

## D3.2: Initial coaching actions and content

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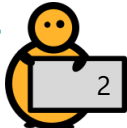
## Abstract

We provide in this deliverable an initial version of the document describing concrete coaching actions to convey knowledge about behaviour change and health related issues that will support the first Functional Prototype of the Council of Coaches (T7.2) and will be updated throughout the project, resulting in D3.4: Final coaching actions and content.



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## Symbols, abbreviations and acronyms

BTC	Behaviour Change Techniques
CMC	Centre for Monitoring and Coaching
COUCH	Council of Coaches
D	Deliverable
DBT	Danish Board of Technology Foundation
EC	European Commission
ISPRINT	Innovation Sprint
M	Month
MS	Milestone
N/A	Not available
RRD	Roessingh Research and Development
SU	Sorbonne Universities
T	Task
WP	Work Package
UDun	University of Dundee
UPV	Universitat Politècnica de València
UT	University of Twente



# 1 Introduction

The aim of this document is to provide an initial set of coaching actions and content, in support of the first Technical Prototype (D7.2), and as the basis of the final coaching actions that will be specified in D3.4.

The coaching actions specified in this document are derived from two sources: the first is a set of hypothetical, idealistic scenarios that it is envisaged the Council of Coaches can assist with; the second is a set of example dialogues that were constructed on the basis of behaviour change literature. These scenarios and examples are provided in Sections 4 and 5 respectively.

In Section 6 we provide the list of initial coaching actions based on the scenarios and examples. These actions are presented as a table that will be updated as the project progresses and further coaching actions become apparent.

## 2 Objectives

The primary objective of this deliverable is to specify an initial set of coaching actions and content which will be used in the development of the first functional prototype. It is not the intention of this document to provide an exhaustive and final list of coaching actions, but to instead act as a “living document” that will be revised and updated as the project continues, and the specific scenarios that the Council of coaches will need to handle become clearer and better defined. These revisions and updates will subsequently form the basis of D3.4 in M27.





### 3 Guidelines for editing this document

One aspect of this deliverable is that it be a “living document”, updated as the project progresses. We therefore provide here brief guidelines for how such edits should be made so as to ensure the document retains a consistent structure.

1. New hypothetical scenarios (i.e. not grounded in literature) should be added to Section 4, with each new scenario on a separate page.
  - a. The structure of scenarios should follow the existing structure, that is:
    - i. Patient background
    - ii. Brief description of how Council of Coaches can help the patient
    - iii. An example coaching dialogue, including details of the (relevant) coaches
2. New example dialogues that are grounded in literature should be added to Section 5, with each new example on a separate page
  - a. The structure of examples should follow the existing structure, that is:
    - i. The roles involved in the dialogue
    - ii. The example dialogue itself, with specific signposting to highlight relevant literature that each part of the dialogue is grounded in
3. When a new hypothetical scenario or example dialogue is added, Table 1 in Section 6 should be updated to:
  - a. Add any new coaching actions that might be present in the scenario/example; and/or
  - b. Highlight the presence of existing coaching actions in the new scenario/example

## 4 Example scenarios

To fully understand the precise coaching actions that the final Council of Coaches will incorporate, we provide in this section some example scenarios that encapsulate ways in which patients might interact with the system. These scenarios were initially developed as input to a discussion at the consortium meeting in Valencia, on the 8<sup>th</sup>-9<sup>th</sup> March 2018, and have subsequently been revised and adapted for inclusion in this document.

Note, however, that at this stage these are purely hypothetical (i.e. no user studies have been conducted to arrive at these scenarios), however they provide a solid starting point from which the concrete coaching actions will be defined (in M27, D3.4).

## 4.1 Scenario 1: Change in work-function

### 4.1.1 Patient background

- **Name:** Bob
- **Age:** 62
- **Profession:** Consultant in technology company
- **Living status:** Wife and dog
- **Other information:** Bob has recently started a new job which involves sitting at a desk for most of the day; in his previous job, he was always on the move, travelling between clients.

### 4.1.2 How can Council of Coaches help?

Bob wants to be active in his daily life. In his previous job, this was straightforward thanks to the travel involved between clients. His new job, however, affords no such opportunities, being entirely desk-based. Bob's Council of Coaches can assist in finding ways to help him become active in his personal life.

