

Textbook of  
**Functional Medicine**



**Institute for Functional Medicine 2010**

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# Chapter 36

## The Healing Relationship

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- ▶ *Creating Effective Doctor-Patient Relationships*
- ▶ *Helping Patients Change Unhealthy Behaviors*

### *Creating Effective Doctor-Patient Relationships*

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#### Introduction

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In the Introduction to this book, we read the following statement:

Functional medicine could be characterized, therefore, as “upstream medicine” or “back to basics”—back to the patient’s life story, back to the processes wherein disease originates, and definitely back to the desire of healthcare practitioners to make people well, not just manage symptoms.

This begs the question of how clinicians can obtain enough of the right kind of information from patients in the relatively short period of time we are in contact with them. Patients have lived a lifetime of experiences, some good, some bad, some with significant impact, and some that are insignificant. How do we put all of this together in a frame that helps us mold a functional diagnosis and treatment plan? It has been said that 90% of all diagnoses in medicine are still made on the basis of history, symptoms, and review of systems—although we would add review of mechanisms to that list (see Chapter 34)—and that technological investigations, though frequently helpful, are most often illustrative and additive.<sup>1</sup>

In this chapter—indeed, in this whole section of the book—we are learning how to elicit, organize, *and use* information about the antecedents and triggers that precede the onset of symptoms, and the mediators that keep the dysfunction going. Antecedents and triggers can be amazingly diverse, ranging from motor vehicle accidents to sexual abuse, from toxic exposure and fam-

ily history to limiting decisions and beliefs that patients have adopted from an early age regarding their lives. The ability to glean this information from the patient is critical to weaving the interconnected web that is so basic to the functional medicine model.

Therapy actually begins from the moment the patient enters the clinic. From the atmosphere in the waiting room to the physical posture, attitudes, beliefs, and language of the practitioner and staff, there is always a need to foster in the patient an awareness of what it means to view health as positive vitality.

#### Rapport

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To elicit and understand the patient’s story, to help people make changes that are beneficial, and to create a healing relationship, it is important to be able to develop a rapid and powerful rapport with patients, so they feel comfortable telling their stories and revealing intimate information and significant events. Rapport is the core element that enables a practitioner to glean this kind of information from patients. Without rapport, both the functional diagnosis and treatment recommendations may be flawed or ignored. We will examine the following elements of the successful doctor-patient relationship:

- What is rapport and how can it be established rapidly and respectfully?
- What questions elicit the information needed to weave the functional web or matrix, so that treatment can be successful?

## Section VII

### Putting It All Together

- What language empowers and motivates patients in a movement toward positive vitality and wellness?
- How do we de-emphasize the pathology model to which we are accustomed?
- How do we help patients change their behaviors and lifestyles so they feel empowered, fully functional, and able to manage on their own to a large degree?

### What Is Rapport?

Being in rapport is the ability to enter another person's model of the world, communicating that we truly understand that world, in a **congruent** way. Being congruent means that we express ourselves with all our senses in a unified way. You have been establishing rapport unconsciously all your life; we all learned this as we figured out how to get along with people. Now we can enhance this process by making it conscious.

In functional medicine, patients are seen as unique individuals who may not fit the pre-determined models that correspond to particular diseases or conditions. Rapport will help us elicit, in a short space of time, the patient's complete story so that we can begin formulating a treatment plan. Traditional diagnosis is usually a part of the story—at least at the outset—but it is not a primary goal, and it will not tell the full story. The initial goals are to gather information that will help to create an *individualized* picture of the patient, create a working hypothesis about the dysfunctions underlying the symptoms and complaints, and form an effective, professional bond with the patient.

### Presuppositions

Presuppositions about our patients set the stage for a positive or negative relationship, and they can interfere with establishing rapport. What *you* believe will influence the course of the patient's illness or wellness, if not at the conscious level, then certainly at the unconscious level. This is demonstrated eloquently in Daniel Moerman's *Meaning, Medicine and the 'Placebo Effect,'* wherein he explores and explains the research about placebo.<sup>2</sup> Moerman argues that it is not so much the patient who produces the placebo effect, but rather the healthcare practitioner whose beliefs about the treatment or the patient have considerable influence on the outcome. Here are some *helpful* presuppositions (assumptions) to have about all patients:<sup>3</sup>

- **Patients have all the resources they need to heal.** Clearly they may not have the same *knowledge* as you do about biochemistry and metabolism, but remember that they live in their bodies, and they have had to learn many things in order to survive and function.
- **The meaning of your communication is the response you get.** If a patient gives you a signal (verbal or non-verbal) that something you have said or done has triggered a negative emotional state (see below), use that information as feedback for a different approach, because ...
- **Your personal flexibility will determine your success.** If something you are doing or saying isn't working—change it. Systems theorists have shown that the system with the most flexibility is the one that generally ends up working.<sup>4</sup>
- **Every behavior has a useful purpose in some context.** Patients with chronic illness sometimes develop illness behavior, which you may have learned to view as a negative trait. Remember that this behavior **serves some useful purpose** (usually unconscious) for the patient. Understanding this will help you avoid the trap of labeling anyone as a "problem patient."

### Emotional States

An emotional state is a *particular way of feeling*, brought about by internal representations and physiological shifts, as a result of a person's life experience, conceptual filters, and internal map of reality, at that moment, and in that context.

Emotional states can range from depression to elation, with myriad possibilities in between: aggravation, frustration, excitement, boredom, joy, amusement, grief, and so on. Emotional states are internally generated by information that comes to us through the five senses—visual, auditory, kinesthetic, gustatory, and olfactory. The information is then processed through a variety of unconscious filters that ultimately create an internal representation of what we see, hear, taste, smell or feel. Such representations have the power to create a shift in a physiological state and can influence subsequent behavior.

A simple example will illustrate. A man is driving home on the highway from work after a stressful day. His mind is filled with thoughts about his day and anything that may have precipitated unpleasant feelings

that we generally characterize as “stress.” Perhaps he has a headache, neck pain, or stomach ache. As he looks out of his car window, he sees (visual representation) the sun setting in the west. He is reminded of his last vacation (past experience), when he saw a beautiful sunset, and he recalls the closeness that he felt with his wife as they watched it from their hotel balcony. As he “connects” to this past experience, he can feel his shoulders relaxing and the tension easing from his body (kinesthetic shift). This man has just changed his emotional state, fortuitously on this occasion, by changing his focus of attention and by remembering a pleasant past experience.

Most patients are in what we might call a *problem state* when they see us. They feel bad. They have to feel that way in order to communicate effectively about their problems—in other words, they have been thinking about the problem and how they are going to describe it. They have been internally rehearsing prior to the visit.

An important factor to take note of here is that we—the practitioners—are also in some kind of emotional state, and whatever it is will surely affect our interaction with the patient. So, it’s good to take stock: **Consider what kind of state you are in before you see the patient.** Are you in a bad mood, or stressed out? Did the last patient trigger some bad feelings? Do you have some personal matters you are bringing to the interview? Or, on the positive side, are you relaxed, curious, and eager to discover something unique about the person you are about to see? If so, you are in an excellent state for seeing patients.

