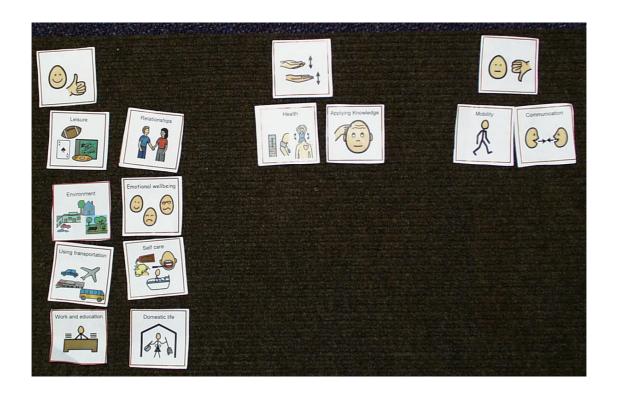
Goal Setting for People with Communication Difficulties

A Pilot Study funded by Forth Valley Primary Care NHS Trust (Research and Development Committee)

Sally Boa (Speech and Language Therapist) & Lynn MacFadyen (Researcher)

Final Report - May 2003



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Abstract

This pilot project examined whether or not *Talking Mats*^{TM^1} could be used to enable people with communication difficulties to set rehabilitation goals.

The report will summarise and discuss the following:

Goal setting in rehabilitation and multidisciplinary teamwork.

The importance of including people in setting their own rehabilitation goals.

Background to *Talking Mats*™.

Background to the World Health Organisation International Classification of Functioning, Disability and Health (WHO, 2001).

An outline of how the above can be used as a framework with *Talking Mats*™to help people set rehabilitation goals.

Findings of the pilot study and implications for further research.

The report is augmented with photographic and case study examples from the project and will give a participant's own perspective.

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¹ A tool developed to help people with communication difficulties to express their views.

1. Introduction

This report details the findings of a pilot study, funded by Forth Valley Primary Care NHS (Research and Development Committee) and conducted by the Augmentative and Alternative Communication (AAC) research group at the University of Stirling in collaboration with Area Rehabilitation Service in Forth Valley. The project investigated goal setting for people with communication difficulties and refined and piloted a tool – *Talking Mats*TM – for this purpose. The project ran from May 2002 until February 2003 and involved the researcher working on the project for 1 half day a week for 9 months.

2.1 Background

In recent years the importance of setting goals with patients as a focus for rehabilitation has been highlighted. The Brain Injury Resource Center (Seattle) http://www.headinjury.com states that "The ability to set goals is essential to effective problem solving; and by default, is essential to self management, and self determination".

Schut & Stam (1994) comment that "Goal setting is a prerequisite for interdisciplinary team work". They state that goals must be:

- Relevant and motivating
- Express what you want to accomplish
- Positively defined
- Put in behavioural terms
- Explicit and commonly understandable
- Attainable and enabling well-balanced planning
- Enable measurement.

Given that authors have suggested that goal setting is essential to planning effective rehabilitation, it is important that all users of a service should be allowed to participate as fully as possible in the process. If patients can choose and set their own goals there is a greater chance that intervention will succeed (McMillan and Sparkes 1999). Schut & Stam (1994) stress the importance of involving the patient in the goal setting process:

"something relevant for the therapist may be regarded as completely irrelevant by the patient and/or the other way round. If the patient does not regard a goal as relevant, the team runs the risk that its efforts are in vain; the patient is not motivated to work at an irrelevant goal."

In addition, Haas (1993) states that

"clinicians must seek patient input early during rehabilitation to guide the setting and revising of goals"

Studies described by Bowling (1998) report wide discrepancies between patients and professionals in relation to preferences for treatment.

It is recognised that it can be difficult for people with communication and/or cognitive impairments to become involved in the goal setting process and often rehabilitation teams rely on their own "ingenuity and persistence" in order to obtain the views of this group (Wade, 1999). However, the importance of including people with communication impairments in goal setting is acknowledged by professional codes:

"Achievable goals will have been identified and agreed between the speech and language therapist and client and carer. These will include expected outcomes and timescales" (RCSLT, 1996).

In previous research projects Research Speech and Language Therapist Joan Murphy developed a novel framework ($Talking\ Mats^{TM}$) which enabled people with communication, cognitive and physical difficulties to express their views.

The framework was originally developed to enable people with cerebral palsy and communication difficulties to express their thoughts and views and has since been developed and used with the following groups:

- People with motor neurone disease
- People with aphasia people
- People with dementia
- People with a learning disability.

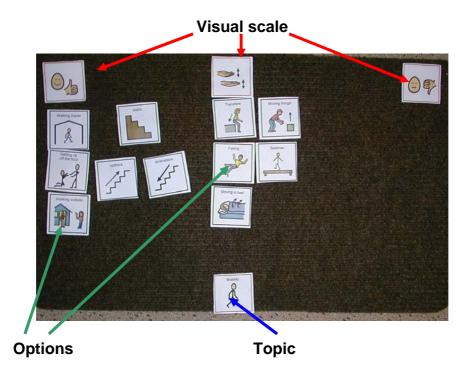
The *Talking Mats*™ framework takes into account issues such as difficulties with speech, language, cognition, fatigue, poor hand control and vision. It is based on 3 sets of picture symbols, which represent a visual scale, topics and options. These are presented to the person with the communication difficulty. The symbols used in this project were Picture Communication Symbols (PCS) which were produced on the software package Boardmaker™². PCS were chosen for a number of reasons:

- They are cognitively easy to access
- They can be adapted to represent the issues and concepts involved in discussing goals for rehabilitation
- They can be used to help people visualise concepts and relationships
- They can act as a scaffolding for memory and cognition
- They do not require literacy.