### 4.1.3 Example coaching

Bob's council consists of the following coaches:

- Ben, a social coach
- Florence, an activity coach
- Richard, a diet coach
- Alice, a COPD expert

Bob initiates a coaching session by telling the coaches he would like to be more active:

**Bob:** *I need your help. I want to be more active in my daily life. I spend most of the day sitting behind my desk.*

**Florence:** *What a great plan, Bob! Let's set a goal for you.*

**Bob:** *I really don't know what to do; lately I've been very inactive. I need to get back on track.*

**Florence:** *You need to do 10,000 steps a day of course! That's the recommendation for someone of your age. You have to take action in your life!*

**Ben:** *Well, shouldn't we take it easy? Bob recently went through a major change to his working routine. I suggest we set some smaller goals. Let's take small steps to reach the ultimate goal!*

**Florence:** *Ok, if you insist! Let's start with 9.800 steps!*

**Ben:** *Florence, really?*

**Florence:** *Ok, fine. Let's look at your step data...hmm...you do seem to be getting a bit more active. But if my calculations are correct, and I extrapolate this here, taking into account various scientific factors, you should aim for 6,000 steps on weekdays and 8,500 on weekends. How about that?*

**Ben:** *Science is all well and good, Florence, but this is Bob's goal. Why don't we ask him?*

**Bob:** *The 8,500 on weekends sounds a bit much but I guess I could give it a try.*

**Alice:** *No. Try not! Do, or do not! There is no try.*

**Bob:** *Haha, fair enough. I will do it!*

**Florence:** *Good luck Bob! And remember, you can always reach out to me if you need to catch up!*

## 4.2 Scenario 2: Putting the user in control

### 4.2.1 Patient background

- **Name:** Ella
- **Age:** 70
- **Profession:** Retired
- **Living status:** Alone
- **Other information:** N/A

### 4.2.2 How can Council of Coaches help?

Ella lives alone and doesn't go out very often. She does have friends but is a bit shy and is always unsure about joining in their activities. Furthermore, she isn't particularly active and particularly doesn't enjoy "goal-based" exercise.

### 4.2.3 Example coaching

Ella's council (relevant to this scenario) consists of:

- Zuckerburger, a social coach
- Olympia, an activity coach

Zuckerburger initiates a coaching session by sending Ella an alert on her tablet:

**Zuckerburger:** *Hello Ella, you have not been going out too often lately. How do you feel?*

**Ella:** *Fine.*

**Zuckerburger:** *Are your friends having any plans any time soon? Maybe you should join them or call to see if they are going to?*

**Ella:** *OK, I will do that.*

*(A few days later)*

**Zuckerburger:** *Ella, you told me you would contact your friends to go out but it looks like you haven't called them or talked to them.*

**Ella:** *No, I don't want to. Do I really have to?*

**Zuckerburger:** *Going out with your friends will cheer you up.*

**Ella:** *OK, I will do that.*

**Olympia:** *If you go out, you could try and reach your activity goals. You should take 500 steps to maintain a healthy life.*

**Ella:** *No, shut up!*

*(A little while later)*

**Olympia:** *If you go out, you could try to reach your activity goals. You should take 500 steps to maintain a healthy life.*

**Ella:** *No, shut up!*

*(Ella then takes the option to "fire" Olympia from her council and replace him with a different activity coach)*

## 4.3 Scenario 3: Life hacks for living with diabetes

### 4.3.1 Patient background

- **Name:** Ron
- **Age:** 55
- **Profession:** Bank officer
- **Living status:** Unknown
- **Other information:** Type 2 diabetic; was recently fitted with a pacemaker; enjoys running

### 4.3.2 How can Council of Coaches help?

Ron has been suffering from arrhythmias for the past five years and received a pacemaker six months ago. He has recently been feeling stressed at work, leading him to run less which in turn makes him sad. Council of Coaches can help Ron feel safer through heart rate monitoring, and by motivating him to be healthy and become a runner again.

