

Mobile Diabetes Diet Adherence Program (MoDDAP)

Smartphone Application & Remote Coaching

Prototype

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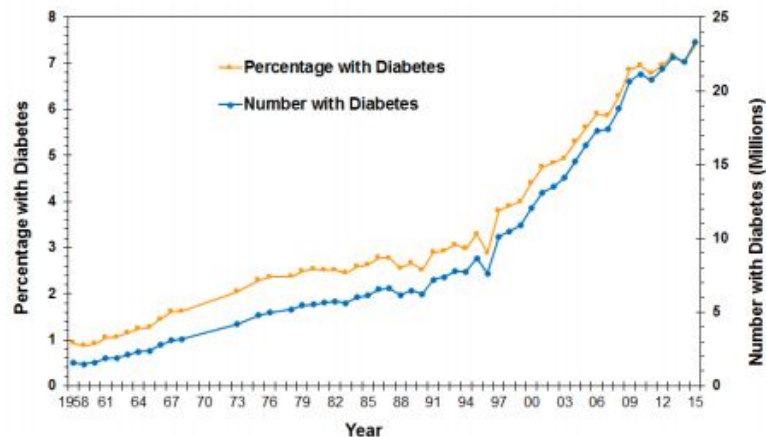
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Introduction

Background: The Diabetes Pandemic

Type 2 diabetes is one of the most pressing problems facing the modern world, due to its rising prevalence, high comorbidity rates, and potential for blindness, permanent organ damage or even death. Sufferers of this chronic condition use the blood sugar regulating hormone insulin ineffectively and sometimes also produce too little of it, and the effects of both can be fatal. According to the International Diabetes Federation, 463 million adults globally are currently living with diabetes. Put another way, 20% of the world's population over the age of 65 are diabetic.¹ The estimate for treating diabetes annually in the United States alone is a staggering \$327Bn and has been growing at an annualized rate of 6% per year for the last few years.² It is absolutely crucial that we slow and reverse the tide of this epidemic that is causing both immense physical suffering and financial stress to individuals and communities worldwide.

Number and Percentage of U.S. Population with Diagnosed Diabetes, 1958-2015



CDC's Division of Diabetes Translation. United States Diabetes Surveillance System available at <http://www.cdc.gov/diabetes/data>

Long term trends in diabetes, CDC. April 2017.

https://www.cdc.gov/diabetes/statistics/slides/long_term_trends.pdf

¹ Diabetes Facts and Figures, International Diabetes Federation, 2019. Retrieved from: <https://www.idf.org/aboutdiabetes/what-is-diabetes/facts-figures.html>

² The Cost of Diabetes, American Diabetes Association, 2018. Retrieved from: <https://www.diabetes.org/resources/statistics/cost-diabetes>

Problem: Current Solutions Don't Work

Fortunately, one of the most dependable paths to managing blood sugar levels is simply keeping to a doctor-mandated diet. Yet, despite being faced with the risk of permanent disability or death, most diabetics do not make the prescribed behavioral modifications to a degree that clinically improves their health. In fact, in some studies, patient compliance has been shown to be as low as 22%.³



*An example of the overwhelming treatment regimen many diabetics are prescribed.
Photo includes glucometer, insulin shots, and medication.*

Why? The reason is simple. Most existing remedies are medical and pharmaceutical interventions. Diet adherence, however, requires lasting behavior change, for which current treatments provide little to no support. In addition, diabetics are not just physically ill but also emotionally fragile, with an estimated 10% to be suffering from clinical depression, twice that of the normal population, with another 10% registering subclinical but nonetheless pervasive depressive symptoms.⁴ A significant factor is the disease-specific distress patients feel from the overwhelming nature of the diabetic treatment regimen and self-care demands, including their new prescribed diet.

³ Broadbent, E., Donkin, L., & Stroh, J.C. (2011). Illness and Treatment Perceptions Are Associated With Adherence to Medications, Diet, and Exercise in Diabetic Patients. *Diabetes Care*, 34, 338-340.

⁴ Ali, S., Stone, M.A., Peters, J.L., Davies, M.J., Khunti, K. (2006). The prevalence of co-morbid depression in adults with Type 2 diabetes: A systematic review and meta-analysis. *Diabetic Medicine*, 23(11), 1165-1173.

Therefore, our program, the Mobile Diabetes Diet Adherence Program (MoDDAP) is designed to be different: *it stems from the core belief that a cure for diabetes needs to be a behavioral and psycho-emotional intervention in addition to a medical and pharmaceutical one.*



Diabetes patients often suffer from disease-specific depression and distress.