Previous projects (Murphy 1998, 1999, 2000, 2002) have shown that people with little or no speech can use this method successfully to communicate about issues in their lives. Anecdotal evidence has also suggested that *Talking Mats*TM is a useful thinking tool and can be used by people who have no communication difficulties to think about specific issues.

² The Picture Communication Symbols (PCS) are ©1981-1997 Mayer Johnson Co. and are used with permission - Mayer-Johnson Co., P.O. Box 1579, Solana Beach, CA 92075, USA.

An example of a $Talking Mat^{TM}$ is shown below:



Here, the person is using *Talking Mats*TM to express how they feel about their mobility. This mat shows that areas of concern include balance, transfers, moving things and moving in bed.

2.2 Aim

This pilot study aimed to explore whether or not the use of *Talking Mats*TM could enable people with a communication difficulty to express their views and set their own goals for rehabilitation.

2.3 Research Questions

- 1. Does the use of the *Talking Mats*™ framework help people with a communication difficulty become involved in the process of setting their own rehabilitation goals?
- 2. Can the use of the *Talking Mats*™ framework enable us to track change after a period of rehabilitation?

3. Method

3.1 Setting

The project was set in the Forth Valley NHS Board area and was conducted by Sally Boa, Speech and Language Therapist with the Area Rehabilitation Service. The Area Rehabilitation Service in Forth Valley is an interdisciplinary team comprising a range of allied health professionals, medical and nursing staff as well as generic rehabilitation assistants. The Team was set up in 1998 to provide a service for adults aged between 16-65 years who have a physical disability and live in the community within the Forth Valley NHS Board area. Many of those referred to the Team have acquired neurological conditions such as Multiple Sclerosis, Parkinson's Disease and Motor Neurone Disease, brain injury as a result of stroke or Traumatic Brain Injury. A typical pathway as a patient with the Area Rehabilitation Service is outlined as follows:

- Referral
- Assessment using multidisciplinary screening tool (developed by the Area Rehabilitation Service)
- · Goals set
- Intervention carried out
- Review
- Discharge.

As outlined above, following referral to the Area Rehabilitation Service, patients are assessed using a multidisciplinary screening tool. Rehabilitation goals are set prior to intervention commencing.

This pilot study explored the use of the *Talking Mats*™ framework to enable people with a communication difficulty to become more actively involved in expressing their views and setting their own goals for rehabilitation.

3.2 Topic and Symbol selection

The symbol selection for use with *Talking Mats™* was informed by The World Health Organisation (WHO) International Classification of Functioning (ICF), Disability and Health (2001). This provides a standard framework for describing health and health related states and allows health professionals to look at human functioning and disability at four levels of detail. It also takes contextual factors into account. The Activities and Participation component from the ICF framework provides a comprehensive list of domains covering a full range of life areas which enables the health worker to build and record a systematic picture of a person's functioning. It provides a structure to articulate the goal setting process.

Using the Activities and Participation component, it was possible to identify areas which are relevant to people who use the Area Rehabilitation Service in Forth Valley. In collaboration with the interdisciplinary team, a list was drawn up from the ICF categories.

The areas were then translated into more "user friendly" topics, as outlined:

- Applying knowledge
- Emotional well being
- Domestic life
- Communication
- Relationships
- Mobility
- Self care
- Health
- Transport
- Work and education
- Leisure
- Environment.

Each broad topic was further divided, again using the ICF categories as a guide. This is summarised in Table 1, see Appendix 1.

Using Boardmaker™ software, symbols were produced to represent each broad domain as well as the subcategories within each. This provided a symbol library so that *Talking Mats™* could be explored as a method to help people with communication impairments to more actively participate in the goal setting process. The symbols were used to:

- 1. Illustrate the **main topics** that are important so that participants could identify areas that they wished to work on with the ART.
- 2. Illustrate **subcategories**, so that particular issues could be examined in greater detail and translated to goals for rehabilitation.
- 3. Represent possible positive and negative factors relating to each issue.

Examples of some of the symbols are shown in Appendix 2. Blank symbol squares were also made available so that any topics not covered in the symbol library could be added if required.

3.3 Choice of symbols for the visual scale

Considerable time was spent trying to identify the most appropriate symbols for the visual scale at the top of the mats. The following factors were considered:

- How many symbols should there be?
- Symbol types (i.e. different facial expressions or more concrete "positive/negative" symbols).

Another important consideration related to the way in which topic symbols were presented and the way in which the question was worded. Throughout the interviews, the researcher was concerned that:

- Those with difficulty understanding spoken language could use the mats
- 2. Questions were *consistent* across all interviews
- 3. Participants were able to give their **own** view, rather than the view "expected" of them by the professional.

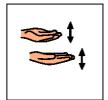
One participant had a background in marketing and research. She kindly agreed to take part in two in-depth interviews with the researcher. She commented:

"I found it more useful when there was 3 categories. I found it difficult trying to decide about a 7 point scale, which when you come to do the three month follow up, could lead to confusion."

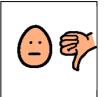
From this it was possible to identify the following symbols as the most suitable for this project:



This symbol was used to depict issues that the participant was happy with or did not want any help with from the Team.



This symbol represented issues that the participant felt unsure about. Often items placed under this symbol became areas that the person wanted to work on with the Team.