### 4.3.3 Example coaching

Ron's council consists of the following coaches:

- Ben, a social coach
- Florence, an activity coach
- Richard, a diet coach
- Sandra, a diabetes coach

**Florence:** *Hey Ron, good afternoon! How was your day?*

**Ron:** *It could have been better. A colleague passed away yesterday.*

**Ben:** *Oh, this is so sad. We are really sorry. Do you know the cause of death?*

**Ron:** *Heart attack.*

**Richard:** *What a pity. But you do not have to worry about that as long as your pacemaker is powered on.*

*(At this point, sensors detect that Ron appears to be sad)*

**Richard:** *Don't be sad Ron. I mean that your pacemaker is continuously taking care of your arrhythmias.*

**Florence:** *And we are also continuously monitoring your heart rate...*

**Florence:** *...unfortunately we cannot predict how Richard expresses himself.*

**Ben:** *Hahaha. I hope to upgrade his vocabulary in the next firmware.*

**Richard:** *So funny, I forgot to laugh.*

**Richard:** *Maybe not the right time to mention it, but as a diabetes patient, you still have to take care of your healthy diet.*

**Sandra:** *Not the right time Richard. Indeed. We will come back to this later.*

**Florence:** *Ron, I just performed your daily heart rate check. You are healthy as a horse! Why don't you go for your daily jogging? You will relax and feel much better.*

**Ron:** *Great idea. See you later.*

## 4.4 Scenario 4: Motivational interviewing<sup>1</sup>

### 4.4.1 Patient background

- **Name:** Kate
- **Age:** 50
- **Profession:** Business/Management
- **Living status:** Alone
- **Other information:** Type 2 diabetic; diagnosed 1 month ago; has an adult daughter; stressful job; smokes; follows a low carb diet

### 4.4.2 How can Council of Coaches help?

Kate has a lot of variance in measured blood glucose values, which might be affected by her low carb diet. Council of Coaches can help Kate to modify her diet to include some carbs which will help with her blood glucose values.

### 4.4.3 Example coaching

Kate's council consists of the following coaches:

- Colin, a motivational interviewer
- Barbara, a nutritionist

**Colin:** *I wonder if it might be useful just to talk about a low carb diet, and how that relates to your diabetes?*

**Kate:** *Right, well if you think it's useful.*

**Colin:** *You okay to go with that?*

**Kate:** *Yes.*

**Colin:** *Barbara, do you want to come in on that please?*

**Barbara:** *Yeah, sure. I think carbohydrates get a little bit of bad reputation.*

**Kate:** *Yeah, of course.*

.....

**Colin:** *Okay, so you don't see any relation between your low carb diet and your blood sugars dipping?*

**Kate:** *No, no, because Google tells me that diabetes is due to sugar intake, and I'm not taking sugar, so...*

**Colin:** *Okay. So, I get that you have researched. Can I just ask, in your work, if you research a piece for your work, what do you search through?*

**Kate:** *Well, I use the internet, but I also use libraries, there's different firms who have got past cases that you can look at, and you can look at manuals that you've already, I work for a toy manufacturing company, so there's different manuals that you can look at, to just get guidance from. There's lots of different things you can compare them.*

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<sup>1</sup> Note that this is an extract from the Patient Interview recordings: 02/02/18 Session 3

**Colin:** *So, your research is thorough.*

**Kate:** *Oh yes.*

**Colin:** *And what you use is specialist knowledge, yeah?*

**Kate:** *Yeah, I've been doing this for years, I'm very experienced in it.*

**Colin:** *How does that compare to your research about something as complex as diabetes, with a general search engine?*

**Kate:** *Well, I mean, Google, you put in a question, you get information from all over the world, that's like the easiest way to get all the information in one place and there's lots of different sources you can look at, to make sure that the facts are consistent.*

**Colin:** *So, I could do your job by putting in a search term to Google?*

**Kate:** *Oh no, you need years of experience, you need to train properly as a lawyer, learn all that, you need to do the work-shadowing and the placements, that's a completely different thing.*

**Colin:** *So, and I guess what I'm wondering is, as you draw that comparison in your mind, about the research you have done and the methods you've done to research diabetes to enhance your understanding of, what is affecting you and your wellbeing, it's not something you would do for your work base, because you wouldn't trust to that level of search and research?*

