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### Patient participation in physical therapy goal-setting

Susan M. Baker

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**PATIENT PARTICIPATION IN PHYSICAL THERAPY**  
**GOAL-SETTING**

by  
**Susan M. Baker**

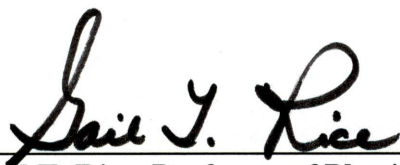
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**A Publishable Paper In Lieu of a Thesis**  
**in Partial Fulfillment of the**  
**Requirements for the Degree**  
**Doctor of Physical Therapy Science**

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**June 1999**

Each person whose signature appears below certifies that this publishable paper in their opinion is adequate, in scope and quality, as a publishable paper in lieu of a thesis for the degree Doctor of Physical Therapy Science.



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Gail T. Rice, Professor of Physical Therapy

Chairperson



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Helen H. Marshak, Associate Professor of Health Promotion and Education



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Grenith Zimmerman, Professor of Biostatistics

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## ABSTRACT

### PATIENT PARTICIPATION IN PHYSICAL THERAPY GOAL-SETTING

by

Susan M. Baker

**Background and Purpose.** An important part of treatment planning in physical therapy is effective goal-setting. The *Guide to Physical Therapist Practice* recommends that therapists identify the patient's goals and objectives during the initial evaluation as a way to maximize treatment outcomes. The purpose of this study was to examine whether therapists seek patient participation in goal-setting and, if so, with what methods. We also examined therapists' attitudes toward participation and patient satisfaction with the evaluation encounter. **Subjects and Methods.** Twenty-two physical therapists audiotaped the initial evaluation of 73 elder patients. The audiotaped evaluations were then scored using the *Participation Methods Assessment Instrument* to determine the frequency of attempts made by therapists to involve patients in goal-setting. Therapists and patients completed opinion surveys following the evaluations. **Results.** Therapists' use of participation methods during evaluations ranged from a minimum of one to a maximum of 19 out of 21 possible items ( $\bar{x}=10.1$ ). Therapists believe that it is important to include patients in goal-setting activities and that outcomes will be improved if patients participate. Patients indicated that participation in goal-setting is important to them. **Conclusion.** In most cases, therapists are not fully utilizing the potential that exists for patient participation in goal-setting. Patient and therapist education is needed to maximize the benefits of collaboration in rehabilitation.

**Key Words:** Patient participation, Collaboration, Goal-setting, Geriatric rehabilitation.

Effective physical therapists are able to establish realistic and achievable goals to guide their intervention with patients. To assist in setting appropriate goals, the American Physical Therapy Association (APTA) recommends that therapists identify the goals and objectives that the patient wants to achieve from treatment. This calls for physical therapists to encourage active participation from their patients (and families), as appropriate, during the goal-setting process. Ideally, this collaboration starts at the initial evaluation.<sup>1</sup> The APTA is not alone, nor is it pioneering, in this recommendation. The Commission for Accreditation of Rehabilitation Facilities (CARF) and Joint Commission on Accreditation of Healthcare Organizations (JCAHO) require that therapists involve patients in decision-making and establishing treatment goals.<sup>2,3</sup>

The purpose of this emphasis on patient participation in goal-setting is to enhance patient management and the effectiveness of treatment. Physical therapy literature appears to support participation as a means to improve outcomes and identifies benefits that may result. These benefits include greater goal attainment, increased patient satisfaction, gain in functional skill, better compliance with treatment regimens, decreased depression in patients and reduced burnout rates among therapists.<sup>4,5</sup>

Nursing and psychological studies have shown that intervention outcomes were enhanced when practitioners employed collaborative goal-setting strategies.<sup>6-8</sup> Rost<sup>9</sup> found that patients with diabetes who actively dialogued with their physician during the initial office visit were more compliant with prescribed medication and lifestyle changes than patients who had minimal dialogue with the physician. Satisfaction was shown to decrease



when the physician dominated the conversation in the initial office visit. Jones and Kovalcik<sup>10</sup> cite reduced levels of stress in clients that participate in goal-setting.

Haas has stated that "accommodating the wishes of patients . . . during the establishment of goals is one of the most demanding tasks practitioners face."<sup>11</sup> Therefore, professional organizations, accrediting bodies and benefits notwithstanding, therapists in clinical practice may face obstacles as they endeavor to establish a collaborative relationship with their patients. Northen<sup>12</sup> examined whether occupational therapists attempted to gain patient participation in keeping with the occupational model of rehabilitation. She found that occupational therapists did seek patient participation in setting goals, but at levels that were less than optimal. She cited theory application, time constraints, patient age and cognitive status as factors that impact participation.

While there may be many barriers to participation, our literature review will explore three: (1) prevalent models governing practitioner-patient interaction, (2) lack of patient preparation for a participative role, and (3) incongruence between the goals of the therapist and those of the patient. (Appendix A contains an expanded literature review.)

### *Models of Interaction*

Health-care professionals have not always been encouraged to include patients as active participants. Indeed, the role of both patient and practitioner in the health-care interaction has followed an evolutionary process.

The *medical model* is possibly the best known framework of practitioner-patient interaction. Physical therapists, like other health-care professionals, have been guided by this model of service delivery for many years. In it, the patient assumes a "sick" role and

seeks the services of a medical practitioner, whose role is to identify the problem and initiate an appropriate treatment. The patient's role is to be passive and comply with the practitioner's directives.<sup>13</sup> The practitioner may act in a paternalistic manner toward the patient, with paternalism defined as any interference with the patient's liberty of action on the grounds that the control is in their best interest, for their own good, welfare or overall happiness.<sup>14</sup> Accordingly, in the medical model, paternalism is acceptable because of the technical knowledge that the practitioner has regarding the treatment of disease/illness. Since patients do not have this type of expertise, input from them regarding medical care may not be actively sought by the practitioner as decisions are made. Kenny<sup>15</sup> suggests that this type of paternalistic, noncollaborative approach to patient care results in dependency and compromised medical outcomes.