Options placed under this symbol were the main focus of discussion regarding rehabilitation goals.

3.4 The Study

The study comprised 2 in-depth interviews with patients recently referred to the Area Rehabilitation Service. Interview One took place at the beginning of the participants involvement with the Area Rehabilitation Service. This was designed to help participants set their goals. Interview Two took place three months after the first interview and was intended to assess the participant's progress. In addition, the participant's views were sought directly from a brief questionnaire and a participant case-study.

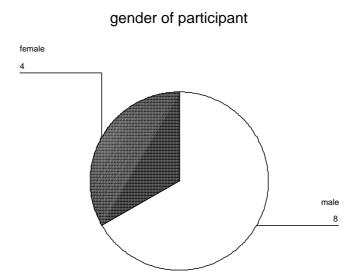
Twelve people newly referred to the Area Rehabilitation Service with communication difficulties were approached and given an information leaflet

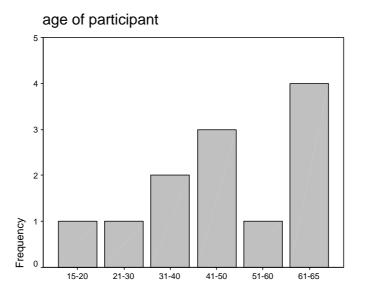
about the project (see Appendix 3). All indicated that they were interested in being involved and the researcher then visited them at home to explain the details of the project and the nature of their involvement. All consented to take part and a date for each interview was agreed.

Their communication impairments ranged from severe receptive and expressive dysphasia to mild dysarthria.

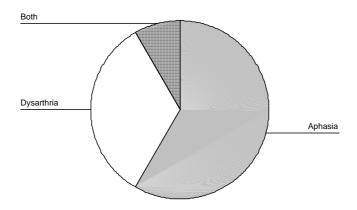
Ethical permission was obtained from Forth Valley Ethics of Research Committee.

The following charts summarise details of those who took part in the study:

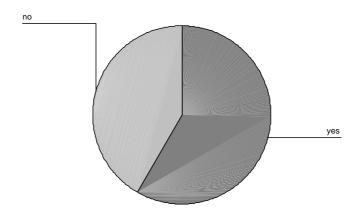


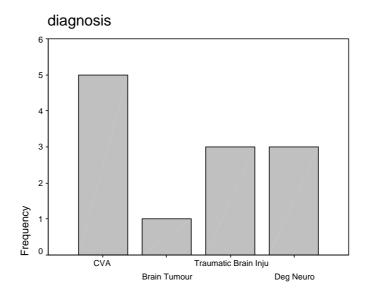


communication difficulty

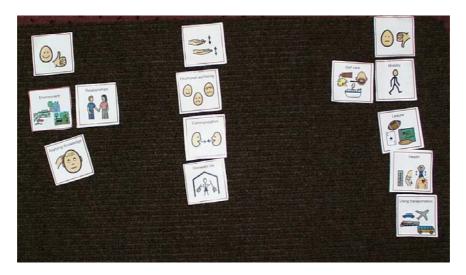


cognitive impairment

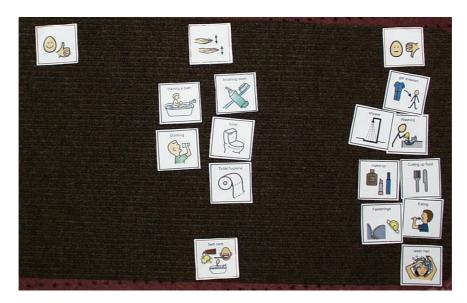




The interviews were semi structured which allowed for focussed, two way communication. Open ended questions were used which provided the interviewer with greater freedom and less restriction (Kadushin, 1990) Participants used *Talking Mats™* to choose from the options identified from the ICF categories to build up a personal picture of their specific goals in order of importance to them. Initially participants were asked to think about broad topic areas as outlined in section 3.2. Participants then selected issues or topics that they wanted to explore in greater detail. For example, this mat shows that the participant's main areas of concern in terms of broad topics were mobility, self-care, leisure, health and using transport.



Each broad topic was then explored in greater detail. For example, using self care as the sub topic resulted in the mat below:



This showed that the participant was concerned with many aspects of self care. Using the mats helped her to think about her many difficulties one at a time. Discussing issues in this way enabled her to think about realistic goals, and also to consider positive aspects of some of the issues.

Digital photographs were taken of each participant's completed *mats* as a visual record, and where appropriate, a video recording was made so that nonverbal communication and discussion that took place around the goal setting could be recorded.

Where appropriate, participants were interviewed again three months later to ascertain how successful intervention had been, how realistic goals were and to measure any change. All those who took part in the pilot study were asked to complete a questionnaire about how they felt about using *Talking Mats*™ to set rehabilitation goals at the follow-up stage (See Appendix 4).

4. Results

Initial interviews were completed for 11 out of the 12 participants who consented to take part in the study. (1 participant withdrew from receiving treatment from the Area Rehabilitation Service). Follow up interviews (3 months after the initial interview) were carried out with 5 participants. The high withdrawal rate was due to a variety of factors:

- Deterioration in a participant's condition making it inappropriate to re-set goals (One participant who had a rapidly deteriorating condition)
- The initial use of *Talking Mats*[™] had not been successful (Two participants 1 had severe cognitive difficulties and 1 had a very severe receptive aphasia)
- Insufficient time between the person being referred to the Team and the end point of the pilot project (Three participants agreed to take part in the study during the last 3 months of the project).

