Health Behaviour Change

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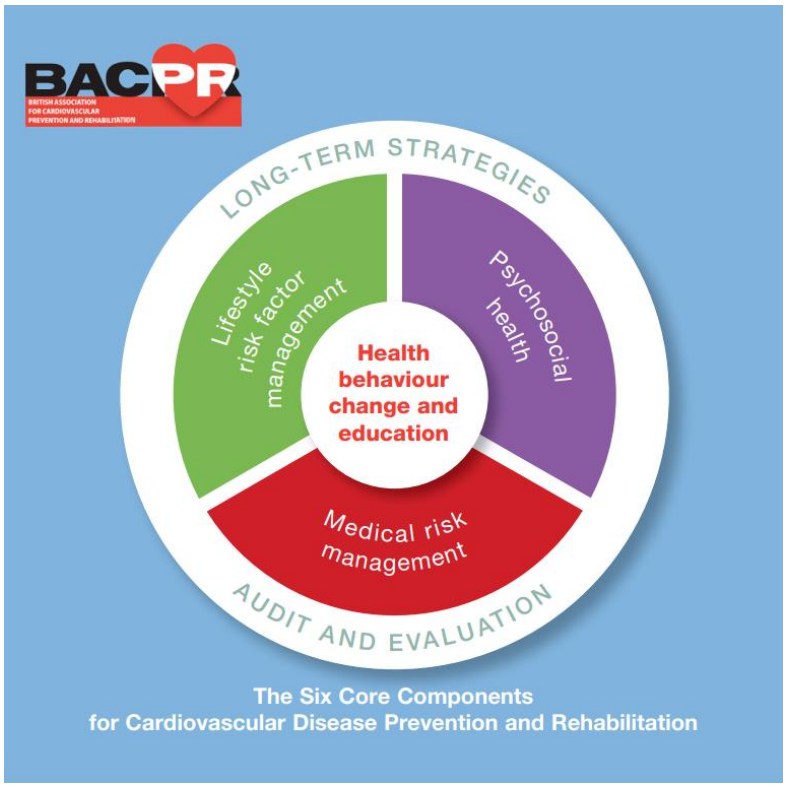
Motivational Interviewing

Goal-Setting and Pacing

Overactivity-Rest Cycle

Health Behavioural Change

Health behaviour change is a key part cardiac rehabilitation. As such it is the central component of the seven core components defined by the British Association for Cardiovascular Prevention and Rehabilitation (BACPR). This is illustrated by the diagram below. The core competences document for the Health Behaviour Change and Education Component (BACPR 2014) can be used as a tool for health professionals working in cardiac rehabilitation to monitor the need for professional development and support staff to achieve specific competences.



Seven key components of cardiac rehabilitation (BACPR 2017)

Health behaviour change has underpinned the Heart Manual since its inception, it is of course an integral part of the cognitive behavioural model on which the Heart Manual programme is based. The Heart Manual training that facilitators receive also substantially contributes to the competence in supporting health behaviour change. The Heart Manual resource in either the book or digital format is the key tool in the programme to support the patient in their own behaviour change journey, from hospital to long term maintenance. Key behaviour change techniques are seamlessly built into the programme. Indeed as a key cardiac rehabilitation programme the Heart

Manual has been studied in a systematic review to highlight behaviour change techniques in home-based cardiac rehabilitation (Heron, Kee, Donnelly, Cardwell, Tully & Cupples (2016).

The Heart Manual is in effect, a behaviour change tool. The first part of the manual explains the condition, coronary artery disease and either the heart attack (MI edition) or the revascularisation process (revascularisation edition). The second part addresses misconceptions that are often a barrier to lifestyle change and provides reassurance and support that people can make changes to improve their condition. The manual introduces the key cardiac risk factors at weekly intervals. It also helps to develop a sense of self efficacy or confidence in one's own capability by encouraging the individual that lifestyle improvement is indeed achievable.

The walking and exercise plans are designed for goal setting – a key behaviour change technique (BCT). It also uses reframing techniques to encourage an individual to think more positively about the behaviour and prompt behaviour change. For example, the section on exercise addresses fears about safety and accentuates the benefits of physical activity.