In response to the demand for greater consideration of patient rights, the *consumerism model* evolved.<sup>13</sup> Here, responsibility for health-care decisions is given to the patient, who is considered the appropriate decision-maker. The role of the practitioner is to gather all the necessary medical information, analyze it, present it, then withdraw so that patients can make an independent decision regarding the direction of their care. The downside of this approach is that even with accurate information many patients still need the input of the practitioner to assist them with decision-making.

To fill this gap and yet avoid paternalism, the *advocacy model* encourages self-determination in a more supportive way. The practitioner still provides adequate information about the diagnosis, prognosis and potential outcome of a given treatment. Then instead of withdrawing, the practitioner continues to provide support and input throughout the decision-

making process.<sup>16</sup> An opportunity for patients to assume an active yet supported role is intentionally created, and the decisions made reflect a collaborative relationship between patient and practitioner. This collaboration is necessary in order for patients inexperienced in participation to develop their problem-solving skills.<sup>17</sup> Payton<sup>18</sup> believes that even though becoming actively involved in their care is a challenge for many patients, therapists have an ethical and professional duty to help them do so.

### *Preparation for Participation*

Therapists would generally agree that patients are more likely to work toward goals that are meaningful to them. But as practitioners know, patients enter the treatment setting with great diversity in terms of their values, beliefs, expectations and personalities. Are patients prepared to assume an active role in goal-setting? Or do they, because of historical paradigms, generally lack the preparation, motivation or background to be active participants?

Physical therapy literature presents mixed conclusions on the issue of whether patients are prepared to participate in treatment planning. Windom<sup>19</sup> interviewed 14 patients in the rehabilitation unit of a teaching hospital. She focused on the preparedness of patients to take an active role in their physical therapy and defined four areas to be examined: knowledge of their disease, knowledge of physical therapy, role perception, and goal-setting. In regard to role perception, she found that most patients perceived their role as that of a passive participant. Paradoxically, when patients were encouraged to participate in goal-setting, they readily identified the goals they wanted to pursue during treatment. Where they required assistance was in making their goals specific.

Payton<sup>20</sup> interviewed 20 patients to ascertain their perception of the level of their participation in goal-setting, treatment planning and outcome assessment. He found that the patients had a weak sense of participation in goal-setting and described their role in this activity as indirect. They felt that goals were established as a result of tacit consensus between them and the therapist. Furthermore, they appeared satisfied with this role and expressed little desire for greater responsibility.

In a later study by Payton<sup>21</sup>, it was found that patient expectation and participation were influenced by the patient's race, gender and economic status. Still, the majority of the 109 participants (68%) indicated that they would have preferred to be more involved in goal-setting with their therapist.

Similarly, patients in a cardiac rehabilitation program indicated that their personal preference would be to set their own treatment goals and that this preference was largely unmet. Male participants identified arbitrary goal-setting as the area of their greatest dissatisfaction with the program.<sup>22</sup>

### *Goal Incongruence*

The issue of therapist-patient goal incongruence can also influence efforts at collaboration. Using goal attainment scaling to measure treatment outcomes, Reid<sup>23</sup> found that incongruence often exists between the goals of the patient and those of the therapist. Patient goals were found to be more often related to function, while therapist goals were clinical. However, therapist-set goals were reached with greater frequency than those set by the patient.

Cott observed that "when patients participate in goal-setting, rarely do their goals get high priority during the treatment planning."<sup>24</sup> Coy<sup>25</sup> suggests that treatment effectiveness could be increased if physical therapists take time to explain procedures and routine care to patients, encourage patients to express their feelings about their care and involve patients in the initial and ongoing goal-setting process.

### *Purpose of the Study*

Despite the fact that patient participation in goal-setting is mandated in practice guidelines and may be beneficial, there appears to be a paucity of physical therapy research focused on this aspect of patient management. The purpose of this study was to (1) examine whether therapists seek patient participation in goal-setting and, if so, with what methods; (2) explore the relationship between patient participation in goal-setting and satisfaction with the evaluation encounter; and (3) determine therapist attitudes toward patient participation in goal-setting.

### **Subjects**

In a geographical area that has approximately 65 licensed physical therapists, 24 therapists who evaluate and treat elder patients were recruited to participate in this study. They met two criteria: (1) they held current licensure, and (2) they spoke English as their primary language.

The therapists recruited 81 patients to participate. Inclusion criteria were: (1) 65 years of age or older; (2) non-neurologic primary diagnosis; (3) functional cognitive level (as determined by the physical therapist's observational assessment), with the ability to follow 3-5+ step instructions; (4) English spoken as primary language, with the ability to

verbally communicate and read at an eighth-grade level; and (5) this evaluation was the initial one by this therapist.

Informed consent was given by each subject, and their confidentiality and rights were protected.

### **Study Instruments**

We utilized four instruments in this study. Two were used to record interactions between therapists and patients during the evaluation encounter: the *Participation Method Assessment Instrument* (PMAI) and the *Interactional Style Assessment Form* (ISAF). We adapted the PMAI from the *Patient Participation Evaluation Form*, which was developed by Northen<sup>12</sup> (permission granted). The ISAF was based on the work of Payton.<sup>4</sup> We developed two instruments to identify the attitudes and perceptions of therapists and patients: the Therapist Opinion Survey and the Patient Opinion Survey. (Appendix B contains samples of instruments and forms.)

#### *Participation Method Assessment Instrument*

The PMAI was used to record attempts by therapists to involve patients in goal-setting. It consists of 21 items reflective of various aspects of patient participation. Items 1-8 are related to *patient preparation*, which may lay a foundation for participation. Items 9-14 deal with *concerns clarification* and reflect the therapist's attempts to understand the patient's concerns, which may create areas of shared knowledge. Items 15-21 are *goal-setting processes* involving strategies that may encourage collaboration between therapist and patient.

In order to achieve face and content validity of the PMAI, we distributed it to three board certified geriatric specialist physical therapists who were not associated with our study. All therapists had more than six years of clinical practice, one was male, two held baccalaureate degrees and one held a graduate degree in physical therapy. These therapists were asked to review the PMAI and comment on whether it was inclusive of the basic areas that would be in a typical physical therapy evaluation and represented areas designed to increase patient participation in goal-setting. We also asked them to recommend additional items or indicate ones that may be invalid, arcane or outside the scope of a typical evaluation. The final version of the PMAI incorporated suggestions we received.