Results are separated into three main areas of enquiry: project workers observations (4.1); results from feedback questionnaire (4.2); and participant case-study (4.3).

4.1 Project Workers Observations

Observations are based on a systematic analysis of the participant's journey through the goal setting process (see Table 1 below) and structured analysis of specific cases using photographic examples of *Talking Mats*TM to illustrate emerging themes.

A summary of how *Talking Mats*TM was used to develop goals with participants is provided in Table 1 below. The Table illustrates the goal setting process for each participant; from identifying general issues, to specific problems. It allows a comparison of the issues highlighted by **participants** and goals identified by the **team**. Team goals were set through interdisciplinary discussion following assessment by professionals on the team (without the participant).

Table 1

Participant	General issues identified using Talking Mats TM	Specific issues identified using Talking Mats ^{IM} and discussed in more detail	Goals set by ART without using Talking Mats
1	Communication, Domestic Life, Emotional well being, Relationships	Communication: Using the telephone, talking to "new" people, word finding, regaining accent, following conversation, writing and using e-mail Emotional well being: Confidence, fatigue management, concentration, decision making, mood, planning	Knowledge of condition, word finding, confidence, writing, using e-mail
2	Leisure, Communication, Relationships, Domestic life, Environment, Self care, Health.	Domestic life: Housework, helping others, making beds, hoovering Communication: Understanding Health: Pain	Preparing snacks, Communication
3	Health, Work, Communication, Emotional well being, Transport	Health:, Knowledge of his condition, smoking and bladder, bowels Communication: Speech/word finding, reading and writing Emotional well being: Confidence, anger, thinking, concentration, fatigue, decision making Transport: Driving	Word finding, reading, writing
4	Using transport, Leisure activities, work, Communication, Emotional well being, Mobility, Applying knowledge	Communication: Following conversations and understanding, speech, talking to new people, using the computer and e-mail, writing notes. Emotional well-being: Mood, concentration, memory, fatigue, thinking. Work: Getting back to work	Reading, high level language skills, managing money, voluntary work
5	Self care, Applying knowledge, work, Domestic life, Transport	Domestic life: Preparing meals, snacks and hot drinks, ironing, managing money Applying Knowledge: Memory, concentration, mood, anger, making decisions, planning, thinking Self care: Doing fastenings, putting on make up, cutting up food, toilet hygiene	Writing, walking, hair, child care, eating
6	Mobility, Self care, Leisure, Health, Transport, Communication, Domestic life, Emotional well	Mobility: Moving in bed, moving a limb, getting up off the floor, using stairs, balance, walking Self care: Dressing, showering, washing hair, make up, eating	Communication – understanding of condition & strategies to help, dry mouth, catarrh, getting in and out of bed

	being		
7	Communication, Applying knowledge, Domestic life	Domestic life: Preparing meals and cooking, Making hot drinks, managing money Communication: Talking to new people and friends, understanding conversation, using a computer, reading Applying knowledge/emotional well being: Memory, sleep, fatigue concentration	Communication, memory strategies, increased stability and balance, decreased pain in right arm
8	Mobility, Communication, Health, Applying knowledge	Health: Skin, Managing pain, bladder and bowels, swallowing, muscle weakness and knowledge of condition Mobility: Walking inside and outside, balance, using the stairs Communication: Talking to new people, talking at meetings, writing, using the telephone Applying Knowledge: Fatigue, concentration, confidence and memory	Speech, use of left hand, kitchen tasks, fitness
9	Mobility, Emotional well- being, Domestic life, Applying knowledge, Communication, Leisure, Work/education	Emotional well being/applying knowledge: Concentration, mood, memory, planning Communication: Following conversation, word finding and volume of speech, writing Domestic life: Making hot drinks, preparing and cooking food Mobility: Balance, falling, moving things, transferring, moving in bed	Team unable to set goals as patient found it too difficult to think about the concept
10	Self care, Using transport, Relationships, Work & Environment	Using the mats demonstrated that this participant had very little insight into his difficulties. He was unable to identify any specific goals	Walking outside, strength & range of movement, controlling temper (These were identified by the Team and patient's partner)
11	Emotional well being	Emotional well being: The participant was unable to identify any specific goals using <i>Talking Mats</i> ™	Team unable to carry out Rehabilitation with this patient

The table above shows that some participants were able to be more precise about areas that concerned them.(see columns 2 and 3). As a result, possible goals were more specific than those identified by members of the Area Rehabilitation Service (see column 4). For example, participant 8 identified "mobility" as an area of concern. Using *Talking Mats™* the person was able to specifically pinpoint "walking inside", "walking outside", "using the stairs" and "balance" as areas that they wanted to work on. This compares with the less specific goal set by the Team of improving the person's "fitness".

Another example is shown when we look at participant 4's communication goals. The Team goals were to work on "Reading and High level language". When using *Talking Mats*TM, participant 4 was able to be far more specific and wanted to work on: "Following conversation, understanding speech, talking to new people, using the computer and using e-mail". The goals set by the patient were more functional and were easily understood by the patient, and as a result more meaningful.

The table also shows some discrepancies between goals set by the Team, and issues identified using **Talking Mats**TM. For example, the Team identified "doing hair" as a goal for participant 5. Using **Talking Mats**TM, this participant did not highlight doing her hair as an area of difficulty.