The programme uses self-monitoring, another key BCT and allows for feedback from you as a facilitator and other family members. The build up of walking/exercise/activity records over the six weeks also allows for a comparison between previous and current behaviour, which is another source of encouragement and motivation to promote maintenance of behaviour change.

The role of Motivational Interviewing

The Heart Manual facilitation employs core skills that are also used in motivation interviewing. Motivational interviewing is a patient centred counselling style that aims to support individuals to make adjustments in unhealthy behaviour by reducing ambivalence and promoting self-directed change. Many health practitioners have avoided performing behaviour change counselling and often share the same reasons as patients for not making lifestyle changes (Dunn and Rollnick 2003). For example, 'I've tried it in the past but it doesn't last' (Reason: lack of confidence), 'I've tried it before and didn't enjoy the experience' (Reason: aversion) and 'I don't have the time in my schedule' (Reason: time). For those who are new to the experience it may be comforting to know that you already have a lot in common with your patients!

Time is not necessarily a barrier to facilitating behaviour change, but how the time is used is important. One of the key features of motivational Interviewing is that the person is empowered to take control of their lifestyle. Traditional interaction between health professionals and the person has often featured the patient as a passive receptor of advice and information, with practitioners judging the patient as 'unmotivated' if they disagree with the advice given, or refuse to act on the information given. Research has shown that this traditional method is not conducive to sustained behaviour change. By contrast, patients who feel they are in control of their decision-making are more likely to be successful in making important lifestyle improvements.

Building a rapport

There is clear evidence that the style in which the health professional approaches a patient about lifestyle factors has direct influence on the choices that patients make (Miller and Rollnick 2002). Miller and Rollnick (2002) describe Motivational Interviewing as:

> ***'A method of communication rather than a set of techniques. It is not a bag of tricks for getting people to do what they don't want to do; rather it is a fundamental way of being with and for people – a facilitative approach to communication that evokes change.'***

Motivational Interviewing has a number of characteristics which, when used flexibly, are crucial to the success of the facilitation process. These are: the demonstration of empathy; the development of discrepancy; the ability to roll with resistance; and the promotion of self-efficacy (the belief in one's own capability for behaviour change) (Miller et al. 2008). This is what Miller and Rollnick (2002) refer to as the 'spirit' of behavioural change counselling. Here the facilitator develops an atmosphere which is conducive rather than coercive to change, allowing the patient to identify their own strategies.

Expressing empathy requires the clear demonstration of understanding and warmth with an acceptance of the patient's point of view. This requires communication skills such as the use of open questions, affirmation (acknowledging positive behaviours and encouraging) and active listening.

The use of reflection is part of active listening. Here the health professional gives a summary of what the patient has told them, or the patient's words are used to frame the questions posed. This process shows that the facilitator has empathy for the patient's situation and can relate to them. The use of reflection is an invaluable tool when gaining an understanding of the patient's perspective.

At the start of consultation it is often useful to find out the patient's understanding of what may have caused their condition and the risk factors associated with coronary artery disease. This allows misconceptions to be identified and accurate information to be acknowledged. The facilitator can work with the person by selectively reinforcing the patient's 'change talk' (talk that indicates a motivation to change to change behaviour) and clarifying any areas where questions may remain. It is often through this process that the patient can express concerns, desires and intentions. It is important to ask permission before giving information as this encourages the patient to share control of the consultation process while reducing the development of resistance.

As the facilitator begins to gain an understanding of the patient's perspective, *discrepancies* may develop. This is where the health professional can lead the person to recognise the distance between the current behaviour and their desired situation. The person may be in 'two minds' or ambivalent about making changes. By recognising discrepancy the person has a 'reality check' and may be more inclined to set practical goals to bring about behaviour change.

As the facilitator-patient relationship develops the facilitator will gain an idea of how ready the patient is for behaviour change. In some cases the detection of change talk may be hampered by the expression of ambivalence or direct resistance. It is important to avoid argument at this time, and instead try to *'roll with the resistance'* (Dunn and Rollnick 2003). Dunn and Rollnick express this as '*dancing not wrestling'* (Dunn and Rollnick 2003).