#### *Interactional Style Assessment Form*

The ISAF was used to describe the therapists' communication style when goals were discussed during the evaluation encounter. The ISAF has five levels, each of which represents a place on the continuum of collaboration.

Therapists using a *Free Choice* (Level 1) communication style ask patients open-ended questions to ascertain their concerns, expectations and goals. Use of *Multiple Choice* (Level 2) means that the therapist asks questions and gives the patient suggested responses. *Forced Choice* (Level 3) finds the therapist asking questions, but then offering his/her own answer or recommendation. At *No Choice* (Level 4) the therapist prescribes or tells the patient what to do, what the objectives are and what goals are going to be pursued. *No Statement of Goals* (Level 5) was used when therapists did not make goal statements during the recorded evaluation.

### *Opinion Surveys*

Therapists and patients each completed an opinion survey. The Patient Opinion Survey contained 10 items designed to elicit patients' perspective on the evaluation encounter. The Therapist Opinion Survey included 12 items that were structured to assess attitudes about patient participation issues.

### *Data Tracking and Management*

In addition to the above instruments, we used two data tracking and management forms. Therapist Demographic Forms were designed to collect characteristics of the therapists and were self-completed when therapists agreed to participate. Patient Information Forms, which required specific demographic and medical information about the patient, were completed by each therapist when the evaluation was performed.

### **Procedures**

This quantitative study with qualitative aspects was designed to determine whether physical therapists seek to achieve patient participation in goal-setting and with what methods. In order to do this we collected data from the initial evaluation encounter between therapists and patients. Rather than look at this data in isolation, we also collected data about patients' perceptions of the evaluation encounter and therapists' attitudes toward patient participation.

### *Instruction to Therapists*

Each of the 24 therapists was asked to audiotape the initial evaluation of five different patients as they presented themselves for evaluation between March and August 1998. We stated that the purpose of the study was to examine evaluation methods and requested that



therapists conduct their evaluation of patients according to their routine procedures. Study materials were organized so that the instructions the therapists received were identical. Each therapist received five packets containing study materials for each patient to ensure that data would remain organized and uncorrupted. After therapists completed five evaluations, or their maximum possible, they were given the Therapist Opinion Survey.

#### *Instruction to Patients*

The therapists invited the patients to participate in the study. Patients were instructed that their physical therapy treatments would not be affected by their participation or nonparticipation and that following the evaluation their participation in the study would be over.

After the evaluation was over, patients were given a sealed envelope containing the Patient Opinion Survey. Following completion of the survey, patients were asked to place the survey in another envelope, seal it and return it to the therapist. Patients were told that the survey would be forwarded to the researcher and that the therapist would not know how they had responded. If a patient was not able to read the survey due to visual impairment, the therapist was instructed to have it read to the patient by another person. Therapists were asked not to be the designated reader so that blinding to the exact nature of the study could be retained.

#### *Review of Data*

After research packets were returned, each audiotaped evaluation was reviewed and each PMAI item was scored as *attempted*, *not attempted* or *not applicable*. In *ex post facto* analysis we rescored PMAI items as either *attempted* or *not attempted* and did not utilize the

*not applicable* category. This decision was based on the fact that in order for a *not applicable* to be recorded, the reviewers would have had to make a judgment on circumstances that were unknown and based on listening to the audiotape. Instead of doing this, we deleted the *not applicable* option. For PMAI items that were dependent (e.g., Items 3 and 4), we scored the dependent item *not attempted* if the prerequisite item was not attempted. Obviously, if the prerequisite item was *attempted*, the dependent item could have received either an *attempted* or *not attempted* score, as applicable. The appropriate ISAF level was also recorded.

In order to control for bias and develop a scoring framework, two physical therapists not involved in any other aspect of the study were told the purpose of the study, oriented to the use of the PMAI and ISAF, and asked to review a random sample of 20 audiotapes each. These therapists were chosen because they represented a typical clinical therapist's perspective and experience. Both therapists had more than six years of clinical practice, one was male, and both held baccalaureate physical therapy degrees.

After a trial test, the results from each reviewer's scoring were compared to the primary researcher's scoring results. Then the reviewers met to establish guidelines for scoring the PMAI. To develop the guidelines reviewers listened to a sample audiotape and discussed scoring of each PMAI item until agreement was reached. Following this session, reviewers resumed listening to their sample of audiotapes. Scoring was again correlated. Agreement on *patient preparation* items was good (80.0%), on *concerns clarification* agreement was moderate (70.0%), and on *goal setting processes* agreement was good (86.0%). We accepted these levels of agreement.

### *Scoring of PMAI*

The procedural method for scoring Items 3 and 5 of the PMAI (*presents assessment purposes/procedures to patient, family and/or significant others; discusses assessment findings with patient, family and/or significant others, respectively*) deserves mention. We recognized that performance of these items may have entailed multiple assessment procedures by the therapist. To address this issue, we did not consider the possible number of procedures that could have been performed. Rather, if the therapist made an attempt to address even one purpose, procedure or finding with the patient, an *attempt* was registered for that item.

### *Statistical Analysis*

Statistical analysis was performed using SPSS 7.0.<sup>26</sup> Descriptive statistics were calculated for demographic variables. Nonparametric correlations were computed using Spearman rank correlation coefficients; chi-square tests and ANOVAs were applied to determine differences among groups.

## **Results**

### *Physical Therapists*

We enrolled 24 physical therapists in the study and collected data from 22 therapists. Two therapists withdrew because of their inability to identify patients who met inclusion criteria.

The majority of therapists were female (90.9%) and Caucasian (90.9%), with baccalaureate education (63.6%). Most practiced in an acute care facility (23%), followed by out-patient and rehabilitation settings (18.2% each) and then by skilled nursing facilities,

home health agencies and clinic/private practice (13.6% each). Therapists' clinical experience ranged from 1-30 years ( $\bar{x}$ =9.0 years). (Table 1)

For data analysis, we divided the therapists into groups based on years of clinical practice and, in *ex post facto* analysis, further divided them by their usage of PMAI items. We defined *novice* as 0-5 years of clinical practice and *experienced* as 6+ years of practice. Accordingly, the therapists were divided almost evenly, with 10 therapists who were novices (45.5%) and 12 who were experienced (54.5%). As Table 1 shows, novice and experienced therapists were similar in terms of demographic characteristics.

