for each category (see Figure 11). The column "Performance" describes the performance in percent (e.g. 43%) and indicates the number of completed activities (e.g. "3/7" means 3 activities from 7 activities were completed). The column "Tips" either acknowledges your progress and provides tips for improving your diabetes self-management.

Category	Performance	Related Activities	Tips
Meal	10/18 (56%)	fishrecording carb intake	 Good that you are still trying! Continue your good work!
Weight	1/2 (50%)	check weight	 Even small successes count! It might be good to think about how you can further improve on your planned activity next week.
Other	9/20 (45%)	 paint diabetes pills	Good that you are still trying! Continue your good work!
Blood Glucose	6/14 (43%)	measure blood glucose	 Good to know. Many people with diabetes worry about having low blood sugars (hypoglycaemia, or 'hypo's'). Click here if you want to read more about fear of hypoglycaemia. Click here if you want to do i later, and schedule an activity.

Figure 11: Review – Activity Feedback

Journal Feedback

The review menu item gives also feedback (tips) on additional data you record in your journals (see section 6 for journals).

Category	Tips
Sleep	 It seems your sleep quality was a bit low in the Two Weeks. We have an exercise to help you improve your sleep quality. Would you like to do it now? If yes, than click on Energy Battery. If you would like to do the Energy Battery later than schedule an activity
Stress	Try the Breathing Meditation (5 mins) for reducing stress

Figure 12: Review - Journal Feedback

Goals Feedback

Typically, activities are associated to personal goals. This step (see Figure 13) presents you an overview how successfully you have met your goals with the activities of the review time-range. A goal can be related to one or several activities.

The column "Performance" describes the performance in percent (e.g. 43%) and indicates the number of completed activities that are related to the associated goal (e.g. "3/7" means 3 from 7 activities have contributed to the associated goal). The column "Tips" acknowledges your progress and provides tips for improving your diabetes self-management.

Goal	Performance	Related Activities	Tips
Eat fish more often	3/4 (75%)	• fish	 Keep going! It might help to consider in which situations you have already succeeded in achieving your goals
record carb intake	7/14 (50%)	recording carb intake	 It seems as if you are doing less than you hoped :-(Can we help you find the reason? Click here to continue.
Log your exercises (walking, swimming, etc)!	<mark>3</mark> /8 (38%)	Nordic Walking	 It seems as if it is difficult to reach your goal. Can it be that you have set your goal too high? Often one is more successful with smaller intermediate steps. Consider whether it is useful to reduce your goal in such a way that you need to achieve the goal a bit longer, the goal is challenging for you, but still achievable in everyday life.

Figure 13: Review – Goal Feedback

The button "Goal Problem Identification" aims to support you in case you have problems to fulfil one of your goals. It opens a workflow guiding you with several questions to help better identify the problem that hampers your progress. Once identified, POWER2DM suggests an intervention to cope with the problem (see Figure 14).

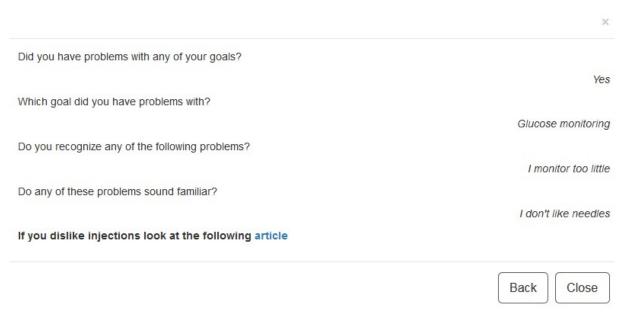


Figure 14: Goal Problem Identification

Charts

The diagrams provide you with a graphical presentation of the most relevant values from the journals. With the help of the selection list you can switch between the available diagram types. For more information see section 5.4.

5.4. Charts

Different types of charts support the visualisation of the recorded observations and the evaluation of personal improvement respectively. To display a diagram, it is required

- to specify the time range in the select box in the top right corner and
- to select the chart type (select box "Chart Type"). Possible categories are glucose monitoring, blood pressure, exercise, meal, sleep, stress and weight

If you move the mouse pointer over a data point, you can see the detailed values.