**You can help yourself achieve that positive state.** Remember a time when you felt **really curious** about something. Mentally imagine yourself being curious, hear what you are saying to yourself, and feel the change in your body as you do this exercise. Take a few deep breaths to relieve any tension you might have, and then greet the patient with a genuine, flexible, curiosity. This will go a long way toward building rapport and establishing a comfortable ongoing relationship with your patients.

## Communication

Communication is 7% words, 38% tonality, and 55% physiology. As mentioned above, we all use our senses to take in our experience of the world. Research has shown that we use the following percentages of our senses to map our reality:<sup>5</sup>

- Visual—60%
- Auditory—20%
- Kinesthetic—20%
- Olfactory/gustatory— <1%

Therefore, your patients will be communicating problems to you with many of these senses, although most of us have a preferred style—most often visual, then auditory and kinesthetic.

Let’s look at this a little more closely. Since we all take in the world through our senses, the type of sense we use will depend on the circumstances. For example, at a concert, the primary sense is tuned to the auditory channel. Looking at a painting requires a visual focus. Doing a workout requires a kinesthetic sense of body position and movement. When we communicate with others, we also *express ourselves* in one or more of these senses:

Sometimes when I sit out on my deck I feel really fulfilled and content. I can **see** the vibrant colors of the blooming flowers, **and hear** the gentle trickling of the waterfall in my pond. Further off in the distance I can **hear** the fluttering of bird’s wings as they play in the birdbath, while a gentle breeze **wafts** across my face bringing me the **sweet scent** of July blooms.

What’s missing from this paragraph? Tonality and physiology are missing, and if you read this to yourself, you will fill them in automatically, based on your own experience. But notice that in this example the verbs or descriptive words match the nouns—that is, you see colors, hear the trickling-fluttering; feel the wafting breeze. This matching helps make the passage *congruent*. However, congruence also depends upon *tone* and *physiology* even more than the choice of words. Sarcasm is a good example of how this works—a sarcastic comment is one in which words, tonality, and expression are not balanced: “I *really* like your tie” (*sneer*). What do we tend to believe? The tone and the visual cues. If the comment is more veiled, we may just feel uneasy, or think that something “isn’t quite right.”

Obviously, this is important information to have, both in the context of what you hear patients saying, and how you say things to them. Some people select primarily **visual** language: “I *see* what you mean.” “This *colors* my judgment.” “You can *look back* on this material and notice how easily it comes to you.” Others choose **auditory** images: “I *hear* what you’re saying.” “That *rings* a bell.” “This idea is coming across *loud and clear*.” Still others use **kinesthetic** words: “I can’t *grasp* that.” “*Hold on* a minute!” “I’m *going to pieces*.” “I think I *have a handle* on this now.”

## Section VII

### Putting It All Together

With this information in mind, we now turn to the development of patient rapport.

#### Establishing Rapport

People tend to like people who are like themselves. When we meet someone new, we search for **commonality**. Rapport is created and established by pacing the individual's communication through **mirroring and matching** the key elements of a person's **physiology**—gestures, facial expressions, eye blink, breathing; **tonality**—tone, tempo, timbre, volume, pitch, pauses; and **words**—predicates (verb phrases), key words, associations.

You know you are in rapport when:

1. You are getting the outcome you want (that might be just getting along with the patient or making the patient feel comfortable), and
2. You calibrate to the person's level of comfort—that is, you keep the level of comfort relatively steady and, if discomfort arises in the patient, you change your approach so that rapport is re-established. (Sometimes when you have sufficient rapport, the relationship can tolerate a certain amount of discomfort. However, handling discomfort in the relationship is beyond the scope of this text.)

There are clearly varying degrees of rapport, as shown in Figure 36.1. In professional relationships, optimum rapport is defined in a fairly narrow band. It is important to avoid overidentification with the patient (and his or her problem) and still be able to communicate understanding and empathy. Physicians are often taught to aim for a cooler demeanor, to avoid getting "too involved." Unfortunately, this can result in a lack of rapport, generating frequent complaints from patients. In my practice, I often hear that other physicians "don't care about me, and don't listen to my concerns." I feel confident that usually the other physician does care, but because of our professional training, he or she may equate objectivity with emotional distance or coolness. I believe that maintaining understanding, openness, and empathy *without overidentification* is critical. Clinician/patient boundaries are important; clinicians must recognize that there are limits to their responsibility to and for the patient. Boundary issues regarding overidentification and sexual/romantic connections with patients are beyond the scope of this text, but have been dealt with adequately elsewhere.<sup>6</sup>

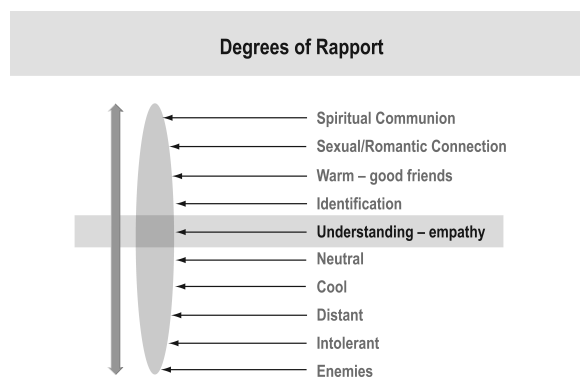


Figure 36.1 Degrees of rapport

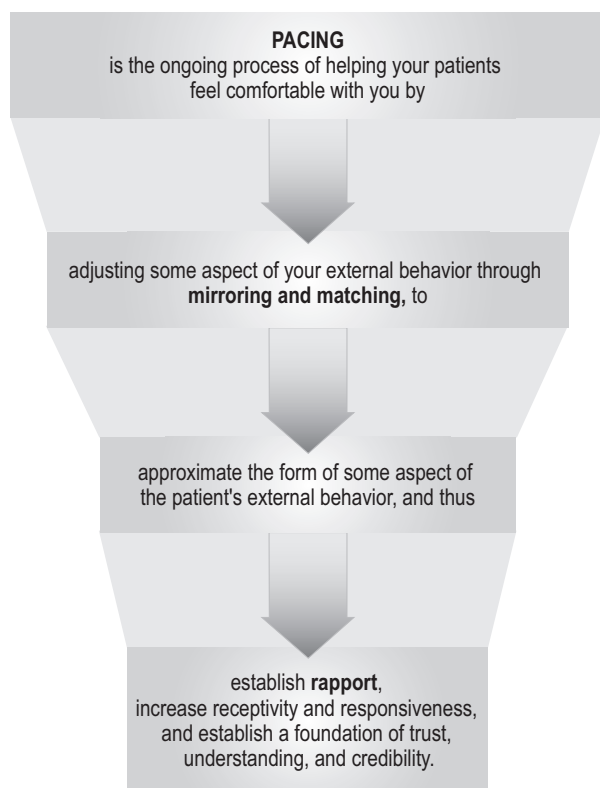
#### Behaviors and Skills that Build Rapport

In order to build rapport, you need to develop sensory acuity. The more sensory acuity you have, the more you can calibrate to the patient's nonverbal but significant communications. We gain sensory acuity by watching, listening, and occasionally smelling and touching our patients. We use many of our senses to communicate, and also to calibrate to our patient's state. When we calibrate well, we can shift our behavior to **match and mirror** the patient, in order to gain more rapport. This is called **pacing current experience**.