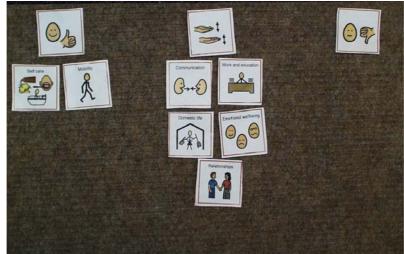
For most participants, using *Talking Mats™* enabled them to be more actively involved in the goal setting process. For example, because of his cognitive difficulties, participant 9 found the concept of thinking about goals hard to understand. Giving him symbolised options to think about and manipulate on the mat enabled him to identify very clear, specific goals, and thus informed the Team's input with him.

There were some occasions where issues identified by participants using *Talking Mats™* were unrealistic. For example, participant 4 specifically wanted to "get back to work". A more realistic option, identified as a Team goal was to explore the options in terms of part time voluntary work. This points to the need for further investigation in this area.

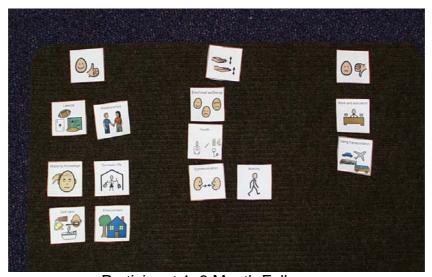
For some people, the use of *Talking Mats™* did not help them think about their rehabilitation goals. The 2 people who were unable to use the mats had severe cognitive problems and poor insight into their difficulties. It was not possible for the Team to involve either participant in the goal setting process. For one of the participants, rehabilitation was not an option. The other participant had a very supportive partner who was able to become involved in the rehabilitation process, and was helpful in supplying information about goals that would be motivating and realistic for the participant. This highlights the importance of a person's environment in relation to rehabilitation.

4.2 Review process

When considering the "Follow up" mats, it is important to note that changes are not always in a positive direction. Such changes may be a consequence of a person's priorities changing as they progress through the rehabilitation process. An example of this is shown below:



Participant 1: 1st Mat



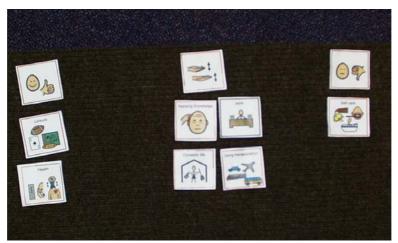
Participant 1: 3 Month Follow-up

These Mats show that as participant 1 has progressed through rehabilitation, her priorities have changed. For example, at the beginning of her rehabilitation, no items were placed on the negative side. Goals were identified from the middle part of the mat. During the follow up interview,

participant 1 identified "work" and "using transport" as main areas of difficulty. "Mobility" had also become more of a problem for her. She commented:

"It would have been nice to having a fresh look at it just a couple of weeks ago or something......because I am picking up more energy and more into doing things. I am more into sorting out my life and that."

Participant 5 had high level aphasia and cognitive problems. Initially she found it very difficult to think about goals for rehabilitation. Using *Talking Mats*TM helped her to pin point specific areas she wished to work on. Using the broad topic helped this participant to identify areas of her life that were presenting difficulties.



Participant 5: topic mat

The Mat showed that her main difficulty related to "self care". Other areas of difficulty included "applying knowledge", "work", "domestic life" and "using transport". Below is an example of a more detailed mat investigating the area of "applying Knowledge" with the same participant.

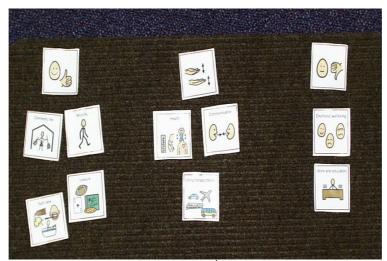


Participant 5: Applying Knowledge mat

Here she identifies that, within the area of "applying knowledge", the main difficulties relate to her mood, concentration and high-level executive

functions. Using the *mat* helped the Team to begin to address the issues with the participant, using cognitive assessment to gain baseline information about the person's skills and difficulties.

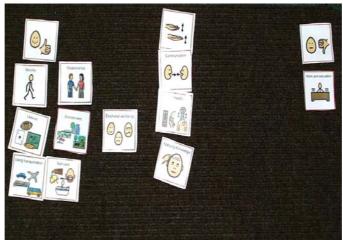
The digital photograph below shows an example of broad topics chosen as goals by participant 3 who had communication difficulties following a CVA:



Participant 3: 1st topic mat

From this it is possible to see that participant 3's main priorities at the beginning of his period of rehabilitation were "work" and "emotional well" being. Other areas that he wanted to work on were "communication", "health" and "using transport".

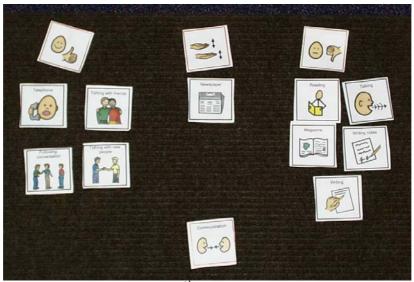
Three months later, the same participant's main topic mat looked like this:



Participant 3: 2nd Topic mat

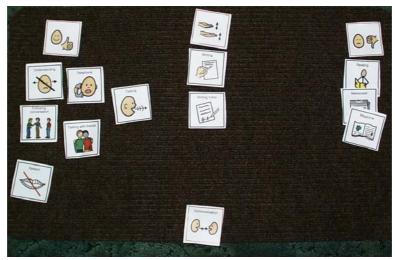
Clearly there has been little movement with regard to "work" and "health", but "emotional well being" and "using transport" have moved to the positive side of the Mat. Interestingly, on the second mat, the participant includes "thinking" as an issue that he finds difficult, suggesting increased insight into his difficulties.