Solution: MoDDAP, A Program for Behavior Change and Emotional Support

MoDDAP focuses on delivering behavior change and emotional support to the diabetic patient in need of assistance for diet adherence. It does so using a combination of remote wellness coaching sessions and a smartphone application that monitors, solicits and records the patient's physical and emotional states. The program focuses on two major outcomes for the patient: a heightened sense of self-efficacy and lowered disease-related emotional distress. The program is informed by major psychological theories as well as empirical evidence from the field of wellness coaching, and designed with principles from developmental psychology. Whether you are a public healthcare service, regional hospital, community benefit program or private clinic, MoDAPP is a scalable solution that can serve your needs.

The Case For Remote Wellness Coaching + Smartphone Application

MoDDAP engages wellness coaches because these trained professionals supplement the patient's clinical visits in a patient-centric manner. In addition to offering emotional support and helping patients strengthen their intrinsic motivations, coaches can also aid in interpreting and regurgitating doctor communications because patients leave their physicians' offices often only having understood half of what was said.⁵ In order to make it most convenient for the patient, MoDDAP has chosen to have the coaching sessions take place over video chat in its proprietary smartphone application. The application is also used to reinforce, monitor and track patient behavior, allowing for real-time analysis and timely feedback.



Video chat coaching session with the MoDDAP remote wellness coach.

A Note on Usage

The MoDDAP program as instructed in this resource manual is meant to last only twelve weeks, or the length of the remote coaching sessions. However, we highly encourage you to prescribe to the patient usage of our software even after the program ends, in absence of the coach. That is because it is designed to be personalized for anyone who wishes to be more deliberate about their diet, as long as the needs of goal-setting and monitoring remain, even for those who have been able to comply successfully with their diet.

⁵ Bodenheimer, T. A. (2007). 63-year-old man with multiple cardiovascular risk factors and poor adherence to treatment plans. *Journal of the American Medical Association*. 298: 2048–2055.

Program Goals

Increasing Self-efficacy and Intrinsic Motivation ...

As a behavioral change and emotional support intervention, MoDDAP utilizes findings from social cognitive theory (SCT) and self determination theory (SDT) respectively to improve the patient's self-efficacy and intrinsic motivation. Improved self-efficacy allows the patient to believe that they can, through their actions, produce certain desired results and thwart unwanted ones. Intrinsic motivation, on the other hand, is when patients persist in achieving their goals in the absence of an external reward. The former is important to cultivate because it provides the patient with the incentive to enact change, and the latter has been shown to lower emotional distress.

.. By Utilizing Goal-setting and Motivational Interviewing

MoDDAP encourages self-efficacy by teaching the patient goal-setting, a process by which patients discover the optimal number of goals to set, establish purpose, create targets, design a feedback system and learn to frame the goal in approach-oriented terms. In the remote coaching sessions, MoDAPP's wellness coaches engage in motivational interviewing, a method of inquiry to boost intrinsic motivation. The primary difference is that goal-setting is practiced by the patient, while motivational interviewing is experienced by her.

Thus, MoDDAP has two primary, program-wide understanding goals from which all subsequent, session-level sub-goals derive and support:

1. How to promote behavior change by utilizing skills such as goal setting to increase self-efficacy
2. How to reduce diabetes-related emotional distress by strengthening intrinsic motivations

Program Structure & Overview

MoDDAP is a smartphone application and 12-session remote coaching program that includes a variety of functions necessary for tracking dietary adherence and emotional distress. In between sessions, the patient interacts with the smartphone application, recording dietary adherence, other physical activities, as well as their corresponding emotional state and thoughts. Through it all, the coach introduces new experiences and skills to the patient session by session. The outline of the program is as follows:

Getting Ready	Week 1	Week 2	Week 3	Weeks 4-10	Weeks 10-12
Preparations	Introductions	Motivational Interviewing	Goal Setting	Continued Practice	Tapering Off