Often health professionals fall into the trap known as the '*righting reflex'*. As humans, we have a strong desire to put things right or fix a situation which we feel has gone awry. Unfortunately this leads to the practitioner providing solutions or directly challenging patient's responses which can be counterproductive and lead to resistance.

Resistance can be manifested in various ways, with 'yes *but'* being a classic resistance statement. Also, agreeing to everything you say may be a form of resistance. In the resistance situation, it is useful to acknowledge the aspect of resistance by reflecting the patient's response. This allows the person to express their frustrations or difficulties further, while giving them the opportunity to decide what to do or talk about next.

Promote *self-efficacy*. Self-efficacy (Bandura 1977) is an important factor in turning good intentions into actual behaviour. Perceived self-efficacy is an individual's belief about their own capability and ability to perform an action or behaviour to create change (Bandura 1994). The person may consider it very important to change their behaviour but feel the constraints that need to be overcome are too great. These types of beliefs are unlikely to lead to change. Encouraging solutions from the person is one step towards supporting self-efficacy. Patients may seek your opinion or advice: in these situations it is best to avoid giving your own suggestions, but using a 'typical day' may be helpful as it encourages the person to think about solutions within the context of their own life. Those patients who find their own solutions are much more likely to implement them.

Assessing readiness

Ambivalence or being in two minds about making a change, is very common. Reasons to change, of course, vary from person to person. The facilitator's role is to guide the ambivalent person towards the process of change without jumping ahead of their readiness to do so. Many facilitators will be familiar with the 'stages of change' model described by Prochaska and DeClemente (1982).

Here the process of change is described as passing through various phases from precontemplation to contemplation, preparation to action and on to maintenance. This can be difficult to assess as often patients do not react to change in a methodical way, such as planning the changes that they make, but leap straight into starting or stopping a specific behaviour.

Occasionally it may be the wrong time to think about change due to emotional or physical issues, or social or personal circumstances. In addition to asking permission to talk about health behaviour change, it may be worth addressing the question of

readiness by asking the person the simple question ‘how do you feel about making a change?’ In this way the person can openly discuss their feelings and their level of readiness can be identified as being ready, thinking about it or not being ready.

Another method of assessing readiness is by exploring the issues of importance and confidence. This is done by asking the patient to consider the prospect of change on the scale of 1-10 for its importance to them and their ability to initiate and sustain the change.

LOW			MEDIUM			HIGH			
1	2	3	4	5	6	7	8	9	10

Importance – on a scale from 1 to 10, how important is it for you to make a change? A low score (1-3) would indicate that the person may not have considered making changes and that it is not very important to them. A high score (8-10) suggests that the person considers it very important to make changes.
If importance is at a score of 7 or more then you can proceed to explore confidence; if it is less, then you can try and boost this. It is useful to ask the person what it is they like about the risk behaviour, and then enquire what they don’t like about the behaviour.

It can be useful to ask them ‘Why are you at a (the number they had stated) instead of a 1?’ This helps the person identify and generate reasons for behaviour change, and in doing so increases their own motivation.

If you follow this by summarising and reflecting on what the patient has said, you can then ask them ‘Where does this leave you?’ This process helps the patient to clarify their own position. Patients may see the discrepancy in what they are doing at present and what they want to change. Reflection provides a chance to convey important information about the risks in not changing the behaviour, if the scores are very low. This information has to be timed sensitively to avoid building resistance. You may find that the patient outlines their risks and you can build on this.

Confidence can be explored in the same way. A person with a score of 7 or above has sufficient confidence to make changes. A person may find that they doubt their

ability to carry out a change and are likely to give a low score. It is then useful to think about ways in which confidence may be increased.

Identifying Problems and Finding Solutions

In order to encourage the person to identify their own solutions to overcome barriers to behaviour change, it is also useful to ask them 'What would it take to get you from (a number less than 7) to a 7?' By framing the question in this way, in order to answer the question, the person will have to think of the type of changes to be made in order to be more confident. At this point you may also want to ask the patient if there is anything you as a facilitator can help them with to increase their confidence. *Brainstorming* (no matter how silly the solutions may be) is a useful process to try and identify solutions. Also going through the *costs and benefits* of a solution helps anticipate problems that may need to be addressed with your support.