**Kate:** *Well, I haven't thought about it like that, it's something I'd have to reflect on.*

**Colin:** *Okay. I wonder if it might be worth just reflecting on that, and thinking about that, and seeing whether that might be something worth talking over with Barbara, with myself, with Alan, should you think about that, and think that might be worth doing.*

**Kate:** *Is this your way of trying to get me to take carbs?*

## 4.5 Scenario 5: Non-medical matters

### 4.5.1 Patient background

- **Name:** Andrew
- **Age:** 58
- **Profession:** Entrepreneur
- **Living status:** Unknown
- **Other information:** Ex-smoker

### 4.5.2 How can Council of Coaches help?

Having previously been successfully treated for lung cancer, Andrew has been informed that a recent follow-up radiological exam has shown a tumour relapse. He has faced this new challenge in a positive way, with Council of Coaches providing him with assistance along his therapeutic pathway ahead of a major operation.

### 4.5.3 Example coaching

Andrew's council consists of the following coaches:

- Betty, a physical coach
- Ernest, a social coach – a retired business coach with industrial experience
- Anita, a medical coach
- Amanda, a psychological coach

Andrew begins the Council of Coaches and is greeted by Anita:

**Anita:** *Hi Andrew, I see you have had your final consultation with my fellow colleagues. Have you got all the info you needed about the planned operation?*

**Andrew:** *Yes, I admit I feel a bit scared, but I see a very good opportunity of being cured, so I am ok.*

**Anita:** *I know you are well centred and empowered in your experience, are you scared about the operation?*

**Andrew:** *Not really, albeit I have been explained that the operation will not affect any of my sensory-motor and cognitive functionalities, I am a bit concerned about the consequences that having my brain "touched" could impair my lifestyle and business performances.*

*(At this point, the council realises it is not a strictly medical issue, so Anita goes into the background; Amanda and Ernest now contribute)*

**Amanda:** *Andrew, you are a very active and successful person and you have the tools to overcome this concern by facing them setting up the right behavioural attitude, what do you think?*

**Andrew:** *Yes but, you know, for me business is very important...*

**Ernest:** *Andrew, I would not worry about your business performance, you have time to set up continuity and you will be back operational very soon. Let's discuss this together with Amanda and set up a positive attitude around this.*

**Andrew:** *Yes, ok let's start working on this.*

**Betty:** *Andrew, how now some exercise now?*



## 5 Example coaching dialogues

In this section five example dialogues between patients and their health councillors are shown. These example dialogues were written with the aim to show how insights from behaviour change literature can be incorporated in coaching dialogues and how behaviour change techniques can concretely be incorporated. While the application of behaviour change techniques is a very specific element of coaching compared to a coaching action, this method – in addition to the previous section – can also provide some insights into what coaching actions might involve.

In the design of the dialogues the following theories have been kept in mind when assuming what the effects of the coaches' statements on the patient could be: The Health Belief Model (Janz & Becker, 1984), Social Cognitive Theory of Self-Regulation (Bandura, 1991), Information-Motivation-Behavioral Skills Model (Fisher & Fisher, 1992), Goal-setting Theory (Locke & Latham, 2002), and Protection Motivation Theory (Rogers, 1983) (Norman, Boer, & Seydel, 2005). In the dialogues the behaviour change techniques described in the Behaviour Change Technique Taxonomy (v1) by Michie, et al. (Michie, et al., 2013) are applied.

The dialogues themselves can be found in the subsections below. For each of these dialogues, the roles of the participants are indicated. For all of the dialogues it was assumed that a patient/subject with type 2 diabetes is involved. In addition, the applied techniques from the taxonomy (abbreviated as BCT) are listed in *italic* after the sentence in which they are used.

## 5.1 Example dialogue 1

### 5.1.1 Roles involved

- A:** Senior personal trainer (Male)
- B:** Exercise coach (Female)
- C:** Patient (Female, about 45 years)

### 5.1.2 Dialogue

**C:** Hello A and B, recently I have come to know that I have type II diabetes and I am worried about it.

**B:** That is a matter of concern, but do not worry about it. Diabetes can be controlled through healthy eating and regular exercise. *(BCT 5.1 – Information about health consequences)*

**C:** Yes. That is what I have heard from my doctor. I want to know more about how exercising can control Diabetes.

**A:** Sure C. We can help you with that. But first, we need to know about how comfortable you are with performing exercises.