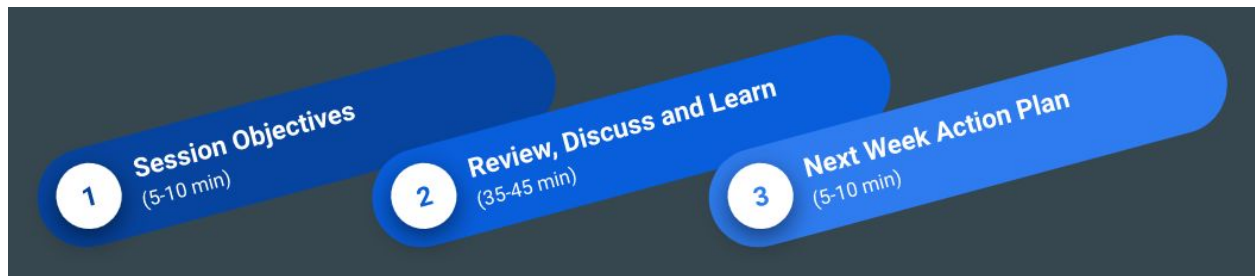
Participants

As a healthcare provider or facilitator, you will recruit the central participants of the program: Type 2 diabetic patients who have been prescribed a dietary compliance program. You will pair each patient with their own certified wellness coach trained in motivational interviewing for twelve weeks. The sessions are one-on-one and privileged by confidentiality, with the exception of the patient's physician and social worker. If desired, the patient may also give data access to other stakeholders, including support networks such as family members and other caretakers.

Remote Coaching Sessions

Each coaching session lasts one hour and is conducted via videoconference over the smartphone. Each session begins with the coach and the patient together agreeing to the explicit objectives for the session, if any, using the program outline as guideline. The bulk of the hour will be then spent on reviewing the past week's activities with a focus on wins and challenges, open-ended discussion, and the introduction of new concepts, again, if any. Towards the end of the session, at least five to ten minutes

should be reserved for committing to an action plan for the next week. During this time, adjustments to goals should be made directly into the smartphone application.



Smartphone Application

The MoDDAP smartphone application collects a variety of user inputs so that progress can be quantified in real time. A dashboard showing visualizations of how the patient is doing relative to their goals can be viewed at any time. These tools help the patient and her coach make weekly adjustments to the treatment plan. Initially, patients are prompted six times a day at preset meal and snack times for their diet, blood sugar levels, physical activities, mood and also asked to journal their thoughts and emotions. The patient can change the frequency and timing of these prompts, or initiate these functions by opening the app at any time.

Setting Up

Due to the program's reliance on technology to deliver a superior experience, the following requirements must be fulfilled before starting:

Hardware Requirements

The smartphone must have a functioning front facing-camera and speaker system with microphone access. It must have the processing power to engage in real-time video chat at at least a 1136 x 640 resolution or greater (1.3 GHz core, iPhone 5 or equivalent). The qualified device should be updated to the latest version of either the iOS or Android operating system that it can support. It must also have at least 250Mb of free storage space left on the device in order to install the application and run it.

Connectivity Requirements

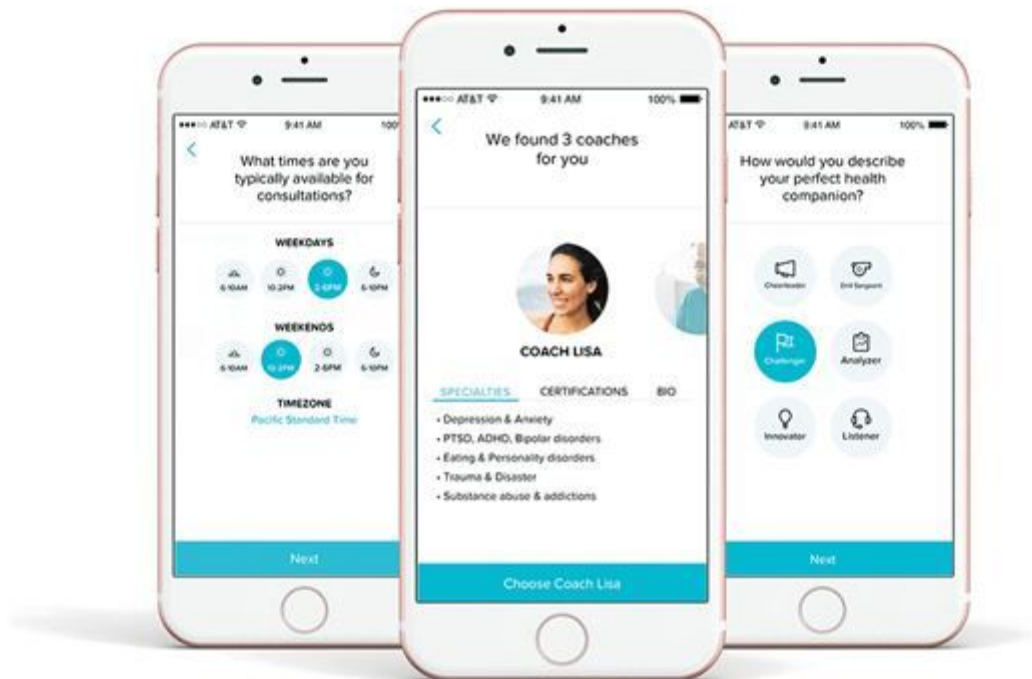
During each remote coaching session, the user should be able to connect to uninterrupted WiFi for the full hour at a minimum speed of 3Mbps download speed, which will allow for a single video stream at clear, standard definition. A faster download speed is highly recommended. During the remainder of the week, sustained 3G connectivity or better is recommended. Should the data requirement be difficult or uneconomical to fulfill, an uninterrupted connection to WiFi for at least ten minutes a day should suffice in communicating with the server to generate the latest algorithmic recommendations, reminders and progress reports for the next day.