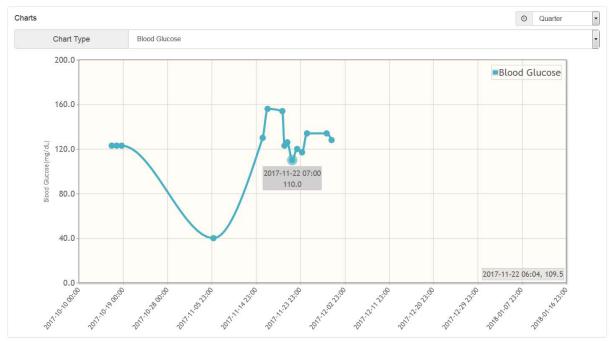


Figure 15 - Charts

5.5. Energy Battery

The Energy Battery aims to increase your awareness of how you either gain or lose your energy to manage your health. Hints are provided on how you can recharge your energy.

In the first step (raise awareness, see Figure 16), the Energy Battery tells you about activity categories where you might lose energy and about activity categories that will help recharge your energy battery. You can also watch a video explaining the Energy Battery and these different activity categories.

Raise Awareness	Ene	gy Diary	Feedback
▶ Play Video			
ur body and brain are closely con	nected, and work as a sort of battery.		
/hen we are born and healthy, the	battery is fully charged. When we get of	der and/or have (mental) health proble	ems, the battery loses energy.
/hen we keep spending energy an	d do not recharge the battery enough, t	he result is feeling tired, exhausted an	d/or depressed/tense.
	ur battery loses energy Usually we los rs) have a choice about, you need to do		
	ht helps to recharge your battery for the between 6-10 hrs. sleep per night. Sleep		
assive relaxation: these are acti	vities that help you to calm down, relax,	and maybe take your mind off of thing:	s. Usually these activities are helpful
	active relaxations".		
fter the "must do's" and after the "a		(or used to enjoy) them. Think of thes	e as the activities in which you are
after the "must do's" and after the "a	ties you chose to do because you <mark>enj</mark> oy	(or used to enjoy) them. Think of thes	e as the activities in which you are
after the "must do's" and after the "a Active relaxation: these are activit actively' doing something and feel r	ties you chose to do because you enjoy nentally recharged afterwards.		
after the "must do's" and after the " Active relaxation : these are activil actively' doing something and feel r Nthough it might sound contradictor	lies you chose to do because you enjoy nentally recharged afterwards. ry, it is known that active relaxation is the	e best way to recharge your battery. Pe	eople with low energy/mood might no
after the "must do's" and after the "a Active relaxation: these are activit actively' doing something and feel r Although it might sound contradicto enjoy these activities any longer, an	ties you chose to do because you enjoy nentally recharged afterwards.	e best way to recharge your battery. Penge is to still keep doing/planning thes	eople with low energy/mood might no
after the "must do's" and after the "a active relaxation: these are activitia actively' doing something and feel r withough it might sound contradictor injoy these activities any longer, an	ties you chose to do because you enjoy nentally recharged afterwards. ry, it is known that active relaxation is the d therefore stop doing them. The challe	e best way to recharge your battery. Penge is to still keep doing/planning thes	eople with low energy/mood might no
fter the "must do's" and after the "a active relaxation: these are activit actively' doing something and feel r athough it might sound contradictor njoy these activities any longer, an to them. Then after a while, when the Active Relaxation	ties you chose to do because you enjoy nentally recharged afterwards. ry, it is known that active relaxation is the d therefore stop doing them. The challe neir battery is recharged (a bit more) the	e best way to recharge your battery. Penge is to still keep doing/planning thes y might start to enjoy them again.	cople with low energy/mood might no se activities, while not really wanting t
fter the "must do's" and after the "a active relaxation: these are activit actively' doing something and feel r withough it might sound contradictor injoy these activities any longer, an to them. Then after a while, when the Active Relaxation e.g. playing the piano, walking, dancing, going out with friends,	ties you chose to do because you enjoy nentally recharged afterwards. ry, it is known that active relaxation is the d therefore stop doing them. The challe neir battery is recharged (a bit more) the Passive Relaxation e.g. reading, watching TV, surfing the internet, taking a bath, talking	e best way to recharge your battery. Penge is to still keep doing/planning these y might start to enjoy them again. Must Do's e.g. work, cleaning your home, doing laundry, paying bills, taking	eople with low energy/mood might no e activities, while not really wanting t
after the "must do's" and after the "a active relaxation: these are activit actively' doing something and feel r withough it might sound contradictor injoy these activities any longer, and to them. Then after a while, when the	ties you chose to do because you enjoy nentally recharged afterwards. ry, it is known that active relaxation is the d therefore stop doing them. The challe heir battery is recharged (a bit more) the Passive Relaxation e.g. reading, watching TV, surfing	e best way to recharge your battery. Ponge is to still keep doing/planning these y might start to enjoy them again. Must Do's e.g. work, cleaning your home,	eople with low energy/mood might no e activities, while not really wanting t Sleep should be between 6-10 hours pe