**C:** Umm. I am not much into exercising. I have never been to a gym. Twice a week I walk for about 2 kilometres to go to the market.

**A:** Okay. C, you should realize that from now on regular exercise should be a part of your everyday schedule. This will play a great role in controlling the Diabetes. *(BCT 1.1 - Goal setting (behaviour))*

**B:** A, maybe we could start off by recommending the exercise routine that we had developed for Mrs X who has been visiting us for the last two months.

**A:** Yes B. That would be a good idea.

**A:** C, I would suggest you to start off by walking. Everyday go for a brisk walk for at least an hour. This would really do you good. *(BCT 1.1 - Goal setting (behaviour), BCT 1.4 - Action planning)*

**B:** Yes, C, A is right. Also, from now on take the stairs instead of the elevator. *(BCT 8.4 - Habit reversal)*

**C:** Okay. And if I may ask, how will this control my condition?

**A:** That is a good question! Walking is an aerobic type exercise and this helps in improving insulin sensitivity and also in controlling blood pressure. *(BCT 5.1 – Information about health consequences)*

**C:** Okay. I will stick to this schedule. I will note down the number of miles and the time taken in a diary. How long should I stick to this schedule? *(BCT 1.3 - Goal setting (outcome), BCT 2.3 Self-monitoring of behaviour)*

**B:** Maintaining a diary is a really good idea. It will give a clear picture about where you stand. Try to stick to it for two weeks and then come visit us again. *(BCT 2.3 - Self-monitoring of behaviour, BCT 1.4 Action planning)*

**C:** Okay. See you guys!

**A:** Bye C. Take care.

## 5.2 Example dialogue 2

### 5.2.1 Roles involved

- D:** Exercise coach (Male)
- E:** Volunteer who is also diabetic (Female)
- F:** Family member: Wife (Female)
- A:** Patient (Male, about 45 years old)

### 5.2.2 Dialogue

**D:** Hello A, how have you been?

**A:** Hello D. I am doing good, although I have some concerns with the exercises that you had told me to do.

**D:** Do you? What is the problem?

**A:** You had suggested that I go to the gym and I was going. But in the gym, I was asked to lift weights and I found it really difficult and soon gave up going to the gym altogether.

**D:** Oh. That is not good. But wasn't the trainer there with you to monitor your progress?

**A:** Umm. Not really. He just comes and goes.

**F:** Also, we are checking his weight every day at home and there is not really much of improvement.

**E:** D, maybe A is not really suitable for the resistive exercise. Maybe you could recommend him some aerobic exercises? (*BCT 1.6 - Discrepancy between current behaviour and goal, BCT 1.7 – Review outcome goal(s), BCT 2.3 - Self-monitoring of behaviour*)

**A:** What is that and how are they different?

**D:** Lifting weights is a resistive exercise. Along with increasing insulin sensitivity it also improves your resistance to conditions like osteoporosis. (*BCT 5.1 - Information about health consequences*)

**E:** Resistive exercises are machine dependent while aerobic exercises include walking, swimming and cycling and they have equally good effect in managing Diabetes.

**A:** Okay. E, was it beneficial to you?

**E:** Yes. Of course. I started off going on brisk walks and then proceeded to cycle. Within a few weeks there was a good difference in my weight. I had lost 5 Kilos. (*BCT 9.1 - Credible source*)

**F:** That sounds really promising. A, I think you should put a number on the weight you want to lose. (*BCT 1.1 - Goal setting (behaviour), BCT 1.3 - Goal setting (outcome), BCT 1.4 – Action planning*)

**A:** Yes. I will do that. I guess, I could start with 5 kilos as wells.

**D:** Good A, I would suggest that you follow what E has said and additionally I think you and F should do this together. I feel that, it would help you to stay motivated. This strategy has helped a lot of my clients. (*BCT 3.2 - Social support (practical), BCT 3.1 - Social support (unspecified)*)

**A:** Okay. We will do this.

**F:** Yes D. In addition, I think it would help us if we were to maintain a journal to record all the details. (*BCT 2.3 - Self-monitoring of behaviour*)

