Editorial

Goal setting in rehabilitation: an overview of what, why and how

Setting goals with the patients and monitoring their achievement is a core practice within much rehabilitation, but the evidence base behind this practice is patchy. This issue of Clinical Rehabilitation has seven articles concerned with various aspects of goal setting, and this Editorial sets them in context. It considers the theoretical basis underlying goal setting, especially in rehabilitation. It argues that a goal is the intended outcome of a specific set of interventions. It suggests setting goals has benefits beyond simply motivating the patient and team; it may coordinate activities and ensure that all necessary goals are identified. It reviews whether goals should be SMART (and what SMART means), and emphasizes that there may be a hierarchy of goals on two axes (time, abstractness). It reviews the benefits and problems of goal attainment scaling and, finally, considers the ethical problems associated with goal setting. It concludes that goals should not necessarily be completely SMART, and that goal attainment scaling may only be useful as a measure in research. It emphasizes the need for much more research into the cost-effectiveness of this activity.

Introduction

Most human behaviour is goal-directed. In other words, people generally act for a reason, however nebulous or unconsidered that reason is. Rehabilitation is ultimately concerned with changing behaviours. One objective of rehabilitation is to reduce ‘activity limitation’ (in the World Health Organization’s (WHO) International Classification of Functioning, Disability and Health (ICF) terminology); the goal is to increase a patient’s behavioural repertoire as much as possible, within any constraints imposed by disease and impairments.

Thus it should be no surprise that the identification and setting of goals with patients in rehabilitation is a core component of the process, much more so than in most other parts of health care.

This issue of Clinical Rehabilitation includes seven papers concerned with aspects of the goal-setting process. This Editorial sets these papers in the context of the whole process of goal setting. It first considers what goals are, the reasons for setting goals, and the theories that underlie goal setting. Then it moves on to some practical issues around setting particular goals and issues concerning measurement of goal achievement. Finally it draws attention to the resource implications of goal setting and how this might influence clinical practice.

Goals and goal setting

The Oxford English Dictionary defines a goal as ‘The object to which effort or ambition is directed; the destination of a (more or less laborious) journey. spec. in Psychol. An end or result towards which behaviour is consciously or unconsciously directed.’ It is important to note there are two components to this definition: an end state and an effort to reach that state.

Thus in the context of rehabilitation, goals have two characteristics. First a goal is an intended future state; this will usually involve a change from the current situation although, in some circumstances, maintenance of a current state in the face of expected deterioration might be a goal. Second, and of equal importance, a goal refers to the intended consequence of actions undertaken by the rehabilitation team. A goal is not nor should be a simple prediction of what will happen; it should be the intended result of some intervention(s).

Goal setting, sometimes referred to as goal planning, is the formal process whereby a rehabilitation
professional or team together with the patient and/or their family negotiate goals. Although professionals and teams will always have some reason for their actions, the goals are often unstated and unconsidered in the particular situation. In rehabilitation the goal-setting process ensures explicit identification of the reasons for all activity.

Why set goals?

Why should the reasons behind rehabilitation treatments be made explicit? The benefits of setting goals in the management of organizations have been investigated extensively and it has been shown that setting a person goals increases their behaviour change, presumably through increasing motivation (the desire to act in a particular way). There is no particular reason to doubt its effectiveness in patients participating in rehabilitation.

However, it is far from certain that the time and effort expended in a detailed and formal goal-setting process is necessarily better than simply setting a goal. Indeed one paper in this issue that reports on a randomized controlled trial of three approaches to goal setting specifically raises the issue of whether a formal process is better than simply using goal attainment scaling.

Before dismissing the goal-setting process, it is important to consider whether the process of setting goals in rehabilitation has several other purposes over and above motivating the patient.

The shared setting of explicit goals by a group of people should ensure both that all actions undertaken by each individual are contributing towards the overall goal and that important, necessary actions are not overlooked. Team effort in setting goals should facilitate both the efficiency (through cooperative activity) and the effectiveness (through not omitting any important actions) of rehabilitation.

Third, having a goal allows the effectiveness of the rehabilitation process to be monitored. This is particularly important because often it is unknown which of several interventions might help (if any) and it is important to stop ineffective actions as soon as it is clear that they are not having the desired effect so that an alternative way of achieving the overall goal can be started (if it exists).

Lastly it has been suggested that the setting of goals may help the patient in other ways. It may reduce anxiety and it might increase insight into and acceptance of limited recovery.

Goal setting – theory

The setting and use of goals is a complex intervention. There are many components, and the relationships both between the separate components and between the process of goal setting and the eventual outcomes are likely to be non-linear and unpredictable. In this situation it is important to use theory to guide all actions and decisions as far as this is possible. In reality the relationship between theory and practice is recursive: theory will suggest or guide actions and research; and the results of actions and research will confirm, refute or alter the underlying theory.

The theoretical underpinning of goal setting in rehabilitation has not been well researched, and tends to depend upon theories used in other contexts. This issue has one paper reporting on a systematic review of the theories that underlie the practice of goal setting in rehabilitation, and a second paper comparing the use of two different theoretical approaches to setting goals. It seems likely that different aspects of the process will depend upon different theories, but at present it seems likely that existing theories should be reasonably applicable.

The goal-setting process

Whenever a patient’s problems are sufficiently complex to require the involvement of a two or more people from different professions and/or the process is continued for more than a few days, then a formal goal-setting process may be needed to derive a set of goals that:

- motivate the patient;
- ensure that individual team members work towards the same goals;
• ensure that important actions are not overlooked; and
• allow monitoring of change to abort ineffective activities quickly.

When only one person is involved with a patient and the intervention is relatively brief and simple, then a formal goal-setting process is less likely to be needed. Nevertheless the considerations and processes described below should be used, albeit in an abbreviated way.