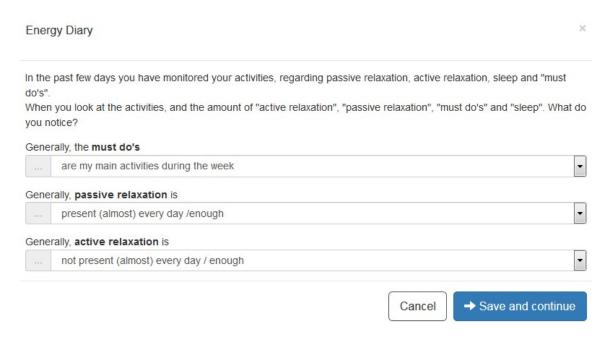
Figure 16: Energy Battery – Raise Awareness

In the next step (Energy Diary, see Figure 17), you will be asked to record all your activities for the next 7 days and assign them to one of the four categories, explained in Step 1 (active relaxation, passive relaxation, must do's, sleep), by using the button "+Add".

Ra	ise Awareness		Energy Diary		Feedback		
nd thus make you ours of each day t et's now create sc ry to cover the wh	feel (less) tired, depr	essed or tense, we like gories (active relaxati energy battery activit	e to help you monitor on, passive relaxation	your activities. In the r	your battery loses and next 7 days you will be) and how to indicate th	asked to assign the	
Мо	Ти	We	Th	Fr	Sa	Su	
00:00 - 08:00 Sleep	00:00 - 08:00 Sleep	00:00 - 08:00 Sleep	00:00 - 08:00 Sleep	01:30 - 10:30 Sleep	01:30 - 10:30 Sleep	00:00 - 08:00 Sleep	
		08:00 - 09:00	08:00 - 09:00	08:00 - 09:00	10:30 - 11:00	10:30 - 11:00	
08:00 - 09:00 Shower and dress up	08:00 - 09:00 Shower and dress up	Shower and	Shower and dress up	Shower and dress up	Eat breakfast	Eat breakfast	
and the second second		Contract Contract	Shower and dress up 09:00 - 09:30 Eat breakfast	Shower and dress up 09:00 - 09:30 Eat breakfast	Eat breakfast 11:00 - 14:30 Gardening	Eat breakfast 11:00 - 14:30 Gardening	
Shower and dress up 09:00 - 09:30	Shower and dress up 09:00 - 09:30	Shower and dress up 09:00 - 09:30	dress up 09:00 - 09:30	dress up 09:00 - 09:30	11:00 - 14:30	11:00 - 14:30	

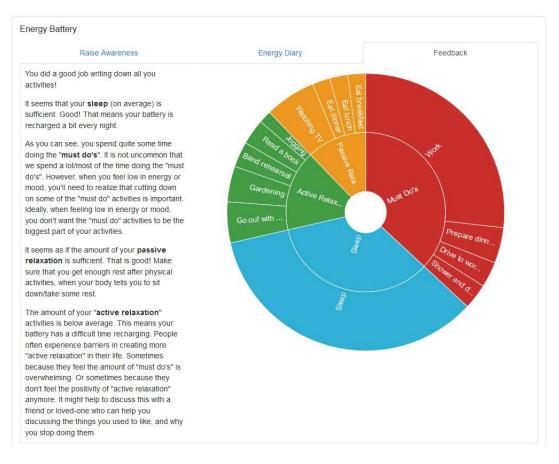
Figure 17: Energy Battery – Energy Diary

After 7 days, you can generally evaluate the recorded activities by pressing the button "Evaluate" (see Figure 18) to simply evaluate these activity categories (must do's, the active and passive relaxation activities) based on your personal feeling.