**Table 1.**

Demographic characteristics of the physical therapists (n=22)

Characteristic	Novice* n=10 (45.5%) %	Experienced* n=12 (54.5%) %	Low Usage+ n=11 (50.0%) %	Mid Usage+ n=8 (36.4%) %	High Usage+ n=3 (13.6%) %
<b>Gender</b>					
Male	10.0	8.3	9.1	12.5	0.0
Female	90.0	91.7	90.9	87.5	100.0
<b>Ethnicity</b>					
Black	10.0	8.3	9.1	0.0	33.3
Caucasian	90.0	91.7	90.9	100.0	66.7
<b>PT Degree</b>					
Baccalaureate	60.0	66.7	63.6	75.0	33.3
Graduate	40.0	33.3	36.4	25.0	66.7
<b>Practice Setting</b>					
Acute	20.0	25.0	36.4	12.5	0.0
Out-Patient	30.0	8.3	0.0	37.5	33.3
Rehabilitation	20.0	16.7	27.2	12.5	0.0
Skilled Nursing	10.0	16.7	18.2	12.5	0.0
Home Health	10.0	16.7	0.0	12.5	66.7
Clinic/Private	10.0	16.7	18.2	12.5	0.0

\*Novice=0-5 years of physical therapy practice; Experienced=6+ years of physical therapy practice

+Low Usage=1-7 PMAI items; Mid Usage=8-14 PMAI items; High Usage=15-21 PMAI items

In regard to PMAI usage, we analyzed each therapist's audiotape submissions, then calculated means on their individual data prior to calculating means for the total sample. Based on the therapists' usage of the 21 PMAI items, we designated a high usage group (between 15-21 PMAI items), a mid usage group (between 8-14 PMAI items) and a low usage group (between 1-7 PMAI items). When we applied these designations and calculated therapist means three therapists were in the high usage group, eight in the mid usage group, and 11 in the low usage group. We recognize the potential for reduced statistical power due to the sample size of the high usage group. Notwithstanding, because the usage groups became a variable of interest, we have reported the results of the analysis of these usage groups.

There is overlap between high/low usage groups and the novice/experienced designation. Two of the therapists with high usage were experienced and one was a novice. Of the low usage group, seven were experienced and four were novices. Therapists with high and low usage of participation methods had different practice setting distribution patterns. The largest percentage of therapists with high usage patterns practiced in home health (66.7%). The majority of therapists with low usage patterns worked in acute care (36.4%). (Table 1) Although interesting, the high, mid and low usage groups were not significantly different in practice setting ( $p=0.09$ ).

In regard to educational level, therapists holding a baccalaureate degree were in the majority in the low usage group (63.6%). In the high usage group, therapists with graduate education made up the majority (66.7%). The difference in educational level between the

high and low usage groups was not significant ( $p=0.60$ ). Gender and ethnicity distributions were also not significantly different between the high and low usage groups ( $p=0.83$ ;  $p=0.21$ , respectively).

### *Patients*

Audiotaped evaluations were conducted with 81 patients. Due to recording errors involving eight patients, data were analyzed on 73 patients.

The mean patient age was 76.4 years (SD: 7.1, range 65-94 years). For data analysis, we divided the patients into three age categories: 65-75 years ( $\bar{x}=70.7$ ,  $n=37$ ); 76-85 years ( $\bar{x}=80.2$ ,  $n=27$ ); 86+ years ( $\bar{x}=88.6$ ,  $n=9$ ). Chi-square analysis showed that the distribution of patient age groups between novice and experienced therapists was not significantly different ( $p=0.47$ ), nor was it of significance among the high/mid/low usage groups ( $p=0.46$ ).

The majority of patients were female (67.6%), Caucasian (86.3%), with an orthopedic diagnosis (71.2%) and had Medicare as their primary insurance (91.8%). It is difficult to accurately report the educational level of our patients due to the amount of missing data (54.8%). We speculate that many therapists did not collect education data because it is not information they typically gather during the evaluation. From the data we have, most patients had an elementary or high school level education (32.8%). (Table 2)

**Table 2.**  
Demographic characteristics of the patients by age groups

Characteristic	AGE GROUPS			
	65-75 yrs $\bar{x}=70.6$ SD=3.2 n=37 % (#)	76-85 yrs $\bar{x}=80.2$ SD=2.9 n=27 % (#)	$\geq 86$ yrs $\bar{x}=88.6$ SD= 2.8 n=9 % (#)	Total $\bar{x}=76.4$ SD= 7.1 n=73 % (#)
<b>Gender</b>				
Male	32.4 (12)	14.8 (4)	11.1 (1)	23.3 (17)
Female	67.6 (25)	85.2 (23)	88.9 (8)	76.7 (56)
<b>Ethnicity</b>				
Black	16.2 (6)	3.7 (1)	11.1 (1)	11.0 (8)
Caucasian	81.1 (30)	92.6 (25)	88.9 (8)	86.3 (63)
Missing	2.7 (1)	3.7 (1)	0.0 (0)	2.7 (2)
<b>Primary Diagnosis</b>				
Orthopedic	78.4 (29)	63.0 (17)	66.7 (6)	71.2 (52)
Medical	10.8 (4)	14.8 (4)	22.2 (2)	13.7 (10)
Cardio-Resp	8.1 (3)	18.5 (5)	11.1 (1)	12.4 (9)
Other	2.7 (1)	3.7 (1)	0.0 (0)	2.7 (2)
<b>Comorbidities*</b>				
No	56.8 (21)	40.7 (11)	55.6 (5)	50.7 (37)
Yes	43.2 (16)	59.3 (16)	44.4 (4)	49.3 (36)
<b>Education Level</b>				
< High school	10.8 (4)	22.2 (6)	22.2 (2)	16.4 (12)
High school	16.2 (6)	14.8 (4)	22.2 (2)	16.4 (12)
College	13.5 (5)	11.1 (3)	0.0 (0)	11.0 (8)
Graduate School	2.7 (1)	0.0 (0)	0.0 (0)	1.4 (1)
Missing	56.8 (21)	51.9 (14)	55.6 (5)	54.8 (40)
<b>Insurance</b>				
Medicare	91.9 (34)	92.6 (25)	88.9 (8)	91.8 (67)
Private	2.7 (1)	0.0 (0)	0.0 (0)	1.4 (1)
Managed Care	0.0 (0)	3.7 (1)	0.0 (0)	1.4 (1)
Other	2.7 (1)	0.0 (0)	0.0 (0)	1.4 (1)
Missing	2.7 (1)	3.7 (1)	11.1 (1)	4.0 (3)

\*Comorbidities include significant chronic disease or injury (e.g., CVA, DM, SCI, MI, CA, COPD).