**D:** Yes. That would be great. We will discuss the progress in our next session.

**E:** Good luck A!

**A:** Thank you. See you.

## 5.3 Example dialogue 3

### 5.3.1 Roles involved

**P:** Nutritionist (Female)

**Q:** Volunteer who is also Diabetic (Female)

**R:** Patient (Female-45 years)

**S:** Exercise coach (Male)

### 5.3.2 Dialogue

**R:** Hello P.

**P:** Hello R. How have you been doing? You look healthier now compared to the last time.

**R:** Thank you P. I have been following all the exercises suggested by S.

**S:** That is good to hear, R. Are you having any issues with sticking to the exercise plan? (*BCT 1.1 - Goal setting (behaviour), BCT 1.3 - Goal setting (outcome), BCT 1.9 - Commitment*)

**R:** No S. I am comfortable with the routine now. Most of the exercises you recommended fit in with my daily activities.

**R:** I am actually more concerned about my diet.

**P:** Are you? What exactly is the problem?

**R:** I am not able to stick on to the diet plan that you had made and I am not able to cut on the junk food.

**P:** You are not the first to be facing this issue but you need to understand that reducing on junk food is a necessity. (*BCT 1.6 - Discrepancy between current behaviour and goal*)

**R:** Yes. I know but I am not able to stop myself.

**Q:** R, maybe you should start replacing some ingredients in your food. (*BCT 1.2 - Problem solving, BCT 1.4 - Action planning, BCT 12.1 Restructuring the physical environment*)

**P:** Yes R. Q is right.

**R:** Can you give me some examples?

**P:** Instead of using butter or cream while cooking, you can use olive oil. It is relatively healthier. (*BCT 12.1 - Problem solving, BCT 1.4 - Action planning, BCT 5.1 - Information about health consequences*)

**Q:** Also try avoiding the adding of sugar in tea, coffee and juices. (*BCT 1.3 - Goal setting (outcome), BCT 1.2 - Problem solving*)

**R:** Okay. But I am not sure whether I will be able to stick to this plan.

**P:** R, you need to understand that a good diet plays a huge role in the management of Diabetes. So, you need to make an extra effort. (*BCT 5.2 - Salience of consequences*)

**Q:** R, why don't you use a personal diet tracker? You can note down on which occasions you avoided sugar intake and junk food consumption. (*BCT 1.4 - Action planning, BCT 1.1 - Goal setting (behaviour), BCT 2.3 - Self-monitoring of behaviour*)

**P:** Yes, and if you manage to do this for 6 days a week, on the 7th day you can have your favourite food. Does that sound like a plan? (*BCT 1.4 - Action planning, BCT 1.9 - Commitment, BCT 10.1 - Material incentive (behaviour), BCT 10.9 - Self-reward*)

**R:** Okay. Now, I feel a little motivated to try this.

**P:** Let's meet again in 3 weeks to discuss your progress.

**R:** Okay. Thank you.

## 5.4 Example dialogue 4

### 5.4.1 Roles involved

**X:** Patient (Male-50 years)

**Y:** Family member (Wife)

**Z:** Nutritionist (Male)

### 5.4.2 Dialogue

**Y:** Hello Z. My husband is suffering from Diabetes for about two months now. We need some recommendations to improve his diet.

**Z:** Sure. Diabetes requires some restriction in the diet but it is manageable. X, generally do you have a lot of junk food?

**X:** Yes. Sort of. Usually I buy my lunch in the office, which is usually some burger and a soft drink.

**Z:** Okay. From now, you need to restrain from eating these food items. They are totally not healthy for you and will not improve your condition. *(BCT 1.1 - Goal setting (behaviour), BCT 5.1 - Information about health consequences)*

**Z:** Y, I would strongly suggest that you keep him away from any source of junk food. Include a lot of whole grain and high fibre content in his food. *(BCT - Goal setting (behaviour), BCT 1.4 - Action planning, BCT 1.9 - Commitment, BCT 7.4 - Remove access to the reward)*

**Y:** Okay, but we usually don't have our meals together. Even, I have my lunch at the office.

**Z:** Do you? I would suggest that, you follow almost the same diet as him because it is necessary for him and it will be good for you as well in the long run. *(BCT 3.2 - Social support (practical), Social support (emotional))*