Looking at the same participants' detailed mats reveals more subtle changes. For example, when communication was identified as a topic, the mat looked like this:



Participant 3: 1st Communication mat

Here, one participant's goals were to work on "talking", "writing" and "reading". Three months later, this participant's communication Mat looked like this:



Participant 3: Follow up communication mat

The Mat indicates that the main area of positive change for the participant was in "talking". Reading remained problematic.

Overall the results from this pilot study suggest that the use of **Talking Mats**TM is helpful in terms of allowing people to become more involved in the goal setting process and enables them break down areas of difficulty into small elements. Further investigation is needed to explore how realistic goals are and to look at any differences between professionals and patients views. Factors such as a patient's motivation and how the environment affects their choices should also be considered.

4.3 Feedback Questionnaire

Participants in the study were asked to complete a questionnaire giving feedback about how they felt about using *Talking Mats™*. This was done at the follow up stage of the project, and therefore 5 completed questionnaires are available. The results are shown below:

How useful was <i>Talking Mats</i> TM		0		
In explaining what the Rehab team do?	3	2		
In helping you think about your situation?	4	1		
In helping you set goals?	5			
How easy was <i>Talking Mats</i> TM to use?	5			

All participants found that *Talking Mats™* was useful in helping them to think about their goals for rehabilitation. They also found *Talking Mats™* easy to use. Feedback during the sessions suggested that all participants enjoyed using *Talking Mats™*, including those who were unable to use the tool as a method for setting goals. This is supported from data from previous studies where it was found that:

- Using Talking MatsTM is non-threatening in that there are no right or wrong answers
- The *Talking Mats*TM are simple and enjoyable to use (Murphy, 1999)

5. Participant's Perspective

Talking MatsTM. She was referred to Area Rehabilitation Team in Stirling in May 2002 following cancer treatment. She underwent surgery and radiotherapy for a high grade brain tumour which was located on her speech and language centre, and at the time of her referral, was affected by high level aphasia, dysarthria and fatigue. It was anticipated that participant 1 would need speech therapy and physiotherapy.

At the first *Talking Mats*TM session in August, participant 1 indicated that she was confused as to the nature of her disease and symptoms, so her first goal would be to have enough knowledge and understanding of her symptoms to enable her to cope with less difficulty. Participant 1 was struggling to communicate with other people, most notably with strangers and in times of stress. Her second goal was to have more confidence in interacting with others. She was keen to return to work and was anxious about interacting with work colleagues. She was anxious about her concentration, reasoning aptitude and her writing abilities, so her third goal was to tackle some of these fears by writing notes and emailing more readily. Finally, her speech was most problematic to her. Her goal was to improve her speech by having less word finding difficulty and by working to regain her accent.

After five months of therapy, participant 1 underwent the second *Talking Mats™* session in January. It was anticipated that all her goals would be realised and that the *Talking Mats™* would reveal a much more positive picture about the participant's status. All the goals set at the first session had been realised, but other priorities emerged as her well being improved, namely her physical fitness, being confident about using public transport so she could be more self reliant and her employment rights when she returned to work. These were attended to in a revised goal plan with her.

The researcher conducted two in-depth interviews with participant 1 and from our interviews with her we gained an insight into the possible benefits and barriers to goal setting by using *Talking Mats*TM.

Below is a summary of the participant's thoughts relating to the use of **Talking** $Mats^{TM}$ as a framework for helping people to set rehabilitation goals.

5.1 Benefits

Explain Community Rehabilitation

The client can use the first **Talking Mats**TM experience to, not only set goals, but to visually demonstrate to the client the range of services and therapies offered by the Community Rehabilitation Team. The client may be unsure what the team does or can offer them. The practitioner can use the **Talking Mats**TM to explain the range of services and therapies and how these may meet the client's needs.

"so this kind of explains what the rehab team do and what rehabilitation is practically. I didn't know, for example, that it [the service] was so wide. I didn't know that A would be taking me out, for example, and getting me used to the train, the shops and people ..."

"Community Rehabilitation Team" can be quite an abstract term for many clients. Many do not fully understand the depth and breadth of their work. The *Talking Mats*TM give a good introduction to the team. Moreover it sets the theme of rehabilitation, of a positive, participative and rewarding experience.

The *Talking Mats*TM was, in a way, an initiation to "being rehabilitated" for some. Some were unsure of the path they were now on. For example, participant 1 had just had a stay in hospital after a sudden diagnosis and unexpected surgery and at the time of referral, was having radiotherapy treatment. She needed to be aware that rehabilitation consisted of many elements, the practical, some physiological or psychological.

But what surprised participant 1 the most about the *Talking Mats*TM session, was that it suggested to her what she needed to do herself, for her own recovery. It suggested that her diet and exercise were important as was having a relaxed, stress-free life.

5.2 Raise Issues That Might Form Goals

Clearly the most obvious benefit of *Talking Mats*TM was their ability to raise issues that might form goals.

When using *Talking Mats*TM within each topic (e.g. health and transport) there are different issues for reflection (e.g. medication or using the train), some of which the participants had previously considered and some not. It is in this way that *Talking Mats*TM can help form goals – by giving the client the mechanism by which to solve a particular problem. For example, participant 1 was concerned about resuming her work. The *Talking Mats*TM helped her to realise that "transport", "aspects of her speech difficulty" and her "employment rights" was problematic. It can break down a problem providing very important sub-goals for clients, when their ultimate goal is to feel better about themselves and their situation. For example, participant 1's primary goal was to improve her speech, so we worked on the twin goals of improving her word-finding abilities and gaining her natural accent.