### *Evaluation Audiotapes*

We asked each therapist to submit five audiotapes for data analysis; however, there were differences in the number of tapes each therapist actually submitted ( $\bar{x}=3.3$ ). Three therapists submitted one audiotape (13.6%); five submitted two audiotapes (22.7%); two submitted three audiotapes (9.1%); six submitted four audiotapes (27.3%); and six submitted five audiotapes (27.3%). To avoid biasing the data due to unequal submission totals, data were averaged over subjects for each therapist and then analyzed. We received the largest number of audiotapes from therapists working in rehabilitation centers (24.6%;  $n=18$ ) and the least number from acute care settings (9.6%;  $n=7$ ). (Table 3)

**Table 3.**  
Number of evaluation audiotapes submitted by type of practice setting

Practice Setting	Audiotapes Submitted			
	All Groups n=73 % (#)	Low Usage n=35 % (#)	Mid Usage n=25 % (#)	High Usage n=13 % (#)
Acute Care	9.6 (7)	17.1 (6)	4.0 (1)	0.0 (0)
Out-Patient	16.4 (12)	0.0 (0)	32.0 (8)	30.8 (4)
Rehabilitation	24.6 (18)	40.1 (14)	16.0 (4)	0.0 (0)
Skilled Nursing	15.1 (11)	25.7 (9)	8.0 (2)	0.0 (0)
Home Health	19.2 (14)	0.0 (0)	20.0 (5)	69.2 (9)
Clinic/Private	15.1 (11)	17.1 (6)	20.0 (5)	0.0 (0)



Therapists with high usage submitted a total of 13 audiotapes (17.8%;  $\bar{x}$ =4.3; SD:0.5). Mid usage therapists submitted 25 (34.2%;  $\bar{x}$ = 3.1; SD:1.5), and therapists with low usage submitted 35 audiotapes (47.9%;  $\bar{x}$ =3.1; SD:1.5). ANOVA showed no significant difference in the mean number of audiotapes submitted among the usage groups ( $p=0.09$ ).

The mean length of all evaluations was 30.4 minutes (SD: 13.0, range: 15-90 minutes). There was no significant difference in the mean evaluation length time between novice and experienced therapists ( $\bar{x}$ = 29.2 minutes,  $\bar{x}$ = 31.6 minutes, respectively;  $p=0.10$ ). Therapists with high usage had a mean evaluation length of 36.0 minutes (5.6 minutes greater than the overall mean), while therapists with low usage had a mean evaluation length of 29.2 minutes (1.2 minutes less than the overall mean). This difference in mean evaluation length between high/low usage therapists was not significant ( $p=0.18$ ). (Appendix Table D)

#### *Extent of Patient Participation*

We were able to quantify therapists' attempts to involve their patients in goal-setting by their use of PMAI items. Each therapist did attempt to involve his/her patients to some extent during the evaluation. The minimum number of PMAI items used by therapists during an evaluation encounter was one. The maximum number of PMAI items used during an evaluation encounter was 19. The mean number of PMAI items used during the typical evaluation encounter was 10 of the 21 items (novice  $\bar{x}$ =10.1; experienced  $\bar{x}$ =10.6; high  $\bar{x}$ =15.6; low  $\bar{x}$ =4.0). Each of the 21 PMAI items was used at least once by a therapist.

### *Use of Patient Preparation Methods*

The most frequently used group of PMAI items was *patient preparation* methods, which received greater use than *concerns clarification* or *goal-setting process* items ( $\bar{x}$ =47.71%;  $\bar{x}$ =33.04%;  $\bar{x}$ =31.30%, respectively). (Table 4)

When usage of PMAI items was analyzed for the total group of therapists, those items used frequently ( $\geq 60\%$ ) by therapists included: (1) discussion of assessment findings with patient/family (69.2%), and discussing the findings in a manner that was appropriate for the patient's level of understanding (64%), (2) presentation of assessment purposes and procedures to patient/family (60.4%), and (3) elicitation of patient's concerns (59.5%).

PMAI items used infrequently ( $\leq 20\%$ ) by therapists included: (1) confirmation of patient's major concerns (19.4%), (2) collaboration with patient to establish goals (18.9%), (3) introduction of physical therapy services (12.7%), (4) introduction of concerns exploration (10.4%), (5) discussion of how patient may participate in goal-setting/treatment-planning (6.8%), (6) explanation of cooperative role of patient in identifying goals (5.9%), and (7) asking patient to establish priority of concerns (3.2%). Table 4 shows frequency of attempts for each PMAI item, along with the number of novice, experienced, total and high usage therapists who attempted each item. (Appendix Tables A-C contain results related to PMAI usage.)