**Pacing current experience.** You can learn how to match and mirror your patient's words, tone, and physiology, and thus gain sensory acuity *and* rapport at the same time. People feel more comfortable with someone who responds to them in the *same language representations* that they are using. This will lead you rapidly into a state of rapport that can—seemingly magically—produce a wealth of information in a short time. The following characteristics of certain people will help you to determine their primary representational system.

Primary Representational System	Characteristics Displayed
Visual	Thin, ectomorphic, wiry, wide-eyed, fast talkers, neat, chest breathers
Auditory	Mesomorphic, easily distracted, very verbal, even breathers
Kinesthetic	Endomorphic, lax in dress, slow talkers, diaphragmatic breathers

**Pacing and then ... leading.** With pacing, you begin to establish more rapport. Once rapport is established at a sufficient level, you can begin to **lead** the person. Leading is a mild challenge—have you ever paced a friend who was training to run a certain distance in a certain time? If you ran slightly ahead of him (or her), you would induce him to run faster to keep up, and then you could pace him again by running beside him. In interviewing and psychotherapy, leading may be used to help a person feel more comfortable in their surroundings, or to move them from a non-resourceful emotional state to a resourceful state. The overall process for establishing rapport through pacing is shown in Figure 36.2.



**Figure 36.2** The process of establishing rapport

**Matching** is an integral part of pacing and rapport building. Table 36.1 reviews the different ways in which matching can be done.

**Table 36.1** Matching Behaviors

Type of Matching	Behaviors
Whole Body Matching	Adjust your body to approximate the patient's postural shifts, e.g., cross legs, adjust torso angle, etc.
Partial Body Matching	Pace any stylistic use of body movements, e.g., eye blink, head shakes, head/shoulder angle, etc.
Vocal Qualities	Match shifts in tonality, tempo, volume, timbre, cadence or intonation.
Verbal Patterns	Hear and utilize sensory system language that matches and paces the representational system used by the patient (i.e., auditory, visual, or kinesthetic language).
Facial Expressions	Notice the patient's facial expressions—wrinkles, lips, eyebrows, etc.
Gestures	Respectfully match the patient's gestures.
Breathing	Adjust your breathing pattern to match the patient's.
Matching is NOT copying. All of the above must be below the client's level of awareness.	

### Understanding the Story—Some Questions to Ask

Patients often provide clues about important factors in their stories in ways that can sometimes be easily overlooked when we focus too much on physical vs. emotional content. Open-ended questioning, together with listening in a non-judgmental way, will provide us with the opportunity to **really** hear what the patient is saying. Here are some open-ended questions that can elicit very useful information:

1. **When did you last feel really well?** This is an extremely important question because it takes the patient back to a time before things changed from good to bad. The answer may elicit both the temporal onset of symptoms and the **triggers or antecedents** for the functional issue. Asking the question in

this way, as opposed to focusing on when the patient began to feel sick (a more standard inquiry), requires patients to access, in memory, a time when they felt good, and that may give you important information that will help you to manage their “wellness program.” If there were only one question that a clinician could ask, it might well be this one. Ensure that you do initially elicit a **wellness** description here, as it is likely that the patient will gravitate to an illness description in order to tell you what is wrong, purely out of cultural conditioning.

2. **What happened then?** This is the next question to ask because you want to elicit a sequential response that will maximize the possibility of accurately identifying antecedents and triggers. Depending upon the patient’s particular way of telling stories, you will get more or less detail. Sometimes you may have to curtail too much detail, and at other times you may have to fish for more detail, remembering that you are looking for clues about triggers and antecedents.
3. **Was there anything going on in your life at that particular time that might have precipitated this [illness, pain, or other symptom]?** This question allows the patient to connect symptoms of any kind with stresses or life changes that they may have experienced. It gives them permission to make, or recall, that connection.
4. **Do you think that this [illness, pain, or other symptom] had anything to do with the fact that you [had a car accident, lost your father, became unemployed ... insert the specific event you are inquiring about]?** Again, this gives the patient permission to make connections between possible antecedents or triggers and their present symptoms. If they do make such a connection, the chances are it has some validity in their model of the world.
5. **Did anything happen to you as a child that made you feel bad?** This question is very open-ended, and may yield a number of results. Some patients may simply answer “no,” in spite of the fact that such an answer is unlikely to be correct, since most people can recall at least one bad thing that happened to them during childhood. The “no” answer may have two possible reasons: perhaps something did happen that they don’t want to talk about, or, in their map of the world, they simply don’t include “bad things.” Both of these have to

be respected. I sometimes preface this question, particularly in patients who are presenting with gastrointestinal issues, in the following way:

*There is research showing that some people with long-standing intestinal problems have had abuse issues as children. I don't want to suggest that that might have happened to you, but I do need to ask ...*

**Did anything happen to you as a child that made you feel bad?**<sup>7,8</sup>

You may be thinking, “What do I do with this kind of information if I get it?” The answer will depend upon your particular clinical skills, focus of interest, and degree of comfort with exploring such issues. For those with appropriate training and interest, affirmative answers to any psychological questions can be explored further for the purpose of healing. That work may not be appropriate for an initial intake and may be deferred to future sessions; this of course should be communicated to the patient. For clinicians with less training in this area, it is important to support patients in some way when they disclose triggers of a sensitive nature. This might take the form of acknowledging the importance of the connection, followed by suggestions for appropriate therapy and follow-up with a professional trained in the area. For example:

*This is obviously a sensitive and important area, and may have an impact upon your ultimate recovery. In the functional medicine model, these emotional factors can have a significant negative impact on our overall well-being. Would you be willing to talk to someone whose training could help you resolve any lingering issues that you might have with regard to this problem?*

Raising questions in the way described above gives the patient the opportunity to engage with difficult issues or to bow out without feeling pressure. It is also helpful to give them a future option such as, “Feel free to talk to me about this again if you change your mind.” All too often, patients have not been given the opportunity to even mention such matters in a practitioner’s office, let alone been given the opportunity to consider a solution.

You might wonder whether asking these kinds of questions could raise issues that are better left alone; in other words, is re-opening old wounds a good idea? I frequently find that the patient has made these connections anyway, and is relieved to know that a professional sees the importance of them. Sometimes just acknowl-

edging this can provide such significant relief that nothing more needs to be said. This is the power of a really effective doctor/patient relationship—it becomes a healing relationship.

## Motivation, Changing Behaviors, and Feedback

Language is really how we measure experience, and how we re-present our experience to others. Since our primary goal as practitioners is to help people feel better on many levels, it is important to use language that is positive and, at the same time, an honest appraisal of the situation. Transmission of hope to the patient is often essential to a good outcome.

Healing language encompasses:

- Self-empowerment
- Direction
- Motivation and feedback

Whatever the particular problems of your patients, the chances are that some aspects of their behavior will need to change in order for them to feel better. Changes may relate to diet, exercise patterns, stress management, leisure activities, or some other behavior. The functional medicine practitioner is in an advantageous position with patients because the model not only allows, but demands, that we take advantage of this “teachable moment.” The functional medicine model is a generative one, in which new behaviors lead to feeling better emotionally, physically, and spiritually.