When offering support it can be useful to say 'Other people have found that doing (solution) can be helpful'. Providing information in this way is non-judgemental and still allows the person to take the final decision on the choice of solution.

For those patients who are less willing to change, the use of hypothetical language may provide patients with the means to visualise how or when they might bring about change. You may need to go back a step in the process in order to guide patients to proceed further in the behaviour change process.

> ***'If you did change your diet what would be the benefits?'***
>
> ***'If you could increase your fitness levels how would your life be different?'***
>
> ***'If you continued to smoke, what do you think will happen in 5 years?'***

Rollnick et al (2008) also suggest these questions if you have a good rapport with your patient:

> ***'What currently impossible thing, if it were possible, might change everything?'***

'If you were in my shoes, what advice would you give yourself?'

The main spirit of Motivational Interviewing according to Rollnick et al (2008) is that the patients have most of the answers in them, and with this in mind the appropriate questions will follow.

What next?

After discussing readiness, importance and confidence, Rollnick et al (2008) suggest that it is useful to test the patient's commitment by asking a 'what next?' question, e.g.,

'So what would be a first step for you?'

'So what do think about your diet at this point?'

The usual response to these types of questions gives an indication of the level of commitment and likelihood that the person will make changes. Your follow-on questions can encourage the person to be more specific, for instance *what* will the person do next, *how* can the person succeed in doing this (Miller et al. 2008). This leads us to the SMART acronym used in goal-setting (See section on goal-setting later in this chapter).

If the person is willing to make changes then they may be ready to set some goals. In their responses to your questions they may have already identified goals and ways of carrying these out. It is good to remind them of these and emphasise that they were the person's own ideas. If the goals are vague, encourage the person to identify a goal that is more specific, for example 'I will take more exercise' is general, whereas 'I will walk the dog every day for ten minutes' is more specific.

Summarising

The use of Motivational Interviewing methods may be a new experience to many facilitators. Like any new technique it takes time to master and become confident. Its use takes practice and often you may find yourself thinking about how to construct a conversation which can result in the loss of the flow of the consultation: '*wrestling rather than dancing*'. In this situation it is worth while taking a few minutes to summarise the main aspects of the discussion. This allows you to reinforce the

change talk, demonstrate that you have been listening and allows the patient to elaborate on areas of concern or interest.

The Heart Manual course offers a taste of some of motivational methods and it is worthwhile seeking out further courses and literature which will help you develop this skill further.

Goal-Setting and Pacing

Goal setting is increasingly referred to within cardiac rehabilitation as it can be a useful technique in supporting individuals to change their behaviour. However, it is important to acknowledge an individual's ambivalence, hesitancy or even little/no motivation to change. In this case, goal setting may not be initially appropriate. Instead, using motivational interviewing techniques, as discussed above, may be more effective by focusing on motivation to change. Key techniques for this include: exploring the pros and cons of behaviour change; looking to the future and the effects of not making a change; or engaging social support. Once the individual is at a higher level of motivation, goal setting can be used much more effectively.

The risk factors for heart disease have been highlighted in an earlier chapter. One of the key and most effective ways to tackle the risk factors is to use goal-setting. Safety is paramount - it is best to avoid the Overctivity-Rest Cycle (see Overactivity-Rest Cycle section later in this chapter) that can be both harmful and demoralising. 'Do what you plan, not what you feel' is a good rule to follow and is an important part of goal-setting.

Research has shown that the type of goal that is most likely to be achieved is one that is not too easy or too hard. Also personal factors are important too. Self-efficacy or the belief that one is capable of attaining a goal can also affect the chances of achieving the goals. The amount of importance attached to the goal also has a bearing of whether a goal is achieved or not. These factors can be changed through the use of a Motivational Interviewing approach (see earlier in the chapter).

Goals

So what do we mean by goals? There are specific risk factors that the Heart Manual describes that may need to be reduced. Goals in relation to any of these may be: stop smoking, eat 5 pieces of fruit or vegetables a day, lose 15lbs, get back to work or walk 5 miles. What these goals have in common is that they are specific, measurable, achievable, realistic and timely.