**Table 4.** Usage frequency of participation methods

Participation Method Assessment Instrument Item	Attempted (%) Mean (SD)*	No. of Therapists Attempting Item			
		Nov n=10	Exp n=12	Total n=22	High n=3
<i>Patient Preparation</i>					
1 Introduces physical therapy services to patient	12.7 (22.4)	4	5	9	3
2 Verbally prepares patient for initial and ongoing treatment	57.6 (38.9)	10	8	18	3
3 Presents assessment purposes/procedures to patient, family and/or significant other(s)	60.4 (40.9)	9	8	17	3
4 Presents assessment purposes/procedures in manner consistent w/patient, family, level of understanding	58.3 (40.3)	9	8	17	3
5 Discusses assessment findings with patient, family and/or significant other	69.2 (35.4)	9	10	19	3
6 Discusses assessment findings in a manner consistent with patient, family, etc., level of understanding	64.0 (40.5)	8	9	17	3
7 Discusses how the individual is to participate in goal-setting and tx planning, unless contraindicated	6.8 (19.8)	0	3	3	2
8 Informs patient of the nature and potential outcomes of treatment	52.6 (43.6)	6	8	14	3
<i>Concerns Clarification</i>					
9 Introduces exploration of concerns	10.4 (18.6)	9	4	13	3
10 Elicits the patient's concerns	59.5 (40.7)	8	8	16	3
11 Attempts to gain more specific info re: verbalized concerns by using open-ended questions	46.8 (44.7)	7	7	14	3
12 Attempts to gain more specific info re: verbalized concerns by using clarification questions/statements	59.0 (41.5)	7	10	17	3
13 Asks patient to establish priority of concerns	3.2 (11.3)	1	1	2	1
14 Confirms major concerns	19.4 (25.6)	3	6	9	3
<i>Goal-setting Processes</i>					
15 Introduces exploration of goals	24.1 (33.9)	3	6	9	3
16 Explains cooperative role of patient in goal identification	5.9 (15.3)	0	3	3	2
17 Collaborates with patient, family and/or significant other (s) to establish goals	18.9 (34.7)	2	4	6	3
18 Incorporates patient's stated concerns in or during exploration of goals	34.9 (40.9)	5	6	11	3
19 Explores/explains additional goals not identified by patient, but relevant to his/her rehabilitation	36.0 (37.2)	6	7	13	3
20 States goals to patient, family, and/or significant other(s)	49.6 (40.9)	6	9	15	3
21 States goals in manner consistent with patient, family and/or significant other's level of understanding	49.6 (40.9)	6	9	15	3

\*Mean was calculated on number of attempts within therapists across patients, then on all therapists

### *Interactional Style Assessment Form*

When the therapists made goal statements to patients during the audiotaped evaluation encounter, the reviewers assigned a communication level based on the interaction. It would be expected that therapists communicate differently with different patients. Generally, we found this to be true. Most therapists used a combination of communication levels among their patients, and it is important to recognize this diversity of interaction.

Forty five percent of the time therapists did not make goal statements to the patient, family and/or others (45.2%, *No Statement of Goals*). When goal statements were discussed, the most consistently used communication level was *No Choice* (20.5%). *Free Choice* was used 16.4% of the time and *Multiple Choice* was used 13.7%. *Forced Choice* was used least often by therapists (4.3%). (Table 5)

### *Patient Opinion Survey*

Patient responses for all of the Patient Opinion Survey items ranged from 3 to 5 on a five-point Likert scale (1=Strongly disagree; 5=Strongly agree). (Table 6) Generally, the patients felt very comfortable with the evaluating therapist (Item 1) and believed that physical therapy would be helpful to them (Item 9). They stated that they knew what benefits they wanted to receive from physical therapy (Item 6) and that their expectations were communicated to the therapist during the evaluation (Item 7). Following the evaluation, patients reflected a high level of overall satisfaction (Item 10) with all groups of therapists, and there were no significant differences in the level of satisfaction with therapists in any of the groups.

**Table 5.**  
Interactional communication level used by therapists

Therapist	Level 1 Free Choice %	Level 2 Multiple Choice %	Level 3 Forced Choice %	Level 4 No Choice %	Level 5 No Statement %	Therapist	Level 1 Free Choice %	Level 2 Multiple Choice %	Level 3 Forced Choice %	Level 4 No Choice %	Level 5 No Statement %
T-1 (4)*		25.0		50.0	25.0	T-12 (1)					100.0
T-2 (1)					100.0	T-13 (4)	50.0	25.0		25.0	
T-3 (2)				100.0		T-14 (5)					100.0
T-4 (5)	60.0	20.0			20.0	T-15 (4)	50.0			25.0	25.0
T-5 (4)				75.0	25.0	T-16 (4)	25.0				75.0
T-6 (3)					100.0	T-17 (2)					100.0
T-7 (5)	40.0	40.0		20.0		T-18 (5)	20.0	60.0	20.0		
T-8 (2)				50.0	50.0	T-19 (5)					100.0
T-9 (1)					100.0	T-20 (4)	25.0	25.0	25.0		25.0
T-10 (2)				50.0	50.0	T-21 (5)				20.0	80.0
T-11 (2)			50.0	50.0		T-22 (3)		33.4		33.3	33.3
<b>Total (73)</b>	<b>16.4</b>	<b>13.7</b>	<b>4.2</b>	<b>20.5</b>	<b>45.2</b>						

\*Therapist ID number (number of audiotapes submitted)

**Table 6.**  
Patient response to opinion survey (n=73)

Patient Opinion Survey Item	Mean	Median
1 During this physical therapy evaluation I was comfortable with the therapist.	4.8	5.0
2 The physical therapist asked me to explain the problem which causes me to need therapy.	4.7	5.0
3 The physical therapist was knowledgeable about my medical condition/problem.	4.7	5.0
4 The physical therapist explained how therapy can help me with the problems I am having.	4.7	5.0
5 The physical therapist answered my questions in language that I understood.	4.8	5.0
6 I know what help I want to receive from having physical therapy.	4.6	5.0
7 I discussed what help I want to receive from having physical therapy with the therapist.	4.7	5.0
8 The therapist and I together set goals for me to achieve from having physical therapy.	4.6	5.0
9 I think that receiving physical therapy will be helpful to me.	4.8	5.0
10 Overall, rate your satisfaction with this physical therapy evaluation.	4.5	4.5

Scoring Scale (Items 1-9): 1-Strongly disagree; 2-Disagree; 3-Neutral; 4-Agree; 5-Strongly agree

Scoring Scale (Item 10): 1-Extremely dissatisfied; 2-Dissatisfied; 3-Average satisfaction; 4-Very satisfied; 5-Extremely satisfied

Overall minimum - maximum range: 3-5

In items related to evaluation activities, patients reported that their therapists asked them to explain the problem that precipitated the need for physical therapy (Item 2) and that the therapist was knowledgeable about their medical condition/problem (Item 3). Patients felt that their therapist explained how physical therapy can help them (Item 4). Answers to their questions were given in a way that was understandable to them (Item 5). In regard to collaborative goal-setting, patients responded that they and the therapist worked together to set the goals for their course of treatment (Item 8).