It is a good idea to assume that patients are willing to change their behavior in order to feel better. They need to begin at the appropriate “stage of change” (the subsequent discussion in this chapter addresses that topic in depth); fortunately, if that need is met and real help is offered, great progress can be made. While it is true that there are some patients with recalcitrant, addictive behaviors, it is also true that even these people usually want to change for the better. If we see a patient as an addict, rather than as someone who is capable of changing an addictive behavior, then the label “addict” tends to reinforce the belief that the condition is immutable. How can the practitioner in a general functional medicine practice help people change their unhealthy behaviors?

## Motivation

People are motivated by a variety of factors. Often what brings people to practitioners is the fear of an incurable or painful condition. This at least gets them in the door, and indeed it may be a powerful motivator to do something different. However, as the person who is motivated by fear begins to get better, the impetus for the motivation decreases because the fear is no longer there. One very important factor is to ensure that the patient also has a positive **future** motivation, as well as a motivation to **move away** from the problem. You can access the desire for something positive in the future by posing some of the following questions:

- Tell me what it will be like when you are free of this problem?
- What will you be doing that is different?
- How will you be feeling that is different from the way you are feeling now?
- How will other people see you differently?
- How do you think I can help you, and what kinds of resources do you need?

Asking these questions requires that patients conceptualize future associations with wellness to sustain the changes in their lives even after fear and pain have subsided. When a patient is close to achieving initial goals, he or she can be helped to create other goals that can strengthen their motivation for the long term.

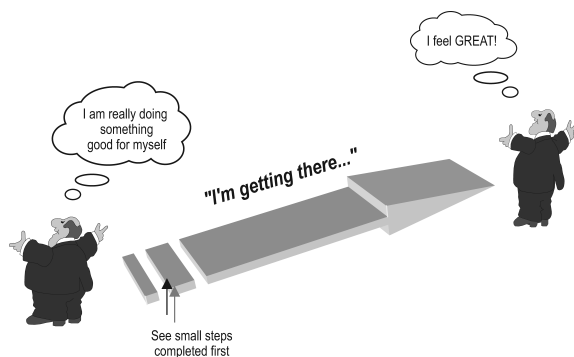
Different people motivate themselves in different ways. Here are some **unhelpful** motivational styles, as outlined by Connirea Andreas in the book, *Heart of the Mind*:<sup>9</sup>

- **Overwhelm motivators** often select a huge goal and make it so big in their minds that they are actually unable to get started because the goal overwhelms them. If you ask what the goal “looks like” to them, they will tell you that it is very large and occupies a lot of their mental space. No wonder they feel overwhelmed. With these people it is a good idea to “chunk down” their goal into smaller, more easily obtainable portions. With weight loss, for example, aiming for small consistent losses over shorter periods of time is more effective than talking about a large weight loss over a longer period of time.
- **Dictator-style motivators** tend to talk to themselves in a negative way using language that is authoritarian and demanding. They don’t get things

done because there is often a rebellious response to such demands. Generally people don't respond well to authoritarian approaches, even their own! Helping such patients create more respectful inner dialogues about their future goals can be helpful.

- **Seeing-it-done motivators.** Have you ever had trouble motivating yourself to do something you like? Probably not. We don't usually have to motivate ourselves to go to a movie, eat a meal, or go on vacation because these activities, for most of us, are enjoyable. We imagine doing them and we feel good. However, when it comes to doing the dishes, tidying our desks, or cleaning the house, the very thought can be unpleasant. The trick here is to visualize having it *done*. Seeing the house tidy, the dishes clean, the desk organized—or the exercise completed, vegetables in the refrigerator, a healthy meal actually on the table—can create a positive impetus.

Of course, these patterns are not mutually exclusive; they may vary from one context to another within a single individual. Figure 36.3 shows a general pattern for helping patients to motivate themselves.



**Figure 36.3** Motivating patients

In words, it might be phrased this way:

*Pick a goal in the future that you want (e.g., weight loss). See yourself having accomplished that goal now—you are a healthy weight, wearing the clothes you like, and doing the things you like to do. Tell yourself in an encouraging internal voice how good you will feel when you get there, and how you will notice changes almost immediately that are small but pleasant. Remember to see yourself having accomplished the task. If that is too overwhelming, then see the first step clearly in your mind, and move on to each successive step as you are able.*

Remember, motivating patients—and ultimately helping them to find their own effective motivation—is essential for a good outcome. People often feel overwhelmed at the thought of changing the habits of a lifetime, especially around food and exercise. However, remember that people are motivated when they enter your office. They may already be looking for a different approach and may expect you to recommend actions they can take on their own behalf, so they are primed. If you present, in an attainable way using some of the concepts outlined above, a plan for change, you enter into a partnership with them for achieving desirable goals. I find working with nutrition excellent in this regard because it often works quickly. If I have formulated the problem correctly, and the patient has carried out the instructions faithfully, by the next visit (two weeks), many patients find their symptoms have improved by as much as 50%. The Medical Symptoms Questionnaire (see Appendix) can be used as an objective measure of improvement if you ask your patients to fill it out at regular intervals. Patients can see how much better they are in black and white, so to speak. A sense of accomplishment is, in itself, a powerful motivating force.

### General Language Guidelines and Giving Feedback

There is, of course, much more to be learned about how health professionals can communicate effectively with patients. Further reading from the references, or focused training, will help you move beyond this introductory information. A very useful book in this regard, particularly for health professionals, is *Irresistible Communication: Creative Skills for the Health Professional* by King, Novik, and Citrenbaum.<sup>10</sup> Although this book is both out of print and a little dated in its approach, it contains a wealth of useful information for communicating with patients in the healthcare setting, with excellent examples.

In thinking about the language we use with patients, it is helpful to remember that language consists not only of words strung together into sentences—we also group sentences into paragraphs or blocks of words to expand and enhance meaning. And, in oral communication, there is the final nuance, the unique way in which words and sentences are spoken (and heard), with differences in tonality, pitch, and speed, and accompanied by facial expressions and other physical

manifestations. It is this complex structure that imparts such meaning to the words themselves.

In the old paradigm, we might have spoken to a patient in the following way regarding, for example, irritable bowel syndrome:

*We have performed all the tests and they are all negative—we couldn't find anything wrong. This means you have something called irritable bowel syndrome. IBS is common; we really don't know what causes it; and there is not a lot we can do about it. You may have heard that it is caused by food allergies, but there really isn't any hard evidence for that, so I wouldn't avoid particular foods. You can eat what you want. You should increase your fiber intake and use bran or Metamucil®. Drink lots of fluids. Relaxation is sometimes helpful; take a few days off and relax. But stress doesn't cause the disease. You will likely have this for the rest of your life. I can give you some medication for the pain, and I'll see you again in a year to see how you're doing.*

All too often, this is actually a paraphrase of what is told to patients. The most common complaint I hear from patients is that they feel hopeless about this condition, and the specialist did not listen to any of their ideas about it.

Strictly speaking, what has been said in the above example is mostly true (albeit incomplete). But, we should ask ourselves, in any patient encounter, “What is my intention?” If our intention is to have the patient feeling better, then the above language needs to change.