In the final step (feedback, see Figure 19), the POWER2DM Energy Battery provides some feedback with hints based on your personal evaluation.





5.6. Relaxation Tips

The relaxation tips help to provide you with your own personal tips in stressful situations. You should revise and / or expand this list according to your preferences.

Relaxation tips can serve as a basis for possible relaxing activities preferences.	during stressful periods. Those tips can be adjusted and extended to your personal
+ Add	
Тір	Degree of relaxation
Exercise or walk	Very high
Listen to music	Very high
Spend time with friends or family	High
Play video games or surf the internet	High
Watch television or movies	High
Spend time doing a hobby	Medium
Take a nap	Medium
Pray	Medium
Read something	Medium
Go to church or religious service	Low

Figure 20: Relaxation Tips – list of tips

Click on "+Add" to add new relaxation tips. Click on an existing tip in the table to open a window (see Figure 21) where you can edit or delete the respective tip. The fields required for the entry are marked with "*", add or edit must be confirmed with "Save".

Tip *	Nordic walking in the park	
Degree of relaxation *	High	

Figure 21 Relaxation Tips – add a personal tip

6. Journal

Your journals list all the values you have recorded. In detail the following items can be collected:

- Blood Glucose
- Blood Pressure
- Comment
- Exercise
- Meal
- Problem
- Sleep
- Stress
- Weight
- Well-Done Diary

By choosing a category (e.g. Blood Glucose, Exercise), the system lists all the stored entries of this particular journal category (see Figure 22 for Exercise). It is also possible to add a new journal entry by clicking on the "+Add" button. Any of the listed journal entries may also be edited/deleted by clicking on the corresponding row.

+ Add					S Month
Start Date	Duration (Min)	Category	Where	Intensity	Comment
2017-11-30 18:30	65	Walking	-	Moderate	-
2017-11-29 19:00	60	Yoga	2	Very Intensive	4
2017-11-25 18:30	65	Walking	At the park	Moderate	-
2017-11-24 19:00	60	Yoga	At gym	Very Light	-
2017-11-23 18:30	65	Walking	At the park	Very Intensive	-

Figure 22: Journal - Exercise

Adding a new journal entry

Adding new journal entries is performed in a separate form that provides relevant input fields. Some of the input fields are optional, some mandatory. The latter are marked with a star "*" (see Figure 23). Whenever all mandatory fields are provided, it is possible to store the journal entry by pressing the "Save" button.

Exercise

Start Date *	2017-12-11 12:24	
Duration *	60	Min
Category	Horse Riding	
Where	Other	2
Intensity *	Intensive	
Comment	1	
equired field		Cancel Save
	Figure 23: Journal Entry Form - Exercise	

The following data types can occur during input:

• <u>Date</u>: You can enter the date manually in the format DD.MM.YYYY HH: mm (or English YYYY-MM-DD HH: mm) or use the widget that opens below the input window. By clicking on the clock or calendar icon you can switch between the selection of date and time (see Figure 24).

Date *												
<		Janu	ary 2018		>		>		>		>	
Мо	Tu	We	Th	Fr	Sa	Su						
1	2	3	4	5	6	7						
8	9	10	11	12	13	14						
15	16	17	18	19	20	21						
22	23	24	25	26	27	28						
29	30	31	1	2	3	4						
5	6	7	8	9	10	11						
			0									

Figure 24: Inserting a date

• <u>Number</u>: You can specify the integer or decimal number (separated by a comma or period). The expected unit is indicated on the right (see Figure 25).

Duration *	Min
------------	-----

Figure 25: Inserting a number

Х

• <u>Text</u>: You can enter a free text. By dragging the anchor at the bottom right edge, you can adjust the size of the input window (see Figure 26).

Comment	location: towntown 123	
	1234 city	

Figure 26: Inserting a text

• <u>Selection</u>: You can select one of the predefined options (see Figure 27).

Category		
	Aerobics	
	Basketball	
	Cycling	
	Dancing	
	Football	
	Gardening	
	Hiking	
	Horse Riding	
	Ironing	
	Mopping	
	Mountain Biking	
	Painting	
	Running	
	Sailing	
	Skiing	
	Snowboarding	
	Soccer	
	Strength Training	
	Surfing	

Figure 27: Selecting from predefined options

 <u>Multiple selections</u>: You can select several items by ticking the checkboxes. The options can be listed for clarity in a separate input window (see Figure 28). In this case, the current selection is shown on the right, by clicking on "Add xyz", the second input window is opened and by clicking on "Delete" the entire list can be emptied (see Figure 29).