Table 7 ranks the correlation of patient opinion survey items to overall satisfaction with the evaluation. Because patients rated all items high on the scale, we recognize the difficulty in detecting correlations due to the lack of variability in the responses. Still, one PMAI item correlated significantly with patient satisfaction: that the therapist explained to the patient how physical therapy would help with the problem(s) they were having (Item 4;  $r=0.43$ ;  $p=0.05$ ). Collaborative goal-setting, although not statistically significant ( $r=0.40$ ;  $p=0.07$ ), ranked second in importance for overall patient satisfaction.

**Table 7.**  
Relationship of Patient Opinion Survey items to overall patient satisfaction

Patient Opinion Survey Item	Correlation Coefficient*
The physical therapist explained to me how physical therapy can help me.	.43**
The physical therapist and I together set goals for me to achieve from having therapy.	.40
The physical therapist was knowledgeable about my medical condition/problem.	.36
During this physical therapy evaluation I was comfortable with the physical therapist.	.32
The physical therapist answered my questions in language that I understood.	.29
I think that receiving physical therapy will be helpful to me.	.17
I discussed what help I want to receive from having physical therapy with the therapist.	.09
I know what help I want to receive from having physical therapy.	.04
The physical therapist asked me to explain the problem which causes me to need PT.	.03

\*Spearman's correlation coefficients

\*\*Significant at the  $p<0.05$  level

### *Therapist Opinion Survey*

One hundred percent of the therapists were positive about their ability to establish initial rapport with their patients (Item 1) and most find geriatric patients as easy to talk to as other age groups (Item 12). Additionally, the majority of the therapists felt they have adequate time to perform a thorough initial evaluation (Item 2).

Fifty percent of the therapists agreed that most patients have the ability to collaborate with them in the establishment of goals (Item 8). But even if the therapists believe the patient has the *ability* to be collaborative, their opinion is mixed as to whether patients are able to set realistic goals (Item 9).

Notwithstanding doubts about the patients' abilities, therapists asserted that collaborative goal-setting is important (Item 5). Furthermore, therapists believe that patients will be more successful in reaching treatment goals if they help to set them (Item 7). Within that context, 95.5 percent of the therapists stated that they attempt to involve their patients in goal-setting processes (Item 6). This high percentage of agreement is in contrast to actual PMAI data for Item 17 (*collaborates with patient/family to establish goals*), where only six of the 22 therapists collaborated with 19 of the 73 patients.

Therapists' opinions were mixed as to whether they learned participative goal-setting methods while in professional school (Item 11). Novice therapists reported greater exposure to the use of collaborative methods while in school (80% agree) than did experienced therapists (25% agree). This difference was not found to be significant ( $p=0.08$ ); however, it was the only item that demonstrated some level of difference between the opinions of



novice and experienced therapists. One of the therapists with high usage patterns reported learning participation methods during her formal education, one was neutral and one stated that she did not learn these methods while in professional school.

Therapists had mixed opinions as to whether patients know what outcomes they expect to achieve from having physical therapy prior to the evaluation (Item 4). Most of the therapists reported asking the patient to explain the problem(s) they were having which caused them to need physical therapy (Item 3). (Table 8)

#### *Correlation of Study Instruments*

When we performed correlation analysis of data from the PMAI, the Therapist Opinion Survey, and the Patient Opinion Survey, we found that there was agreement among the three instruments in the area of concerns elicitation. The therapists stated that they try to elicit the patient's concerns during the evaluation, which correlated with the frequency of attempts by therapists at PMAI Item 10 (*elicits the patient's concerns*) ( $r=0.54, p=0.005$ ). In agreement with this, patients perceived that therapists elicited their concerns ( $r=0.58, p=0.001$ ) and that they were able to discuss their concerns with therapists ( $r=0.52, p=0.005$ ).

The other two items that correlated were related to rapport. Therapists reported that they easily establish rapport with patients. Their patients agreed and expressed a high level of comfort with their therapists at the initial evaluation ( $r=0.51, p=0.005$ ). There were no PMAI items designed to correlate with these opinion survey items.

**Table 8.** Therapist response to opinion survey (n=22)

Opinion Survey Item	Strongly Disagree %	Disagree %	Neutral %	Agree %	Strongly Agree %	Mean (Median)
1 I find it easy to establish rapport with a patient.				31.8	68.2	4.7 (5.0)
2 I usually have adequate time to do a thorough evaluation.		9.1	27.3	40.9	22.7	3.8 (4.0)
3 During the evaluation, I ask the patient to explain the problem(s) they are having which cause(s) them to need PT.		9.1	22.7	31.8	36.4	3.9 (4.0)
4 Most patients know what outcomes they expect from having PT prior to coming for the evaluation.	4.5	45.5	22.7	18.2	9.1	2.8 (2.5)
5 It is important for patients to help to set goals for their PT tx.			4.5	36.4	59.1	4.5 (5.0)
6 I seek to involve patients in setting goals for their PT tx.			4.5	77.3	18.2	4.1 (4.0)
7 Patients will reach their goals more successfully if they help to set them.			9.1	31.8	59.1	4.5 (5.0)
8 Most patients are not able to cooperate with the PT in establishing goals for their treatment.*	18.2	31.8	27.3	13.6	4.5	2.5 (2.0)
9 Pts may be knowledgeable re: their medical condition, but they are not able to set realistic goals for their PT treatment.		40.9	27.3	22.7	9.1	3.0 (3.0)
10 It is important for a PT to develop his/her diagnostic skills.				27.3	72.7	4.7 (5.0)
11 I learned how to involve patients in goal-setting in school.	4.5	22.7	22.7	36.4	13.7	3.3 (3.5)
12 Geriatric patients (65+ years) are more difficult to talk to than patients from younger age groups.	40.9	22.7	13.7	18.2	4.5	2.2 (2.0)

\*Data missing from one therapist

## Discussion

The purpose of this study was to examine (1) whether physical therapists seek patient participation in goal-setting and, if so, with what methods; (2) the relationship, if any, between patient participation and satisfaction; and (3) therapists' attitudes toward patient participation in goal-setting. The study design enabled us to examine the evaluation encounter and compare it with the opinions of therapists and patients. By so doing, we had the opportunity to view similarities and differences that exist between practice and perception.