SMART goal-setting

Specific – or precise: 'I want to take more exercise' is too vague. 'I want to walk to the shops' is better or 'I want to get back to swimming twice a week'.

Measurable: I want to get exercise more is not easily measurable. It is best to have a set amount to aim towards such as 'I am going to walk five miles'. This target can be reached in incremental steps using pacing.

Achievable: Setting goals which are too hard can lead to failure, which is demoralising. It is better to have smaller successes which can give a boost and provide enjoyment.

Realistic: 'I am going to lose two stone in two months' may not be very realistic and may lead to lack of enjoyment and feeling inadequate if the goal is not reached. Again it is better to identify a goal that one feels they have a strong chance of reaching.

Timely: 'I will practise relaxation every day' is good, but 'I will practise relaxation everyday before lunch' is better. By placing a time on this, a patient is much more likely to carry out the activity.

Rating efficacy: If a person rates their chances of achieving the goal as less than 7 out of 10, ask them to think of a target that is slightly easier so that they will get a rating of about 8 out of 10.

Rewarding: Goals that are unrewarding will not motivate the patient. It may be necessary to support the patient in identifying the rewards.

The Exercise/Activity Plan

The Exercise/Activity plan in the Heart Manual is an integrated walking and exercise plan that is based on the principles of goal-setting and uses the walking and exercise records found each week in the manual. Information on supporting the patient in setting safe and realistic walking and exercise goals is covered in detail in the Exercise and Physical Activity Chapter. Please also read the weekly Exercise/Activity Plan in the Heart Manual which gives clear advice to the user on how to build up exercise and activity incrementally.

Additional resources

Additional resources are made available to the facilitator which they may find useful when supporting the patient to set goals and targets for other lifestyle changes, such as reducing alcohol, increasing fruit & vegetable intake, or practising relaxation exercises.

Agenda setting

Visual aids are useful for prioritising goals. The Agenda Setting Chart (Figure 1 & Resource 4 in the Training Workbook) can be used to choose to change predefined behaviours and also to think more individual priorities. There are blank spaces on the chart for this. This can be used to choose to change predefined behaviours and also to think of more individual priorities. There are blank spaces on the chart for this.

Figure 1. Agenda Setting Chart

The Lifestyle Factors Chart (Figure 2) is an additional resource designed to support the person to set appropriate goals. It is structured in such a way that the person can record their present situation, their ideal target, and then the agreed target (there is also a space to note the relevant sections in the Heart Manual for information about the lifestyle factors).

Factor	Now	Ideal	Target	Section in Heart Manual
Alcohol e.g. for male	30 units	<14	14 units	Food/Alcohol Week 3 page 78
Blood Pressure				
Weight (kg)				
Waist (cm)				
Cholesterol				
Smoking				
Alcohol				
Health Eating				
Physical Activity				
Relaxation				

Figure 2. The Lifestyle Factors Chart

For example, if a person wanted to reduce their weekly alcohol intake, their current intake being 30 units whereas their ideal may be less than 14 units, the person and facilitator may agree a target of no more than 25 units per week.

This target is very specific (S), it is also measurable (M), it may be identified as achievable (A), it represents a realistic figure (R), and when a timescale is applied, is also timely (T). The target now fits the SMART criteria.

This can then be written in another extra resource: the goal setting chart (Figure 3) to guide the weekly targets. At the top of the page is a scale from 1 to 5 ('1' being too easy and '5' being too hard) that can be used as a visual aid to help the person rate the level of effort of the target. The initial target should feel 'about right' for the patient. An 'about right' score on the goal-setting scale will be around a 5.