Here is my critique of this approach:

- *We have performed all the tests and they are all negative—we couldn't find anything wrong.* Implies to the patient that there is something wrong, but we couldn't find it, OR there is nothing wrong and therefore, “Why are you complaining?”
- *This means you have something called irritable bowel syndrome. IBS is common; we really don't know what causes it; and there is not a lot we can do about it.* Sets the patient up to feel hopeless.
- *You may have heard that it is caused by food allergies, but there really isn't any hard evidence for that, so I wouldn't avoid particular foods. You can eat what you want.* Implies the patient can eat anything with impunity—the patient probably knows better, but may likely accede to the specialist/expert. Very few of us can truly eat exactly what we want.

- *You should increase your fiber intake and use bran or Metamucil®. Drink lots of fluids. Relaxation is sometimes helpful; take a few days off and relax.* Implies that relaxation is easily accomplished, instead of a skill to be learned. Does not address dietary approaches to increasing fiber, which can have many other benefits as well. Using approaches that help to normalize multiple systems is efficient and effective.
- *But stress doesn't cause the disease.* Implies, therefore, that stress is not really important.
- *You will likely have this for the rest of your life.* In hypnosis, this is called an embedded command—it can create a powerful negative suggestion at the unconscious level.
- *I can give you some medication for the pain, and I'll see you again in a year to see how you're doing.* Some patients interpret this as a brush-off, and it certainly doesn't create a sense of partnership in addressing the problem.

Overall, this is not an empowering communication:

1. **It provides less information than there really is about the condition.** There are approaches that can improve IBS; a number are discussed elsewhere in this book. There are dietary changes that can have multiple benefits. Training in stress management and relaxation is widely available and can be very helpful. For some patients, food sensitivities can be a problem; an elimination diet might help discover if that is the case. Exercise may help certain patients, and supplementation may help others.
2. **It leaves the patient feeling powerless.** If patients are empowered, they can be extremely effective partners in identifying triggers and mediators for this and countless other conditions. You want them working with you (and for themselves).

There are some guidelines for using language as a tool to create the outcome you and your patients want:

- **Tense.** People with chronic illness are often stuck in the past. They wish “it” hadn't happened, or it could have been different. Your language can bring them into the present and on into the future. Remember to move them forward: “What you are doing **now**, by changing your diet, will help you to feel better in the **future**. Let's imagine what that will feel like so that it becomes real for you.”

- **Unconditional presuppositions.** Use **when** rather than **if**. “If” implies doubt that it might happen; “when” presupposes that it will happen—it’s just a question of time and effort. For example, “**When** you start your nutrition program, you will ... .”
- **How or what, rather than why.** “Why” questions generally get us into trouble and don’t lead anywhere except to more generally unhelpful information. “How” questions provide more useful information. So if a patient says, “I haven’t been able to do the diet, it was just too much for me,” don’t ask “Why?” because that invites a list of excuses. Ask, for example:
  - “How did you actually stop yourself from starting the diet?”
  - “What would make it more likely that tomorrow you can take the first step?”

Answers to these questions should give you more information about how to help patients overcome the obstacles they have named.

- **Offer choices** that help the patient to focus on specific times and actions. For example, if a patient is beginning a lifestyle change program, say “Will you start the (nutrition, exercise) program **before** or **after** you go on holiday?” “What day **will** you begin?” The assumption is they will start; it’s just a question of **when**.
- **Giving feedback.** The more encouraging feedback you can give, the better. Remember, your patients have been sick for a while, and they need lots of encouragement to initiate and maintain healthy changes. When you want something done differently, or you are concerned about progress, finding a respectful way to give feedback is very important. A **feedback sandwich** can work well; you sandwich any feedback that might be perceived as negative between two positive comments. For example:

*I like the changes you have made to your nutrition program so far, especially the new foods you have introduced. The fact that you haven’t lost weight yet is not uncommon. It would be a good idea to replace those granola bar snacks with fruit, for more energy. And keep up the good work; you are headed in the right direction!*

## Summary

As you review the ideas and techniques presented so far in this chapter, keep in mind that you—just as much as your patients—are now taking on the challenge of changing your behavior as a clinician. You will need to find your own motivation and reinforcement, measure your own progress, and ask for help where needed. You will need to practice; just reading about these ideas doesn’t build the skills or the ability to maintain the new behaviors under stress. We have covered some important topics—**establishing and building rapport, creating good communication, and developing a healing language**. All of these can help us become more effective in our work with patients. If this work is new to you, then my hope is that you will be delightfully surprised and satisfied to learn, not immediately, perhaps, but after you have developed some skill, that your patients are responding in a different, more positive way, and accomplishing their goals with greater effectiveness. When that begins to happen, you will know that you are utilizing the tools that have been described in this chapter at both the conscious and unconscious level—they have become a part of you.

## Helping Patients Change Unhealthy Behaviors

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## Introduction

Healthcare providers can often become frustrated by the fact that too many of their patients have unhealthy diets, are inactive, smoke, abuse alcohol, don’t manage stress effectively, and don’t take their statins or anti-hypertensive medication as prescribed. If we don’t like the way our patients are behaving, then the first thing we need to change is our own behavior. It begins by changing our mental models of behavior change. An action model has dominated medicine for more than a century. Patients are seen as changing when they quit smoking, start to exercise, or take their medications as prescribed. Action-oriented approaches are prescribed but they have little impact; for example, when healthcare systems offer action-oriented smoking cessation clinics for free, the percentage of eligible smokers who participate annually is

only 1%. We cannot impact the health of our patient populations if all we treat with the most deadly of behaviors is 1%. In this discussion, you will be introduced to a model of behavior change that can be matched to the needs of all patients and not just the minority who are ready to take action. This chapter is designed to help **you** change your mind so you can be better prepared to help your patients change their behavior.

## The Transtheoretical Model of Behavior Change

The Transtheoretical Model (TTM), one of the leading approaches to health behavior change, can provide guidance in the development of interventions to increase readiness to change unhealthy behaviors. The TTM systematically integrates four theoretical constructs central to change:

1. **Stages of Change**      Readiness to practice a healthy behavior
2. **Decisional Balance**      Pros and Cons associated with a healthy behavior
3. **Self-Efficacy**      Confidence to practice and sustain the healthy behavior in difficult situations
4. **Processes of Change**      Ten cognitive, affective, and behavioral activities that facilitate the healthy behavior change

The TTM understands change as progress, over time, through a series of stages: *Precontemplation*, *Contemplation*, *Preparation*, *Action*, and *Maintenance*. Nearly 25 years of research on a variety of health behaviors have identified processes of change that work best in each stage to facilitate change.

### The Stages of Change

Stage of change is the TTM's central organizing construct. Longitudinal studies of change have found that people move through a series of five stages when modifying behavior on their own or with the help of formal interventions.<sup>11,12</sup> In the first stage of change, *Precontemplation*, individuals may be unaware of the negative consequences of their behavior, believe the consequences are insignificant, have given up the thought of changing because they are demoralized, or may be defensive about the need to change. They are not intending to take

action in the next six months. Individuals in the *Contemplation* stage are more likely to recognize the benefits of changing their behavior. However, they continue to overestimate the costs of changing and are ambivalent and not ready to change. Those in the *Preparation* stage are seriously considering taking action within the next 30 days, and have already begun to take small steps toward the goal. Their concern is that they will fail. Individuals in the *Action* stage are overtly engaged in modifying their problem behaviors or acquiring new, healthy behaviors. Individuals in the *Maintenance* stage have been able to sustain change for at least six months, and are faced with the challenge of sustaining the change over the long term.