Smartphone Usage Fluency Requirements

The patient must be familiar with how to use simple smartphone applications, specifically typing in data and engaging in video chat. For those whose fluency is insufficient, they can consider enrolling in workshops designed to teach smartphone usage skills.

Patient Onboarding

Once a patient is diagnosed with Type 2 diabetes and has been prescribed a dietary regimen, they are eligible to participate in MoDDAP. As soon as they agree to participate, you should create an account for them in the MoDDAP system. The account should have identifying details and the patient's case history from their physician, including, most importantly, their current prescribed diet. Once that is ready, please tell the patient to download the application onto their mobile phone. The patient can then simply log in and confirm activation of the account. They will then be asked their availability for coaching (weekday, weekends, time of day, timezone) and be suggested a few coaches that fit their requirements. After the patient selects and is paired up with a certified wellness coach, they will be asked to schedule their twelve remote weekly sessions. It will be the same coach at all twelve sessions.



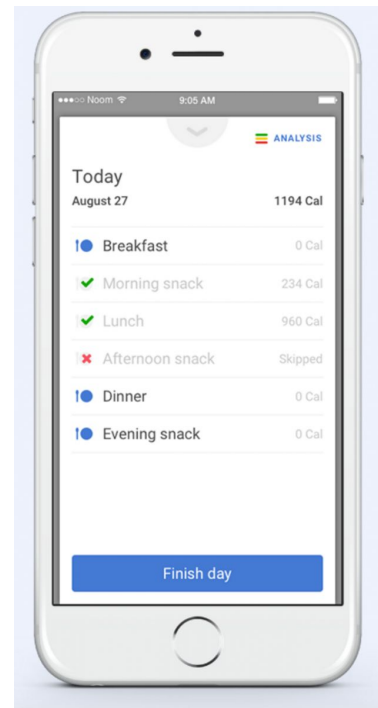
Images taken from Vida Health, a personalized virtual care platform. www.vida.com

Using the Smartphone Application

A core component of MoDDAP is the smartphone application. There are five primary ways of entering information, as listed below. A major benefit of the smartphone application is that it lowers the cognitive load for the patient by automating the tedious processes of data collection and analysis. The patient can then devote more time to the metacognitive aspects of their treatment, where they are able to think about their decisions and evaluate strategies. Another core benefit is how it supports increased self-efficacy by automating much of the input, tracking, and feedback of goal setting.

Inputting Diet

The smartphone application will initially default to prompting the patient at least six times a day at mealtimes and snack times for caloric intake. Initially, the calorie targets, if any, will be as prescribed by the patient's physician. As the program proceeds, the patient is free to adjust the goals after working through the goals with their coach, which can be accessed through the Goal Setting function (see below). On this screen, the daily caloric total consumed thus far is shown in a sum on top, allowing the patient to easily assess how they are progressing against their self-determined goals.



Right: Image from Noom weight loss app for entering diet information.

www.noom.com



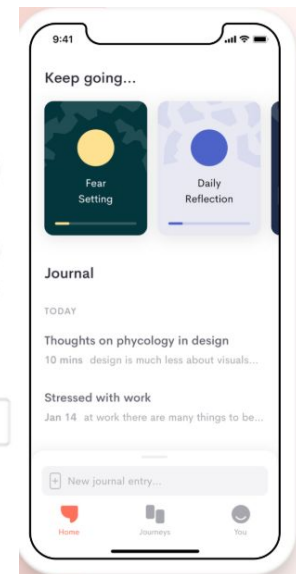
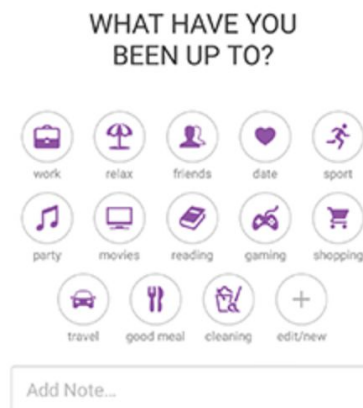
Inputting Blood Sugar Levels

Since blood sugar levels are the ultimate marker that the patient needs to lower to counteract the harmful effects of diabetes, the app provides a place where glucose monitoring can take place, should this be prescribed by their physician. Patients can input pre and post meal blood sugar levels and see if they are within recommended bands. The “percent in target” output shows how many of the past 7 days the patient has been in compliance with recommended levels. Real-time assessment and feedback is a core component of goal setting and increasing self-efficacy.