Concentration disorders
Depression
Dizziness
Dry mouth and throat
Fatigue / avolition
Hair loss
Headaches

Figure 28: Multiple selection – select an option

Problem *	Add problem	Concentration disorders Fatigue / avolition	^
FIODIeIII	X Delete		Ŧ

Figure 29: Multiple selection – two steps

7. Information ("?")

Clicking on the information symbol "?" provides further information. You are strongly encouraged to read this material carefully in order to gain knowledge about diabetes and the challenges when facing diabetes.

7.1. **EMPOWER Information Material**

When you choose the Info materials option by clicking on "POWER2DM Info Material", you will be redirected to the public POWER2DM information site¹ (see Figure 30). Here you may find answers to many questions ranging from what is diabetes to useful tips on how to manage diabetes in the day to day business.

DOMEDODM

POWER2DM			
ABOUT DIABETES MANAGEMENT EXPERIENCING DIABETES PATIENT	FORUMS		
ABOUT	SEARCH		
POWER2DM (Predictive model-based decision support for diabetes patient empowerment) is a Horizon 2020 project funded by the EU (ref. H2020-PHC-689444). The main objective of POWER2DM is to develop and validate a personalized self-management support system for Type 1 and Type 2 diabetes patients that combines and integrates:	English D	leutsch M	Vederlands Españo
 A decision support system based on leading European predictive personalized models for diabetes interlinked with predictive computer models, An automated e-coaching functionalities based on Behavioural Change Theories, and Real-time Personal Data processing and interpretation. 	ABOUT THIS SITE This may be a good place to introduce yourself and your site or include some credits.		
More information about POWER2DM see here.	TAGS	CIDENT	ADVOCACY
This website is part of the POWER2DM project and contains useful information for diabetes patients. Figure 30: POWER2DM Information Material	ALCOHOL	APPOIN	NTMENTS

The information material comprises the following categories

- **About** the homepage of the information material. There is also a list of tags of the most popular tags that link to related articles
- Diabetes general information about diabetes, treatments and measurements
- Management information about nutrition and exercises
- **Experiencing Diabetes** articles about how to manage your emotions, about the daily life with diabetes, how to deal with signs of troubles, and what to do in case of being sick with diabetes
- Patient Forums established public patient's forums.

¹ hosted at https://p2dm.salzburgresearch.at/

7.2. User Manual

On this page you will find the user manual you are reading. If your browser can open PDF files, then document will be displayed directly - otherwise you can download it by clicking on "Download".

8. User Options

8.1. Profile

The Profile (see Figure 31) is used display your personal information. It includes your username, your gender, your E-mail, your date of birth, your diabetes type, your height and whether you are smoking. Depending on your answers appropriate tips will be selected in the Review phase. The profile data is normally collected during your POWER2DM patient registration and cannot be edited here.

Profile	
Username	dg_patient
Gender	Male
E-mail	
Date of Birth	
Diabetes Type	Type 1 diabetes
Height	190
Are you smoking?	No

Figure 31: User Profile

8.2. Settings

In the Settings (see Figure 32), you can make various adjustments concerning the display of your POWER2DM web interface, for example, your language preference.

You can configure the following items:

- Language possible languages are English, German, Dutch and Spanish
- First day of the week you can insert the day of the week your calendar should start with
- Dashboard elements you can indicate which elements should be presented at your dashboard
- **Tips** you can choose whether to maximize or minimize the tips for the different menu items. In case you choose "Minimize" you can still toggle those tips by clicking on the "i" icon in the menu bar

• Animations – you can indicate if various interactive user interface elements (e.g. progress bars, charts) shall be animated or displayed without delay. Choosing "Off" can improve the performance on mobile devices

Changes must be confirmed by clicking on "Save".

Language	English	
First day of the week	Mo	
Dashboard elements	☑ Upcoming Activities☑ Charts	
Tips	Maximize	
Animations	On	

Figure 32: User settings

8.3. Logout

You can logout by selecting the submenu "Sign out" item.