Research comparing stage distributions across behaviors and populations finds that only a minority of people are in Preparation, with a majority in Precontemplation and Contemplation.<sup>13,14</sup> Those data suggest that if we offered all individuals action-oriented interventions that assume readiness to practice a healthy behavior, we would be mis-serving the majority who are not prepared to take action.

Stage-matched interventions can have a greater impact than action-oriented, one-size-fits-all programs, by increasing participation and increasing the likelihood that individuals will take action. Stage-matched interventions for smokers more than doubled the smoking cessation rates of the best action-oriented interventions available.<sup>15</sup> Stage-matched interventions have also out-performed one-size-fits-all interventions for exercise acquisition,<sup>16</sup> dietary behavior,<sup>17</sup> and mammography screening.<sup>18</sup>

Stage of change is generally assessed using a staging algorithm, a set of decision rules that place an individual in one of the five stage categories based on their responses to a few questions about their intentions, past behavior, and present behavior. The algorithms assess individual readiness to take action, such as to quit smoking or to exercise regularly for 30 minutes a day. The response categories place participants in one of five stages: Precontemplation (not intending to take an action such as quitting smoking in the next six months), Contemplation (intending to take action in the next six months), Preparation (intending to take action in the next 30 days), Action (already quit smoking but for less than six months), or Maintenance (quit smoking for more than six months).

### Decisional Balance

Change requires the consideration of the potential gains (Pros) and losses (Cons) associated with taking action. The Decisional Balance Inventory consists of two scales, the Pros of Change and the Cons of Change. Longitudinal studies have found those measures to be among the best available predictors of future change.<sup>19</sup> Across more than 50 behaviors, Hall and Rossi,<sup>20</sup> and Prochaska, Velicer, Rossi, et al.<sup>21</sup> found that the balance of Pros and Cons was systematically related to stage of change. The Cons of changing to a health-promoting behavior outweighed the Pros in the Precontemplation stage; the Pros surpassed the Cons in the middle stages; and the Pros outweighed the Cons in the Action stage. So the first principle of helping patients progress in Precontemplation is to increase the Pros of changing. Ask a couch potato, “What are all the benefits that you could get from regular exercise?” They can usually list four or five. Tell them there are at least 40 scientifically-documented benefits (see the Appendix). Ask them to try to double their list, and they can start changing. Let them know that there is something they can do for 30 minutes a day that can give them so many benefits.

Participants in the Contemplation stage need to lessen the Cons of changing. For quitting smoking, withdrawal is one of the big Cons. Fortunately, there are a variety of medications, such as nicotine replacement therapies, that can dramatically reduce this Con.

### Self-Efficacy

Self-efficacy, or the degree to which an individual believes he or she has the capacity to attain a desired goal, can influence motivation and persistence.<sup>22</sup> Self-efficacy in the TTM has two components that are distinct but related: confidence to make and sustain changes, and temptation to relapse. Like decisional balance, levels of self-efficacy differ systematically across the stages of change, with subjects further along in the stages of change generally experiencing greater confidence and less temptation. Self-efficacy means having the confidence to practice the healthy behavior in a variety of difficult situations (e.g., when one is stressed, has an increased workload, or has conflicting demands).

One of the best ways to increase self-efficacy is to help the patient set realistic goals. Patients in Precontemplation will have little confidence that they can take effective action at this time. But they can have

much greater confidence that they can progress to Contemplation (e.g., doubling their list of Pros). Once they start progressing, they can break out of their demoralized or defensive place, experience some success, and increase their self-efficacy. Temptations can be reduced by using strategies to cope with difficult situations, such as taking deep breaths rather than smoking as a way to reduce stress.

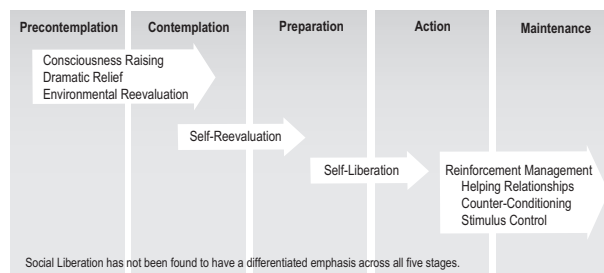
### Processes of Change

In a comparative analysis of 24 major systems of psychotherapy, Prochaska and DiClemente<sup>23</sup> distilled a set of 10 fundamental processes by which people change. These 10 processes describe the basic patterns of activity that should be encouraged by clinicians to help patients change problem behaviors:

Consciousness raising	Finding and learning new facts, ideas, and tips that support the healthy behavior change
Dramatic relief	Experiencing the negative emotions (fear, anxiety, worry) that go along with unhealthy behavior risks
Self re-evaluation	Realizing that the behavior change is an important part of one's identity as a person
Environmental re-evaluation	Realizing the negative impact of the unhealthy behavior or the positive impact of the healthy behavior on one's proximal social and physical environment
Self-liberation	Making a firm commitment to change
Helping relationships	Seeking and using social support for the healthy behavior change
Counter-conditioning	Substituting healthier alternative behaviors and cognitions for the unhealthy behaviors

Reinforcement management	Increasing the rewards for the positive behavior change and decreasing the rewards of the unhealthy behavior
Stimulus control	Removing reminders or cues to engage in the unhealthy behavior and adding cues or reminders to engage in the healthy behavior
Social liberation	Realizing that the social norms are changing in the direction of supporting the healthy behavior change.

Figure 36.4 depicts our current understanding of the patterns of emphasizing particular processes as they progress through the stages.<sup>24</sup>



**Figure 36.4** Stages of change in which particular processes of change are emphasized

## Stage-Matched Interventions Based on the TTM

In addition to providing an assessment framework, the TTM provides a scheme for tailoring programs by matching them to the needs of patients at each stage of change for a new healthy behavior. The degree of tailoring possible depends directly on the extent of the assessment. The following are descriptions of how one could use TTM for increasing a healthy behavior through manuals, provider interventions, or internet-based programs.

### Stage-Based Manuals

When only the staging algorithm is administered, tailoring can occur at the stage level. Stage-based manuals describe how self-changers progress through each stage of change, and how they recycle if they relapse. The manuals teach users about general principles of

behavior change, about their particular stage of change, and the processes they can use to progress to the next stage. Appropriate sections of the manuals are matched to each stage of change and provide detail on change processes and stage-matched exercises. There are several ways to use the manuals. First, they can be read for the big picture of how people change; next, readers can turn to the section for the stage they are in and study that stage for a while. This is a good way to be sure they are heading in the right direction. Then, users can look ahead to the next stage to learn more about how to move forward. For example, if a patient in the Precontemplation stage for effective stress management is underestimating the Pros, that patient could use the section of the manual that describes dozens of documented Pros of doing effective stress management. The patient would also be encouraged to seek more information about the importance of stress management from the media and their healthcare provider.