Above: Image from myNetDiary, a diabetes tracker. www.mynetdiary.com

Inputting Activities & Thoughts

The patient is prompted to open the app and enter their activities throughout the day. They are further encouraged to write down their associated thoughts relating to the activity or simply how they feel at the moment without reference to the activity. The purpose is to record the flow of self-dialogue as accurately as possible for reference during the coaching sessions. Internal self-talk is an important part of understanding the patient’s level of ambivalence towards change. Utilized in conjunction with the coaching sessions, it provides an opportunity to strengthen the patient’s intrinsic

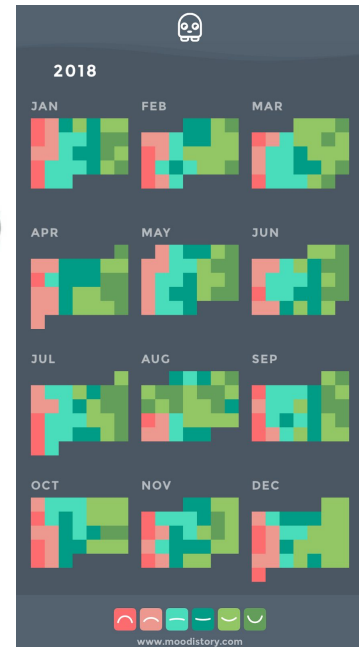


motivation by separating the *pro*-change talk from the thoughts against.

Above: Image (left) from Daylio, a diary & journaling app. Daylio.webflow.io. Right from Noom.

Inputting Moods

The fifth and last input the patient can enter into the app is their emotional state. A simple mood tracker displaying 5 choices allows for the patient to quickly pick the one that best reflects their current mood.



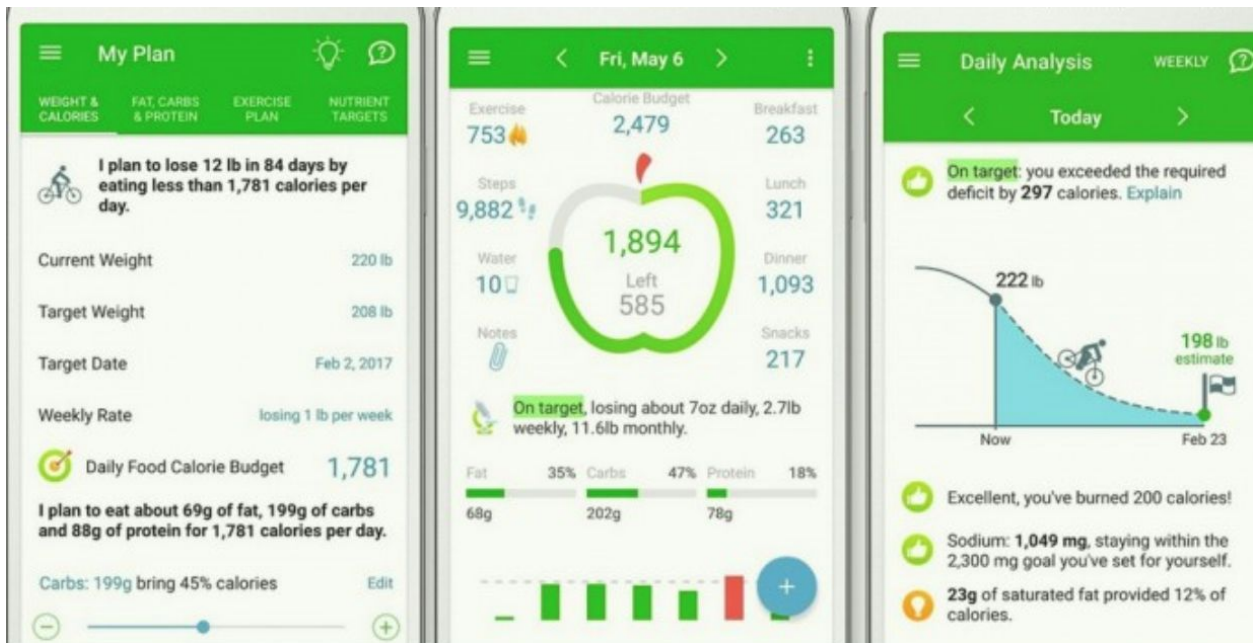
A visualization of the patient's mood over a given time period (daily, weekly, or longer) can be generated to give the patient and those involved in her care, such as her wellness coach, a sense of her distress levels and how they fluctuate. As we know, many patients suffer from diabetes-specific emotional distress and subclinical levels of depression. Recording and tracking mood will better inform the patient and coach how much emotions might be affecting her cognition. It will also make the coaching sessions more productive by giving the coach a signal as to whether or not to focus more on teaching metacognitive strategies or providing emotional support.