It raises ideas for goals and can suggest to the client that rehabilitation is as much about physical health and practical aspects as well as ways of coping, improving confidence and relationships.

5.3 Mats offer a means of problem solving

Mats are a constructive and visual way of mapping out a problem and arriving at a solution, i.e. setting goals for yourself. The problem is broken down into various components, then, you sort through the issues that compose the

problem, sifting out the issues that do and do not need attention. In this sense it was found to be very logical and systematic.

Furthermore, the *Talking Mats*TM gives the client many options to consider, which is easier than thinking up and explaining their own:

"I suppose it is like anything you are asked to write or any question you are asked, it's like a blank sheet of paper and for me with speech difficulties it is easier to work with ideas, than have to come up with my own".

5.4 Barriers

The client must believe in the future

Goals are about the future. In this case, goals are endeavours or actions the client must take to improve his/her well-being. The client must look to future with some sense of hope that they will be able to improve their situation physically or emotionally. The client may well come to the service confused, depressed and despondent and does not view the future very optimistically. In Participant 1's case events happened to her too quickly for her to internalise them and for any degree of acceptance to occur:

"I came to rehab I was just so overwhelmed with the stuff that had happened to me, that I couldn't see the wood for the trees. I couldn't make up my mind what was more important than what, because everything was so overwhelming."

The *Talking Mats*TM process may make ascending this hurdle easier for some. By its very nature of breaking problems down into smaller parts, the client can create smaller goals, e.g. "reading", "gardening" or "doing their hair".

5.5 The Client's Expectations

The client's expectations of the Rehabilitation Team may be an important inhibitor to successful goal setting. They may have had poor past experiences with hospitals, clinics and health professionals and are now reluctant to go through, what is a reasonably intensive, service. Participant 1's hospital experience was fairly positive, but for a few instances of thoughtlessness by various health professionals. They were familiar with working with patients with speech difficulties, yet some shouted at her as if she was deaf and some even preferred to speak to her family instead of explaining procedures/medication etc to her. She had experience of physiotherapy and occupational therapy in hospital, but these were of limited value to the participant.

"No, well [sigh] I was in hospital for two weeks and the physio made me walk up and down the stairs to see if I was coping with the stairs and that and the occupational therapist made me sit on a toilet [laughs] to see if I could get up.."

In participant 1's case, these experiences marred her expectations of the Rehabilitation Team:

"so I wasn't overly enthusiastic at first... Well, I really didn't have a clue. I just thought I would be getting more occupational help, I didn't want that because my experience in hospital was so terrible."

5.7 Goals are not Static

Goal setting is not static, but an evolving process. The client may refine her/his goals achieving some, but not others. As time goes on new goals appear, or indeed, previous goals may have less saliency. For instance, work became a more prominent issue in participant 1's second mat. This in itself was an important move forward as she used the sub-mats to work through the various contingencies that would get her back to work. For example, she needed to have enough stamina and fitness to cope with travelling and work; she needed confidence about using public transport to get her to work; and, she needed to have a plan to grade her return to work.

In participant 1's case, her emotional well-being stayed in the same position before and after (the middle position). On the surface nothing has changed, but qualitatively the kinds of relationships she was having changed as she was able to go out more and mix with friends, colleagues and strangers, not just family and therapists.

"[Emotional well being picture] well I keep that there because I am still working on that and relationships I am needing to work because the kind of relationships I am having with people are new relationships."

The implication of this is the goal setting exercise needs to be repeated and any new issues need to be identified and addressed.

These results suggest that $Talking Mats^{TM}$ has a key role in helping participants to:

- Clarify and understand what the Area Rehabilitation Service has to offer
- Think through their rehabilitation goals
- Track change.

6. Summary and Implications

This pilot study has demonstrated that *Talking Mats*TM is a useful tool which enables people to think about goals for rehabilitation. Using the ICF categories as a framework, it has been possible to generate symbols which can be presented to people to help them think about rehabilitation goals. Observation of video material and field notes taken during the research has

provided useful information about the patients' perspective of rehabilitation and the process of goal setting.

The following points have emerged:

- The participants in this study initially found the idea of thinking about rehabilitation goals a difficult concept
- The use of *Talking Mats*TM helped people with very mild communication impairments as well as those with severe difficulties
- The patients in the study had some different priorities to those of the rehabilitation professionals who were working with them
- Using Talking Mats[™] helped people to focus on and talk about specific areas of their lives
- Use of the digital photograph as a visual record of a participant's goals could be used to track any changes in the patient's priorities.

Feedback from those involved in the study suggests that this system of involving people in setting their own goals for rehabilitation is very valuable. It helps to:

- Break down concepts into small units
- Generate ideas about the type of help available
- Allow people to move ideas around, and therefore gives them control.

However, the study also demonstrated that it is difficult for some people to be actively involved in the goal setting process. Further research is required to investigate to what extent people with severe cognitive difficulties can realistically be involved in setting goals for rehabilitation.

Feedback from members of the Area Rehabilitation Service has been very positive. The pilot has shown that further refinements to the symbol selection needs to take place. Moreover, further investigation is needed with regard to other members of the multidisciplinary team using *Talking Mats*™ with patients.