Goal Setting Chart

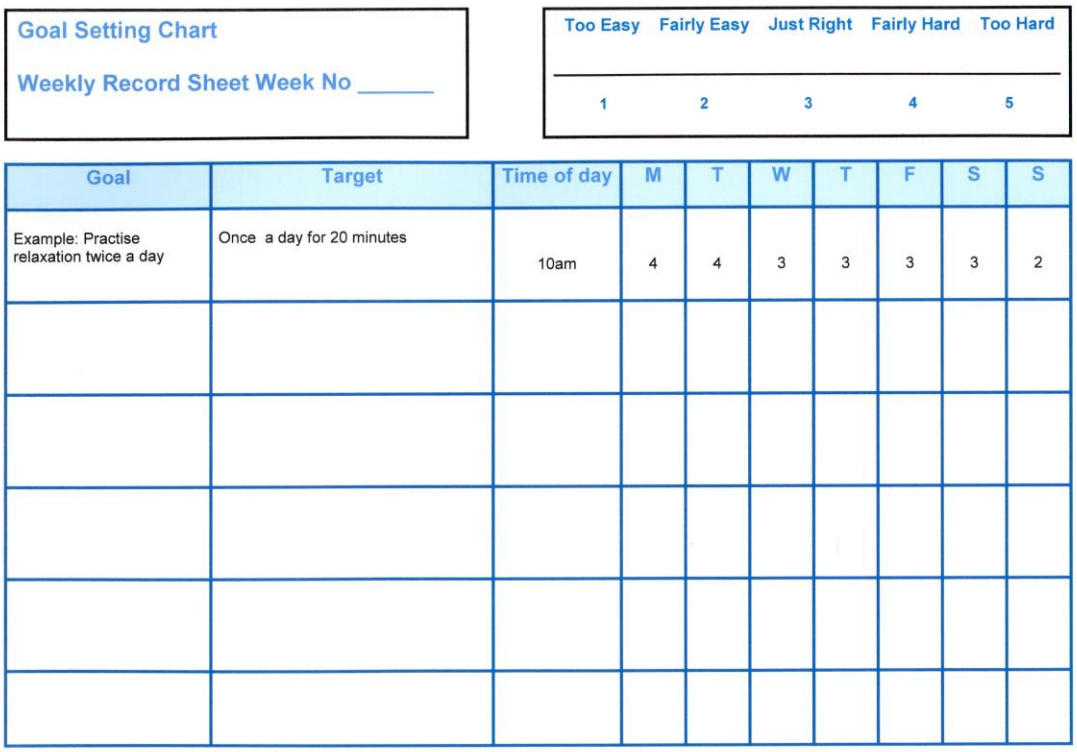
Weekly Record Sheet Week No _____

Too Easy	Fairly Easy	Just Right	Fairly Hard	Too Hard
1	2	3	4	5

Goal	Target	Time of day	M	T	W	T	F	S	S
Increase physical activity	Walk to the shop each morning to collect the paper. 10 minutes.	10am	4	4	3	3	3	3	2

Figure 3. Weekly Record Chart – Physical activity example

To use a different health behaviour example: A patient's overall goal may be to practise relaxation twice a day, where the daily 'mini' target may be recorded as once a day for 20 minutes. The time of day is inserted and how easy or hard. If there is a score of less than 3 (e.g. 1 Too Easy or 2 Fairly Easy) for 3 days in a row, the target should gradually be increased so that the rating will return to 3 or Just Right. The achievement of each target helps to promote motivation and sustain the desire to reach the intended goal (see Figure 4).



Goal Setting Chart

Weekly Record Sheet Week No _____

Too Easy	Fairly Easy	Just Right	Fairly Hard	Too Hard
1	2	3	4	5

Goal	Target	Time of day	M	T	W	T	F	S	S
Example: Practise relaxation twice a day	Once a day for 20 minutes	10am	4	4	3	3	3	3	2

Figure 4. Weekly Record Chart – Relaxation example

Reviewing success and resetting targets

If the person keeps a record of their efforts in either the Heart Manual daily record sheets or on these additional resources, as a facilitator, you can provide powerful reinforcement of the successes that the person has noted, in doing so helping to sustain the motivation to self-record.

Possible problems

The person may fall back into the Overactivity-Rest Cycle (see next section). People who do not stick to their plan and do too much on one day, may realise why they are feeling tired, if you the facilitator draw their attention to the pattern shown in the activity sheets and manual. They may tell you that they went for a lot longer than they

had planned. Ask them what they did and how they felt the next day - if they say they couldn't do as much and that they felt tired or demotivated, highlight what could be happening or better still ask them what they think is happening. The Overactivity-Rest Cycle doesn't only apply to physical exercise - being too restrictive in foods all at once or trying too listen to the whole relaxation CD can also lead to feelings of 'overdoing it' and lack of motivation.