*Changing for Good*<sup>25</sup> is a popular paperback that patients can use to help guide them through the stages of change for a broad range of health behaviors and other problem behaviors. Or a stage-based manual specific to stress management, smoking cessation, medication adherence, exercising regularly, or weight management can be viewed at [www.prochange.com](http://www.prochange.com).

### Stage-Based Provider Guidance

Healthcare providers can also tailor interventions to the patient's stage of change by administering the staging algorithm (e.g., in the waiting room). Providers can then base brief interventions on processes that are most helpful to a particular stage. For example, Precontemplators come in denying or minimizing their problems. They may be unaware of the negative consequences of their unhealthy behavior or they may be demoralized because of repeated failures in changing their behavior.

The goal for the provider is to engage **Precontemplators** in the change process. Lecture and confrontation won't work. Trying to pressure or persuade them to take immediate action will only make them more defensive or demoralized. As we saw earlier, just helping them to increase their awareness of the Pros of changing will help them to progress. Providers also can help Precontemplators raise consciousness by teaching them about the stages of change, and providing more information to dispel any misconceptions the patient may have. During the first appointment with Precontemplators, providers

## Section VII

### Putting It All Together

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can ask if they are willing to do any of the following before the next time they meet:

- Read about the healthy behavior
- Double their list of the Pros
- Talk with someone who has successfully changed the target behavior.

Providers should reinforce the notion that their patients *have* the capacity to progress (see related discussion in the first part of this chapter). They should remind their patients that any forward movement (e.g., becoming more open to considering alternatives, becoming more aware) is progress; change does not equal action—change means progressing to the Contemplation stage.

**Contemplators** are thinking about changing but are not yet committed to do so. They are more likely to acknowledge that their behavior needs to be changed, but they substitute thinking about it for acting on it. They recognize the benefits of changing, but overestimate the Cons. Contemplators are ambivalent about changing and are often waiting for the magic moment. Providers can assist by acknowledging the ambivalence and working to resolve it by encouraging Contemplators to weigh the Pros against the Cons. Patients are asked to shrink Cons by comparing them to the growing list of Pros, by asking how important they are relative to the Pros, and by challenging themselves to counter the Cons. For example, time is the number one Con for regular exercise. But time becomes less of a barrier if we can get more than 40 benefits for 30 minutes. Interventions in these appointments can be more ambitious, including taking small steps toward the healthy behavior. For example, smokers in Contemplation can be given three choices to progress to Preparation:

1. Quit for 24 hours in the next month;
2. Delay the first cigarette by an extra 30 minutes; or
3. Reduce the number of cigarettes they smoke by three or four.

“Which are you most confident you can do? Great. Take it and run with it.”

Providers can help by using motivational interviewing strategies like reflective listening to assist Contemplators to resolve their ambivalence by working with them to identify the negative consequences of continuing the unhealthy behavior, and by providing case examples of people who have been able to change.

Helping patients create a healthier image is important in Contemplation. Providers can encourage patients to ask themselves about their image. For example, “How do you think and feel about yourself as an inactive person? What might it be like if you became more active?”

**Patients in Preparation** assess the Pros as more important than the Cons, are more confident and less tempted, are developing a plan, and are more likely to participate in programs. With those in Preparation, providers need to be experienced coaches to provide encouragement. They need to coach, not lecture, and give praise, support, and recognition for taking small steps; keep interventions short, focused, and action-oriented; be available for phone support; focus on developing a plan for doing the healthy behavior; and problem solve.

Providers can enhance progress by ensuring that patients choose steps that are realistic, concrete, and measurable. Those in Preparation should be asked to put plans in writing and to role play how they will tell others about their commitment to their healthy behavior. It is important to help patients identify sources of support for their new behaviors—family members, coworkers, or friends. Providers can also help the patient to think about how they will feel about themselves after they have started making changes.

**Patients in Action** have recently begun doing the healthy behavior. They are using behavioral processes of change. Their confidence is building, but temptation and risk of relapse are concerns. Providers with patients in Action need to be facilitators for the behavior change. The focus is on the behavioral processes of change—counter-conditioning, stimulus control, and reinforcement management. It is also important to help patients plan ahead to prevent lapses and relapses.

Providers can help by getting patients to identify problematic beliefs and behaviors that inhibit change, and then by problem solving about positive alternatives that they believe will work for them. People, places, and things that increase the likelihood of not adhering need to be avoided or controlled (tempting cues). Reminders in both familiar and unexpected places that support the healthy behavior need to be left around—like a gym bag filled and ready to use, a picture on the desk of relaxing with friends, or pill-taking scheduled on the calendar. Those in Action also need to notice the intrinsic rewards of their healthy behavior—better health, more energy, more control of life. Patients need to reward themselves with positive state-

ments; providers can praise achievements and help patients recognize the benefits of their efforts.

Here is a simple strategy that can help patients activate a series of important change processes. “Do you make to-do lists? OK, good. Now, for this week, write in your to-do list *walking for my heart*. Next week, *walking for my stress*. Then, *walking for my bones; walking for my brain; walking for my immune system*. Pretty soon you will be running.” This technique involves self-liberation (writing down a commitment to walk); stimulus control (continue walking); and reinforcement (scratching walking off one’s daily to-do list). This approach helps providers communicate to their patients that they care for them as whole people and not just as patients with a disease. Patients are being encouraged to walk not only to prevent or manage a disease like diabetes or CVD; they are encouraged to walk to enhance the health of their whole self—body, mind, and spirit.

**Patients in Maintenance** have high confidence, and temptations are low. They are at risk primarily in times of distress or atypical temptations. With those in Maintenance, the provider needs to be a consultant to provide advice regarding relapse prevention. Providers can do this by helping patients to cope with distress (the major cause of relapse), continuing to refine a relapse prevention plan, being available to provide support, and establishing a support system in the community. For many people, Maintenance can be a lifelong struggle—it is a dynamic not a static stage. There needs to be work to consolidate gains and increase self-efficacy through increasing coping skills.

Remember, a majority of individuals relapse to earlier stages before reaching permanent Maintenance. Your job is to make sure they don’t give up on themselves and that you don’t give up on them.

### Intra- and Internet Expert System Program

Lengthier assessments that include each of the constructs of the TTM permit significantly more tailoring, but may be impractical in a clinic setting where competing demands limit time. We have developed computerized tailored health behavior change programs that are designed to be easy and engaging for patients to use and can be delivered over intra- or internet platforms which offer a cost-effective, easily disseminated alternative. The technical basis for these systems relies on the integration of statistical, word processing, multimedia, and database software. A system resides either on an internet server or

a local network server, and can be accessed by anyone who has the appropriate address and password. Such programs are being made more available to patients through their insurers or employers. Once a patient logs onto the program, they are asked to complete a TTM assessment that evaluates stage, decisional balance, self-efficacy, and the processes of change.

During a patient’s first use of the program, feedback is based on a comparison of the responses of the individual to a larger comparative sample of successful and unsuccessful individuals making the behavior change. This feedback relies only on normative comparisons, which differ by stages. The initial norms are derived from a naturalistic sample of individuals. Evaluation of the expert system provides updated norms at periodic intervals. The second and subsequent interactions compare the individual to both the normative group and to their own previous responses, and provide both ipsative (i.e., self-comparisons) and normative comparisons. The ipsative comparisons require access to the database for the results of the previous contact. The program makes individualized recommendations of change and guides the participant through the behavior change process that meets their individual needs.