Above: Image from Daylio, a diary and journaling app. daylio.webflow.io

Inputting Goals

Finally, while the physician may have a dietary regimen for the patient, MoDDAP's emphasis on personalization means that the patient is free to modify their goals as they see fit. Being able to adjust goals to a level that the patient feels is within her reach is also an important part of goal-setting and boosting self-efficacy. Goals can be adjusted for any time period (daily, weekly, or longer) and can be weight, calorie, or macronutrient (carbohydrate, protein, fat) based. Since a robust feedback mechanism

is a key component of goal setting, the patient's rate of compliance and completion with regards to each target can be displayed for easy viewing on a consolidated dashboard or on individual screens, as shown above. By automating the tracking and assessment portions of goal-setting, MoDDAP allows the patient to expend all of her energies on the metacognitive task of deciding which goals to pursue and the strategies by which she will achieve them.



Left: Image from myNetDiary, a diabetes tracker. www.mynetdiary.com

Remote Coaching Sessions

The remote coaching sessions are all similarly structured except for the first, which devotes time to introductions. Based on Martha Wiske's Teaching for Understanding framework, the sessions feature the introduction of explicit criteria as embodied by a clear-cut agenda, followed by learning and assessment / review of last week's progress, finally ending with the adjustment of goals for next week. During all sessions, the remote wellness coach (RWC) uses motivational interviewing, an open-ended method of inquiry that is patient-centered. The focus is on making them feel like their perspective is being heard, since that is often lacking in traditional, more prescriptive interventions. Since the crux of motivational interviewing lies in the belief that the patient's motivation is a dynamic state that shifts and responds to the RWC's own behavior, it is vital that the RWC exercises compassion at all times and refrains from making any kind of judgment. In this way, using reflective listening and open-ended questioning, the RWC can bring the patient to a place of greater awareness and insight about their own motivations, uncovering intrinsic ones, and set the stage for change. In boosting intrinsic motivation, the RWC will also have correspondingly reduced diabetes-related emotional distress, a core goal of MoDDAP.

Session 1: Ambivalence

Patients should come into the session with the application installed and their accounts activated. You should already have paired the patient up with a RWC. Ideally, the patient should have already played around with the smartphone app and have a basic understanding of its functions.

Ambivalence: For most people contemplating behavior change, there are two opposing forces at work -- the fear of change and the wish to change.

Session Understanding Sub-Goal:

The patient understands that struggling with ambivalence is a common experience amongst those seeking to make behavior change.

Ambivalence is one of the cornerstones of motivational interviewing. It is also important to understand because many hesitations can be hidden from view even from the patient herself. Every reluctance needs to be understood since each is an obstacle to behavior change. Every affirmation also needs to be understood because they may turn out to be an intrinsic motivation that can be strengthened.

1. *Introductions (10 mins)*: The patient and the RWC introduce each other's backgrounds and relevant experiences. By the end of this segment, the RWC should have a basic understanding of the patient's current life circumstances, especially anything that could hamper her dietary adherence, such as a disability, injury, job commitments, etc. This will enable the RWC to provide more emotional support than in a typical healthcare setting.
2. *Ground Rules (5 mins)*: Only for the first session, the RWC explains the ground rules for the subsequent coaching sessions. They are the crux of motivational interviewing and are designed to minimize patient resistance. The main tenets are:
 - a. *Autonomy*: The patient is fully autonomous and able to make their own choices. This is something they possess inherently and cannot be taken away. It is the job of the coach to respect this autonomy.
 - b. *Compassion*: The desire by the coach to be of help and to relieve suffering at all times, without needing justification or verification.
3. *Setting Intent (5 mins)*: The RWC explains that this session is primarily for building rapport and to introduce the concept of ambivalence.
4. *Learn & Review (30 mins)*:
 - a. Everyone has all that they need within themselves to make change, whether it be called willpower, self-discipline, or by another name.