**X:** Yes Z. You are right. Eating together might let me stay motivated.

**Z:** For another two weeks, ensure you don't buy any junk food while you go shopping. Keep a track of whatever you are eating. *(BCT 1.1 - Goal setting (behaviour), BCT 2.3 - Self-monitoring of behaviour, BCT 4.2 - Information about antecedents, BCT 8.4 - Habit Reversal)*

**Y:** Okay. I will help him with that.

**Z:** Also, keep an account of the times at which you have your meals. Having meals at the same time on each day is important for X. *(BCT 8.3 - Habit formation, BCT 8.4 - Habit reversal)*

**Y:** Okay. Do you suggest that we keep a daily track of his weight as well?

**Z:** Yes. That would be a great idea. It would help to monitor the progress and be motivated to follow the diet. *(BCT 2.3 - Self monitoring of behaviour, BCT 2.4 - Self-monitoring of outcome(s) of behaviour, BCT 2.6 - Biofeedback)*

**X:** Okay. Am, I allowed to have my favourite dish at least once a week?

**Z:** Of course! Maybe you can follow the strict diet from Monday to Saturday and on Sunday, you can have your favourite dish but only as a form of reward. *(BCT 10.1 - Material incentive (behaviour), BCT 10.2 - Material reward (behaviour))*

**Y:** Okay. I see your point. That way he will stick to his diet for 6 days of the week.

**Z:** This plan should help you in managing your blood glucose levels and reduce your weight by at least 2 kilos in the next month. *(BCT 1.3 - Goal setting (outcome), BCT 2.6 - Biofeedback, BCT 1.8 - Behavioural contract)*

## 5.5 Example dialogue 5

### 5.5.1 Roles involved

**A:** Personal trainer (Male)

**B:** Nutritionist (Female)

**C:** Volunteer (Female)

**D:** Subject (Female-55 years)

### 5.5.2 Dialogue

**D:** Hello. For the last 6 months, I have been suffering from Diabetes and with the medicines prescribed, I tried to take care. But, I guess it is not working.

**B:** Okay. You don't have to worry. A lot of people who have come to us have been in the same state as you and are now doing much better. *(BCT 3.1 - Social support (unspecified))*

**C:** Yes D. Even, I faced a similar situation around 3 years back and with a good exercise and diet plan, I am able to manage the condition really well. *(BCT 3.1 - Social support (unspecified))*

**D:** Okay. This sounds promising. Where should I start?

**A:** D, to keep Diabetes in check, you need to follow both a good exercise plan and diet. Only then would your insulin and glucose levels be under control. *(BCT 1.3 - Goal setting (outcome), BCT 1.1 - Goal setting (behaviour), BCT 1.2 - Problem solving)*

**C:** A is right. Could you tell us a little bit about your comfort with performing exercises?

**D:** I am not a very athletic person nor do I go to the gym. Once in a while I go for walks, but most of the time I drive around.

**A:** Hmm. Okay. Maybe you could start with a 45 minute to 1 hour walk every morning. You can follow this schedule for 10 days and then gradually increase the duration by about half an hour or so. *(BCT 1.4 - Action planning, BCT 8.7 - Graded tasks)*

**B:** Regarding your diet, the first step is to completely cut down on junk food. This means that you should cut down on sugary and oily foods. Work on this for the next three weeks starting from today. *(BCT 1.1 - Goal setting (behaviour), BCT 1.4 - Action planning)*

**A:** Yes. We can see how this goes.

**D:** Okay. I am not very confident about this but I will try my best to stick to this plan.

**C:** I think you will be fine. I would suggest that you use a diary to take notes on all this on a daily basis. It has helped me to stay motivated and get things back on track. *(BCT 2.3 - Self-monitoring of behaviour, BCT 2.4 - Self-monitoring of outcome(s) of behaviour)*

**D:** Okay. Would you also suggest that I weigh myself every day and check my blood sugar level? *(BCT 2.6 - Bio-feedback, BCT 15.3 - Focus on past success, BCT 2.4 - Self-monitoring of outcome(s) of behaviour)*

**B:** Yes. That's a good idea and it will help in getting more thorough feedback.

**D:** Okay. See you.

## 6 Initial concrete coaching actions

Based on the example scenarios in Section 4, we provide in this section an initial set of concrete coaching actions.