More generally, the pilot points to the need for further research in the following areas:

- The use of *Talking Mats*[™] as a tool for goal setting at different points in the rehabilitation process (for example, prior to discharge from hospital, and during/after community rehabilitation)
- Interviews with a range of health professionals with the aim of expanding and further refining the use of *Talking Mats*TM
- Quantitative survey with patients' and their significant others to get hard data on the use of *Talking Mats*TM
- Further investigation regarding how to enable people with severe and complex difficulties to become involved in setting rehabilitation goals.

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APPENDIX 1

Goal setting for people with communication difficulty

Revised headings, based on WHO categories, following feedback from members of ART:

Moving and walking:

- Changing body position
- Maintaining body position
- Balance
- Moving a limb
- Transferring oneself
- Bed mobility
- Carrying, moving and handling objects
- Walking
- Moving around inside
- Moving outside
- Moving around using equipment
- Using the stairs
- Falling

Using transportation:

- Using public transport
- Using taxis
- Using your own car
- Driving
- Being a passenger

Looking after one's health:

- Medication
- Sleeping
- Comfort
- Skin
- Pain
- Continence
- Knowledge of condition
- Diet
- Smoking
- Alcohol intake
- Use of drugs
- Lifestyle
- Exercise
- Nutrition
- Weight

Swallowing

Self Care:

- Washing oneself
- Caring for body parts
- Toileting
- Dressing
- Eating

Domestic life:

- Housing
- Shopping
- Managing finances
- Family role

Household tasks:

- Preparing meals
- Doing housework
- Assisting others

Communication:

- Receiving
- Producing
- Conversation
- Using devices and techniques

Interactions and relationships:

- Basic interactions
- Relating to strangers
- Formal relationships
- Family relationships
- Intimate relationships
- Friends

Major life areas:

- Work
- Employment
- Higher education
- Community life
- Recreation & leisure
- Religion & spirituality

Environmental factors:

- Support carers (formal & informal)
- Where you live
- Type of housing
- Accessibility
- Adaptations

- Equipment
- Wheelchairs

Applying knowledge:

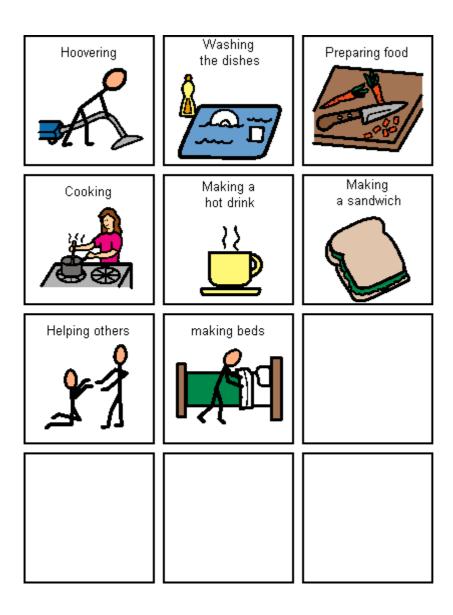
- Thinking
- Concentrating
- Memory
- Planning

Emotional well-being:

- Confidence
- Mood
- Irritability
- Anxiety

APPENDIX 2 Examples of symbols used to represent options presented to participants





APPENDIX 3



Area Rehabilitation Team Stirling Royal Infirmary Livilands Stirling

Goal setting for people with a communication difficulty. Information Sheet

My name is Sally Boa and I am a Speech and Language Therapist with the Area Rehab Team. I have received funding from Forth Valley Primary Care Trust to carry out the above study. I am inviting you to participate in a small research project. Before you decide whether or not you wish to participate, we need to be sure that you understand why the research is being done and what it would involve. I am therefore providing you with the following information. Please read it carefully and be sure to ask any questions you have, and, if you want, discuss it with outsiders. I will do my best to explain and to provide any further information you may ask for now or later. Take time to decide whether or not you want to be involved.

The main aim of this project will be to ascertain if *Talking Mats* can be used to allow people with a communication difficulty to set specific and realistic goals in rehabilitation intervention.

Talking Mats is a framework which uses computer generated picture symbols to represent a range of options that you can choose from and then place on a **mat** under a rating scale (also presented in pictorial form) to indicate how important they are to you.

There is an example of a Talking Mat on the enclosed sheet.

Twelve people with a communication difficulty newly referred to the Area Rehab Team are being invited to participate. Participation in this study is entirely voluntary and you are free to refuse to take part or withdraw at any time without having to give a reason and without this affecting your future medical care or the relationship with any staff looking after you.

If you agree to take part in this study I will visit you, once to help you set your goals and once again 3 months later or when input from the Area Rehab Team is completed, if this is sooner. I will take a digital photograph of your completed *mats* in order to have a record of your views. The interview may be video recorded. The reason for this is to ensure that all your communication methods can be taken into account as you express your views.

All data obtained will be treated as confidential and stored in a locked cupboard within Area Rehab Office. Only the Area Rehab Team will have access to the data. All data will be stored for 1 year only and will then be destroyed by shredding and incineration. Your GP will be informed that you are taking part and will receive a copy of the final report should they wish.

If you wish to be involved please complete the attached consent form and I will be in touch with you in the near future to arrange my first visit.

Version 2 - 17.4.02

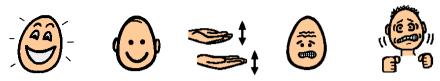
APPENDIX 4











How useful was Talking Mats			COMMENTS
In explaining what the Rehab team do?			
In helping you think about your situation?			
In helping you set goals?			
How easy was talking Mats to use?			