- b. The RWC will help the patient see that this state of mind is to be expected and quite normal. The RWC will then use open-ended questioning to help the patient identify the source of their ambivalence -- each fear and wish, all of which are equally valid and real. (25 mins)
Sample questions might be:
 - i. What are some of your first thoughts when it comes to this topic?
 - ii. What worries you about adhering to the diet?
 - iii. What concerns you about diabetes?
 - iv. What do you think it would take for you to stick to the diet?
 - v. Tell me about the things you prioritize right now.
 - vi. What else have you thought about?
 - c. The patient should already have begun entering inputs into the application on her diet, activities, etc., and the RWC should engage the patient in a collaborative review of this data (5 mins).
5. *Action Plan (10 mins)*: The patient works with the RWC to come up with changes they would like to make for the upcoming week. This can be a change to the way they plan to interact with the app or a change to the app's inputs, such as their "goals." For example, journaling about ambivalence in the app could be an item of action.

Session 2: Change Talk

Session Understanding Sub-Goal:

The patient understands the difference between sustain talk, change talk and activated change talk and that the last is what they want to engage in.

Having understood ambivalence, the patient should be ready to proceed onto the topic of change talk, which goes beyond mere observation and moves towards the direction of initiating motivation for change. Luckily, by sticking with the patient-centered, open-ended method of motivational interviewing, self-motivated change talk can arise quite naturally. However, the goal of the session is to explicitly explain these statements for change and practice how to notice and produce them. In this way, the RWC can help strengthen the patient's intrinsic motivation and reduce emotional distress while also enabling behavior change.

1. *Setting Intent (5 mins)*: The RWC explains that the agenda of this session is to focus on showing patients how to build awareness of their own self-talk and to listen for deeper motivations. Out of respect for the patient's autonomy, the RWC then asks the patient for permission to continue and gets the patient's full buy-in before doing so.
2. *Review, Discuss & Learn (45 mins)*: The first order of business is to review the patient's inputs into the app in the past week (5 mins). However, as the session for goal setting does not take place until the following week, the purpose is to answer questions about the app and build a habit of review and input versus trying to optimize for results.

The RWC will then engage in an open-ended conversation with the patient, but pause the conversation when the patient engages in any of the examples below as they explain their current thinking. This will give the patient a chance to notice

that they are expressing themselves this way. Most will not be as aware as they should or could be of their own ambivalence even after the session last week.

- a. Sustain talk - when the patient gives reasons for maintaining the status quo. Example: “I can’t change because ...”
 - b. Change talk - when the patient has the desire to change, but stops short of making any decisions on the actions required to make said change. Example: “I want to change ...”
 - c. Activated change talk - when the patient has the desire to change and also speaks of actions they intend to take. Example: “I will do something to bring about this change ...”
 - d. The patient can identify what is sustain talk versus change talk versus activated change talk in their own self-talk and also when speaking to others.
3. *Action Plan (10 mins)*: Same as in the week before, the patient works with the RWC to come up with changes they would like to make for the upcoming week. A suggested exercise might be to ask patients to listen for their own self-talk over the next week and write down instances of when they find themselves engaging in any one of these behaviors in their in-app journal function.



Session 3: Goal Setting

Session Understanding Sub-Goal:

The patient understands what is and how to create specific, measurable, actionable, realistic and time-bound (SMART) goals.

In this session, the RWC and the patient focus explicitly on one of the major tools for behavior change: goal setting. We know there is a positive relationship between goals and self-efficacy, since goals guide behavior and individuals with high self-efficacy are those who hold high beliefs in their ability to effect change in themselves and their environment. SMART is a proven method of goal setting; it is also easily implemented within MoDDAP's smartphone application.

1. *Setting Intent (5 mins)*: The RWC explains that the agenda of this session is to learn how to set goals that help facilitate the behavior change needed for diabetes diet management. As before, out of respect for the patient's autonomy, the RWC then asks the patient for permission to continue and gets the patient's full buy-in before doing so.
2. *Review, Discuss & Learn (45 mins)*: As always, the first order of business is to review the patient's inputs into the app in the past week, listen to the patient's observations and thoughts, and to go over any outstanding questions or concerns (5 mins).

Then, the RWC explains how learning how to set goals properly allows the patient to engage in behavior change. Goals direct attention towards relevant activities so that effort is not unnecessarily diverted. The RWC should refrain from pushing the patient and wait for another week if the patient has not gathered enough momentum in the last week to overcome sustain talk.

- a. SMART Goals - The RWC introduces to the patient the concept of specific, measurable, actionable, realistic and time-bound goals.

Example: "I will do three 30-minute yoga sessions per week."

- i. **Specific** - when patients can easily envision what to do, they are more likely to be successful.
- ii. **Measurable** - allows patients to identify when success is attained.
- iii. **Actionable** - the behaviors required of patients should be clear.
- iv. **Realistic** - patients must have a high chance at success because small wins lead to big victories.
- v. **Time-bound** - another way for patients to measure success.