Coaching Action	Description	Derived from scenario(s) and/or examples
Behaviour change technique	The coaches execute a behaviour change strategy based around Goal Setting – setting a personal, challenging and achievable goal (Locke & Latham, 2002).	Scenario 1 Examples 1-5
Reacting to the user's interests and personality	The coaches should be aware of what does and doesn't interest the user and use this to influence their coaching.	Scenario 2
Putting the user in control	Coaches should allow themselves to be "replaced" with different coaches with the same specialty if the user does not like the coaching style or advice.	Scenario 2
Empathic listening	Responding to sensed emotions, e.g. sensing the user is sad.	Scenario 3
Humour	Add appropriate humour to help cheer up the user.	Scenario 3
Language use	Use language that is tailored to the user's background.	Scenario 3 Scenario 5
Engaging other coaches	Coaches bringing each other into the conversation at relevant points.	Scenario 4
Analogies	Get a point across by using an analogy from user's life experience or storytelling technique.	Scenario 4
Open body language	Lean towards a user, have open body language, no physical barriers.	Scenario 4
Disagreement	Show disagreement between coaches along with the resolution in such a way that it does not negatively affect trust.	Scenario 3
Coaching relevant to the user's non-medical life	Incorporate a "peer" coach that does not have medical expertise but is related to the user – e.g. has the same professional expertise.	Scenario 5
Identifying real medical issues	When a real medical issue emerges, the coaches should know to step back	Scenario 5

	and refer the user to a medical specialist.	
Triage	Where a user is doing fine in a certain area, identify this and move on, while coaching in areas where the user is doing less fine.	Scenario 5
Coach hierarchy	Identify a clear hierarchy between coaches based on expertise, the user's current needs etc.	Scenario 5
Information about health consequences	When a user receives a new diagnosis, assist the user in their understanding of what that diagnosis involves.	Examples 1-3
Action planning	Closely connected to goal-setting, the coaches should help the user create a plan towards achieving that goal.	Examples 1-3 Example 5
Habit reversal	When a user currently engages in a bad habit, assist them in trying to stop (reverse) it.	Example 1 Example 4
Review of outcome goals	When a user has been set a goal, return to it in future coaching sessions to assess the progress and determine if the goal needs to be revised.	Example 2
Social support (practical)	Suggest that a user perform an action with someone else (a relative or friend).	Example 2 Example 5
Social support (unspecified)	Refer to previous (unspecified) users who found themselves in a similar situation to the current user.	Example 5
Salience of consequences	Make clear to the user the consequences of performing (or not) a certain action.	Example 3
Behavioural contract	Offer the user a reward in exchange for performing an action.	Example 4

**Table 1: Initial coaching actions**



## 7 Bibliography

- Bandura, A. (1991). Social cognitive theory of self-regulation. *Organizational Behavior and Human Decision Processes*, 50(2), 248-287.
- Fisher, J. D., & Fisher, W. A. (1992). Changing AIDS-risk behavior. *Psychological Bulletin*, 111(3), 455.
- Janz, N. K., & Becker, M. H. (1984). The health belief model: A decade later. *Health Education Quarterly*, 11(1), 1-47.
- Locke, E. A., & Latham, G. P. (2002). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American Psychologist*, 57(9), 705.
- Michie, S., Richardson, M., Abraham, C., Francis, J., Hardeman, W., Eccles, M. P., . . . Wood, C. E. (2013). The behavior change technique taxonomy (v1) of 93 hierarchically clustered techniques: Building an international consensus for the reporting of behavior change interventions. *Annals of Behavioral Medicine*, 46(1), 81-95.
- Norman, P., Boer, H., & Seydel, E. R. (2005). Protection motivation theory. In M. Connor, & P. Norman (Eds.), *Predicting Health Behaviour: Research and Practice with Social Cognition Models* (pp. 81-126). Maidenhead: Open University Press.
- Rogers, R. W. (1983). Cognitive and psychological processes in fear appeals and attitude change: A revised theory of protection motivation. In J. Cacioppo (Ed.), *Social Psychophysiology: A Sourcebook* (pp. 153-176). Guildford Press.