The computer generated feedback also links or refers participants to sections of a stage-matched self-help interactive resource workbook. Like the stage-matched manual described above, the online integrated workbook teaches users about general principles of behavior change, as well as their particular stage of change and the processes they can use to progress to the next stage. The individualized feedback reports refer participants (via links) to appropriate sections of the workbook to provide more detail on change processes and stage-matched exercises. For example, a participant can link to the online workbook where there are testimonials about the effects of stress from people who are now effectively managing their stress, an exercise to learn about what controls one’s behavior, a bulletin board listing rewards people give themselves for effectively managing stress, and substitutes for unhealthy stress management that don’t involve food, smoking, or alcohol. For a sample of this program designed for stress management, please go to [www.prochange.com/PDF/stress.pdf](http://www.prochange.com/PDF/stress.pdf).

## Summary

What is the number one reason that a majority of providers do not practice behavioral medicine? Time is number two. Reimbursement is number three. The number one reason is that two-thirds of providers have come to believe their patients cannot change or will not change. We are convinced they have become demoralized by the action paradigm.

Here is a prescription for producing a demoralized provider and a non-compliant patient. An actual case involved a 50-year-old obese male recently diagnosed with type 2 diabetes. His physician with all good intent told him, "You have to test your blood glucose twice a day, take your medication twice a day, change your diet, exercise, quit smoking, and lower your stress. Good luck!"

Two large population studies demonstrated that health behavior changes could be made simultaneously with populations of patients with diabetes by applying counseling, computers, and manuals.<sup>26,27</sup> But the patients were not asked to take action on these behaviors at once. Less than 10% were ready to take action on two or more of those risks. They were helped to set goals that were realistic for the stage they were in and then to use principles and processes of change to progress from one stage to the next.

As professionals, we can apply the same approach to changing our own behaviors. The goal for this chapter was to help you progress one stage toward adopting a more effective approach to functional medicine. If you have progressed just a single stage, then our time together has been worthwhile.

## References

- Adams F. Brain injury: A neuromedical overview. *The Disability Reporter*. 2000;Winter:19.
- Moerman D. *Medicine, Meaning and the 'Placebo Effect*. Cambridge Studies in Medical Anthropology. Cambridge University Press, 2002.
- These pre-suppositions are based on a psychological model known as Neuro-Linguistic Programming or NLP. For further reading on this topic see: O'Connor J. *NLP Workbook: A Practical Guide to Achieving the Results you Want*. HarperCollins UK: 2001; and O'Connor J, Seymour J. *Introducing Neuro-Linguistic Programming: Psychological Skills for Understanding and Influencing People*, 2<sup>nd</sup> Ed. Thorsons, London: 1993.
- Bateson G. *Steps to an Ecology of Mind: Collected Essays in Anthropology, Psychiatry, Evolution, and Epistemology*. University of Chicago Press; 2000.
- Mehrabian A, et al. Inference of attitudes from nonverbal communication in two channels. *J Consult Psychol*. 1967;(3):248-252.
- Rutter P. *Sex in the Forbidden Zone: When Therapists, Doctors, Clergy, Teachers and Other Men in Power Betray Women's Trust*. HarperCollins: 1995.
- Walker EA, Gelfand AN, Gelfand MD, Katon WJ. Psychiatric diagnoses, sexual and physical victimization, and disability in patients with irritable bowel syndrome or inflammatory bowel disease. *Psychol Med*. 1995;25(6):1259-67.
- Ali A, Toner BB, Stuckless N, et al. Emotional abuse, self-blame, and self-silencing in women with irritable bowel syndrome. *Psychosom Med*. 2000;62(1):76-82.
- Andreas C. *Heart of the Mind*. Real People Press: Moab, Utah: 1989.
- King M, Novik L, Citrenbaum C. *Irresistible Communication: Creative Skills for the Health Professional* WB Saunders: Philadelphia, 1982.
- DiClemente CC, Prochaska JO. Self-change and therapy change of smoking behavior: a comparison of processes of change in cessation and maintenance. *Addict Behav*. 1982;7:133-142.
- Prochaska JO, DiClemente CC. Stages and processes of self-change of smoking: toward an integrative model of change. *J Consult Clin Psychol*. 1983;51:390-395.
- Laforge RG, Velicer WF, Richmond RL, Owen, N. Stage distributions for five health behaviors in the United States and Australia. *Prev Med*. 1999;28(1):61-74.
- Velicer WF, Fava JL, Prochaska JO, et al. Distribution of smokers by stage in three representative samples. *Prev Med*. 1995;24(4):401-411.
- Prochaska JO, DiClemente CC, Velicer WF, Rossi JS. Standardized, individualized, interactive, and personalized self-help programs for smoking cessation. *Health Psychol*. 1993;12(5):399-405.
- Marcus BH, Bock BC, Pinto BM, et al. Efficacy of an individualized, motivationally-tailored physical activity intervention. *Ann Behav Med*. 1998;20(3):174-180.
- Campbell MK, DeVellis BM, Strecher VJ, et al. Improving dietary behavior: the effectiveness of tailored messages in primary care settings. *Am J Public Health*. 1994;84(5):783-787.
- Rakowski W, Ehrich B, Goldstein MG, et al. Increasing mammography screening among women aged 40-74 by use of a stage-matched tailored intervention. *Prev Med*. 1998;27(5 Pt 1):748-756.
- Velicer WF, DiClemente CC, Prochaska JO, Brandenburg N. Decisional balance measure for assessing and predicting smoking status. *J Pers Soc Psych*. 1985;48(5):1279-1289.
- Hall KL, Rossi JS. Informing interventions: a meta-analysis of the magnitude of effect in decisional balance stage transitions across 43 health behaviors. *Ann of Behav Med*. 2003;25:S180.
- Prochaska JO, Velicer WF, Rossi JS, et al. Stages of change and decisional balance for 12 problem behaviors. *Health Psychol*. 1994;13(1):39-46.
- Bandura A. Self-efficacy: toward a unifying theory of behavior change. *Psych Rev*. 1977;84:191-215.
- Prochaska JO, DiClemente CC. *The Transtheoretical Approach: Crossing Traditional Boundaries of Therapy*. Homewood, IL: Dorsey Press, 1984.
- Prochaska JO, DiClemente CC, Norcross JC. In search of how people change: application to addictive behaviors. *Am Psychol*. 1992; 47(9):1102-14.
- Prochaska JO, Norcross J, DiClemente C. *Changing for Good*. New York, NY: William Morrow and Company, Inc., 1994.
- Jones H, Edwards L, Vallis MT, et al. Changes in diabetes self-care behaviors make a difference to glycemic control: the Diabetes Stages of Change (DiSC) study. *Diabetes Care*. 2003;26(3):732-37.
- Rossi JS, Ruggiero L, Rossi S, et al. Effectiveness of stage-based multiple behavior interventions for diabetes management in two randomized clinical trials. *Ann Behav Med*. 2002;24:S192.