Illness can lead to lowered activities too. The targets will need to be planned and reset, perhaps returning to a lower level for a while. Holiday activities may need careful planning to take into account the new environment. For example the amount of time walking may need to be reduced if the holiday area is hillier or the temperature levels are much higher.

The Overactivity-Rest Cycle

In the Heart Manual patients are reminded to *'do what you plan, not what you feel'*. Below are two diagrams of two ways a person may proceed in order to achieve their goal (Figure 5a and 5b). The first example illustrates the Overactivity-Rest Cycle. This may come about when the person does not keep to a plan but does more activity on a 'good day' when they feel like it, and rest or not do anything at all if feeling 'under the weather'. This way the person might take longer to achieve their goal or may even be worse off than prior to setting their goal. After a good day they may feel stiff, achy and exhausted. It may be helpful to use the analogy of a sports person with an injury.

Facilitators have found this particularly useful with those who have considered themselves to be fit and are anxious to get back to their 'normal' self. Rather than rush to achieve the goal, an experienced sport person will use pacing and keep to a number of small goals to reach his/her final objective of getting back in shape, or better still, to attain an even better standard than before they were injured.

The professional sports person is much more likely to keep to a set exercise plan. Regardless of how they feel they will not push themselves further just because they are having a good day. By keeping to a paced plan, patients can reach a better level of fitness than even before an MI.

The progression with this type of pacing pattern is shown in the second diagram: it can be seen that when a series of little goals are accomplished the progress is actually faster. The way forward is little and often, rather than large bursts of activity followed by rest. Success reinforces success: the satisfaction one has in achieving a small goal, will provide incentive and encouragement for keeping to plan and achieving the end target.

Figure 5a. Over Activity Rest Cycle

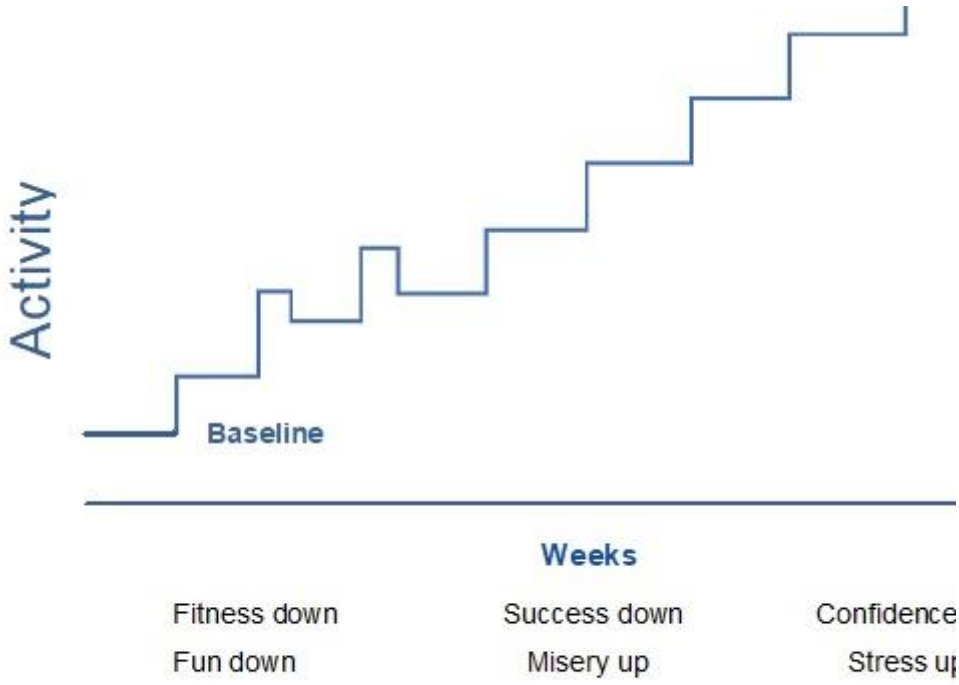


Figure 5b. Pacing

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