The first step is to establish what goals are important to the patient, because goals are only effective if they are considered desirable by the subject. Establishing the patient’s goals is not trivial and it is rarely wise to make assumptions about the wishes and expectations of individual patients in any situation, however obvious they may appear. The process should also consider the wishes and expectations of other important parties such as the family, work colleagues, those who are funding rehabilitation, and even the rehabilitation team itself.

At the same time the process needs to establish what changes are at least possible and what changes are not possible, and what would be needed to achieve each goal and how likely the change is. While this may be easy in some circumstances, it is often difficult, especially in complex situations where a whole team is involved.

These preparatory stages are followed by a process of sharing information and negotiating a set of goals that between them acknowledge most or all of the wishes of the patient and resolve as many problems as possible. This is not to say that all of the patient’s wishes are set as goals. It is to say that some account is taken of their wishes, and some response made.

In the process of goal setting it is important to recognize that goals are hierarchical in at least two ways. The first axis relates to time: there are long-term goals (usually few in number), medium-term and short-term goals. The second axis relates to the conceptual level. One example is the hierarchy of needs given by Maslow,8 who identified needs as being physiological, safety, love/belonging, esteem and self-actualization. An alternative example is the WHO ICF model,1 where goals might concern social participation, activities, impairments or well-being.

It is also very important to link goals one to another so that the patient can see the connection between their own longer term aspirations and the more immediate rehabilitation goals being suggested. Further, if the process starts from a small number of high-level goals it is more likely to identify most necessary actions and it may also encourage interdisciplinary working with shared goals.9

Finally there is the process of documenting or recording the goals set, so that progress can be evaluated and so that all team members (including the patient) know what is expected of them.

Setting a particular goal – being SMART

Most of the research into goal setting has focused on the nature of a goal, and how manipulating aspects of a particular goal may alter its effects. This has led to guidance on setting the ideal goal, and the acronym usually associated with this is SMART. It is uncertain when this acronym was first developed10 but the earliest known publication is in 1981 when two articles in one journal mentioned the acronym, one in the title.11 More recently the acronym SMARTER has also been used. There is considerable variation, however, in the actual words associated with each letter in both of these acronyms. Table 1 shows at least some of the words; these were derived from various websites10,12–14 and other papers. Although at least two of the words used are difficult to interpret (‘magical’, ‘magnetic’), it is likely that the underlying concepts encompassed within the many words used are important when setting goals. Practical guidance on how to set SMART goals is given in one paper in this issue.15

Although being SMART is often said to be vital, it is worth quoting some sentences from one of the earliest papers11 that referred to setting goals in management. Doran wrote:

In certain situations it is not realistic to attempt quantification particularly in staff middle-management positions. Practicing managers and corporations can lose the benefit of a more abstract objective in order to obtain quantification. It is the combination of the objective and its action plan that is really important.
And that

the suggested acronym doesn’t mean that every objective written will have all five criteria.

If one of the originators of the acronym (who used the word *attributable* for ‘A’) was flexible, then perhaps modern practice should also be less rigid in its adherence to being SMART.

### Goals and evaluation

One potential benefit of setting specific patient-centred goals is that it might allow quantification of outcome in each case, avoiding the need to use the same single measure of outcome in all patients. This approach is known as goal attainment scaling, a technique for quantifying change in individual patients first used in learning disability and psychiatry¹⁶ but also used in rehabilitation.¹⁷

This issue has several papers that discuss or investigate goal attainment scaling in rehabilitation.³,¹⁸,¹⁹ Readers should note that there is considerable debate about the actual scoring. One paper¹⁸ puts forward the scoring system (and also gives access to an Excel spreadsheet for practical use), but the theoretical basis is challenged within the conference report⁵ and practical problems are also discussed in other papers.¹⁵,¹⁹

My own conclusion based on one of the papers in this issue³ and also on a systematic review²⁰ is that using the process of goal attainment scaling is probably useful in the clinical practice of setting goals with patients. It may well be useful as a sensitive and specific outcome measure¹⁷ in randomized, controlled trials provided the goals are set by people before allocation and are scored by people unaware of group allocation. But I am much less certain that it is useful as a routine measure of outcome in daily clinical practice. What is clear is that judgements about the success of rehabilitation must not be based on goal attainment scaling as it becomes demotivating² and liable to gaming.

### Goals and resources

Finally one paper²¹ raises another very important issue that arises from some of the words in the table (‘resources are adequate’ and ‘resourced’). Specifically, Levack asks to what extent people participating in the process of goal setting may alter the goals they set, usually to a lower level, because setting a higher goal may use more resources than are considered reasonable. Thus ethical organizations responsible for rehabilitation should be pressing for adequate resources rather than constraining the goals set. Unfortunately political pressures usually favour almost any other part of health care and the lack of strong evidence to support his argument (which may well be valid) means that we may remain underresourced for a while longer.
Conclusion

Goal setting is and will remain a central feature in rehabilitation and is or should be a core competency of any member of a rehabilitation team. However there are at least three major research efforts needed. First, there should be a review and synthesis for use in rehabilitation of the large body of evidence concerning goal setting in all areas including sports science and business management as well as the smaller amount of evidence in rehabilitation. Second, studies in rehabilitation are needed to confirm that the findings in other spheres apply equally in health care. Specifically, do the findings generalize to people with cognitive deficits and psychiatric problems. Third, is the resource used warranted by the benefits achieved (and what are those benefits)?

In the meantime we should negotiate and set goals with our patients that are not necessarily completely SMART, and some goals may not be SMART at all. Goal attainment scaling may be an appropriate method to set goals, but will rarely be a good measure of outcome except in double-blind research protocols. And in complex cases we should set goals in different timescales and domains, and link them together.

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References

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