- b. The patient can craft a goal that is SMART, or modify an existing one to make it so.

- 3. *Action Plan (10 mins)*: Together, the RWC and the patient should review the patient's current goals and assess honestly if they meet the SMART criteria. If not, the patient should be encouraged to make the necessary modifications. They should furthermore be encouraged to record their mood, activity, and thoughts as frequently as possible in order to gain even more insights about their ambivalence for future sessions.



Sessions 4 to 10: Maintenance

These many sessions devoted to maintenance are because patients will need time to practice their new skills. It is almost certain that there will be great variability initially in their performance. It is also an opportunity for the RWC to continue offering both emotional support and the cognitive scaffolding necessary for patients to eventually achieve an optimal level of proficiency.

Session Understanding Sub-Goal:

The patient should understand that normalizing relapse is a crucial part of behavior change and accept it, not fight it.

In MoDDAP, relapse is defined as consciously abandoning all attempts to adhere to the prescribed diet. Unfortunately, we expect that relapse will be common amongst patients since a temporary reversion to old habits is quite prevalent. Normalizing relapse early and being prepared for setbacks will prevent them from becoming completely derailed. For many diabetics, relapse will come with feelings of shame or disappointment. Becoming aware of and resolving in advance these feelings may be able to prevent or delay relapse. By addressing these negative emotions as early as possible before they emerge, the RWC reduces diabetes-related emotional distress, especially the portion related to relapse.

1. *Setting Intent (5 mins)*: The RWC explains that the agenda of these middle sessions, for the most part, is to continue practicing what has already been explained to and experienced by the patient. The remaining portion will be devoted to learning how to recover from relapse. As before, out of respect for the patient's autonomy, the RWC then asks the patient for permission to continue and gets the patient's full buy-in before doing so.

2. *Review, Discuss & Learn (45 mins)*: As always, the first order of business is to review the patient's inputs into the app in the past week, listen to the patient's observations and thoughts, and to go over any outstanding questions or concerns (5 mins).

Then, as soon as is feasible, after the patient's grasp of past sessions has stabilized, the RWC should go into the topic of relapse.

- a. *Relapse*: Relapse is common and failure is to be expected. Normalizing and addressing relapse is core to ongoing behavior change. The shame of failure can be so overwhelming for patients that they do not make another attempt. Celebrating progress is important, but it is equally important that the patient is ready for failure.
 - b. *Continued practice*: The RWC should continue to have the patient identify ambivalence and listen for obstacles to change such as sustain talk. It is also important to engage in regular re-evaluation of how SMART each goal is.
 - c. The patient should be able to identify her obstacles to normalizing relapse, whether it be shame, disappointment, lack of self-confidence or something else.
3. *Action Plan (10 mins)*: Now that the patient understands how to set a SMART goal, the discussion should move from simply checking for completed inputs to assessing the quality of compliance and to make adjustments as necessary. They should furthermore be encouraged to record their mood, activity, and thoughts as frequently as possible in order to gain even more insights about their ambivalence for future sessions.
With regards to relapse, the RWC and patient should discuss the details of each relapse when it happens. Post-relapse, the patient should make a decision as to whether or not to modify their goals.

Sessions 11 & 12: Tapering Off

There are no new understanding sub-goals for these sessions. The RWC continues to provide emotional support to the patient, allowing for intrinsic motivation to grow and lowering emotional distress. The RWC also shifts gears to identify other potential sources of scaffolding and collaborative problem-solving before the program ends, so that the patient's learning and behavior change may continue.

1. *Setting Intent (5 mins)*: The RWC explains that the agenda of these last two sessions, for the most part, is to taper off the coaching and ready the patient for behavior change without RWC support. As before, out of respect for the patient's autonomy, the RWC then asks the patient for permission to continue and gets the patient's full buy-in before doing so.
2. *Review, Discuss & Learn (25 mins)*: As always, the first order of business is to review the patient's inputs into the app in the past week.
 - a. Continued practice: The RWC should continue to have the patient identify ambivalence and listen for obstacles to change such as sustain talk. It is also important to engage in regular re-evaluation of how SMART each goal is. Finally, there should be honest discussion of relapses, if any.
3. *Tapering off (30 mins)*: The RWC should acknowledge the progress that has been made by working alongside the patient for the last two and a half months. Now, the patient needs to understand that after the last session, they will be on their own, with just the app to guide them. The RWC and patient should collectively brainstorm a list of other outside resources and the best time to utilize them. They should also make a list of anticipated challenges and brainstorm strategies to deal with them. The purpose is to role-play what would happen when the patient is on their own.