### *Participation and the Evaluation Encounter*

The physical therapists in our study did seek to achieve patient participation in goal-setting, much like the occupational therapists in Northen's study.<sup>12</sup> Yet with the average therapist using approximately 10 of the 21 PMAI items during evaluations, it appears that opportunities to gain patient participation were not maximized.

Therapists indicated that they believed patient participation to be an important part of quality care. Further, they associated patient participation to successful treatment outcomes. These beliefs appeared to be firm; however, they were not applied consistently by the therapists during the evaluation encounter, as demonstrated by the PMAI results.

The relatively large use of *patient preparation* PMAI items showed that therapists do provide education to patients that can form the basis for participation, as these items are largely educative in nature. However, the less frequent use of *concerns clarification* and *goal-setting processes* items may reveal that therapists have a lack of comfort engaging in patient education that demands greater interaction with the patient than does *patient*

*preparation* education. Chase<sup>27</sup> found that 80-100 percent of physical therapists reported they did some teaching with their patients. But May<sup>28</sup> discovered that many therapists felt poorly prepared to assume the role of patient educator. Our results appear to indicate that as the educational activities become more complex, therapists may avoid them because they feel unprepared.

Nevertheless, a level of comfort with exploring and then addressing patients' verbalized concerns is necessary to achieve collaboration in goal-setting. When Chase<sup>27</sup> asked therapists to rate the relative importance of patient education activities, 87 percent indicated that being able to address what patients state as their most pressing need was *most important/very important*.

As our study focused on goal-setting processes, it was of interest to find that approximately 45 percent of the time therapists did not state goals to their patients during the evaluation. There are two views that may help to put this in perspective. One is that the process of goal-setting is developmental and, as such, can proceed along a continuum based on factors which indicate readiness and ability to collaborate.<sup>29</sup> For any number of reasons, then, participative goal-setting may not occur at the initial evaluation.

The other view is that during the evaluation an unstated agreement about goals may occur between the patient and therapist. This agreement is based on the obvious deficits of the patient that present during the course of the evaluation. If this is the case, neither the therapist nor patient may deem a formal statement of goals as necessary—they both just know what needs to be done.<sup>20</sup> This type of unspoken understanding did seem to occur as we analyzed certain evaluations. Nonetheless, in our opinion some type of goal statement is

necessary to clarify intentions and create a basis for mutual understanding. Further, when goal statements are the result of collaboration, cooperation between the patient and therapist can occur.

We expected to find that therapist characteristics (e.g., years of clinical practice, gender, ethnicity, educational level, or practice setting) would influence the use of participation methods. On the contrary, usage of participation methods or lack of usage was not related to any measured characteristic.

Likewise, we anticipated that patient characteristics (e.g., age, gender, ethnicity, diagnostic grouping, educational level, or insurer) would impact the therapists' attempts to achieve participation or the patients' ability to participate. We did not find any characteristic that influenced levels of participation. These aspects of participation deserve further study.

Again, we also speculated that time constraints would impact attempts at patient participation. We were surprised to find that therapists who used a high number of participation methods did not have appreciably longer evaluation times than therapists who used less methods. Arguably, the additional five minutes of evaluation time utilized by high usage therapists could make a significant increase in time over the course of a treatment day. Still, in listening to the audiotapes, we recognized that if participation is woven into the fabric of the evaluation encounter from the start, collaborative goal-setting is a confluent part of the evaluation and not a separate, time-consuming activity.

### *Patient Satisfaction*

Patients expressed a consistently high level of satisfaction with the evaluation encounter, independent of their level of participation in treatment planning or goal-setting.

This was significant because we anticipated, based on the literature, that there would be a positive correlation between active patient participation and satisfaction with the evaluation encounter.

We have noted earlier that patients rated therapists high in all areas of the survey. In several areas their positive responses were incongruent with the audiotape data. Of particular interest to us was that the majority of patients indicated that they collaborated with the therapist to set treatment goals. Additionally, the majority of therapists stated that they seek to involve patients in goal-setting. In contrast, audiotape analysis showed that only six therapists engaged in collaborative goal-setting with 19 patients. What might explain this? Perhaps patients, and therapists for that matter, did not have the necessary familiarity with participation concepts to answer participation-related survey questions. Or maybe our patient survey instrument could have been more focused to detect the nuances of participation issues.

Although the overwhelmingly positive patient response is gratifying, it does raise questions: Did the patients give socially desirable responses? Do elders generally hold health-care professionals in high regard, thus biasing their answers toward favorable responses? Did the patients believe that their answers were not confidential and might affect their treatment? Future research could address these questions that may be relevant to the geriatric population.

We embedded five questions in the survey that specifically served to reflect the patient's ability to collaborate with the therapist in goal-setting (Items 1, 4, 6, 7, 8). Even though this is a self-report measure and subject to the problems heretofore mentioned, patient

responses to these key collaboration items indicated that patients believe they have the ability to participate in goal-setting.

### *Participation Strategies*

This study gave insight into the variety of methods that physical therapists used to achieve patient participation. During data analysis, we observed approaches that were illustrative of strategies for participation and collaboration.

Therapists who consistently encouraged patient participation demonstrated an accommodative use of participation methods. They fit their methods to the needs of the patient and his/her abilities, expecting that each patient had some level of ability to participate in treatment planning. Working on this premise, they used their professional expertise to facilitate the patient's involvement, moving him/her from one level of participation to the next throughout the course of the evaluation. They effectively used *patient preparation* items, but then proceeded to achieve participation in the more complex and interactive areas of *concerns clarification* and *goal-setting processes*.

Therapists with high usage of PMAI items actively explored the patient's opinions, concerns and goals. They could be heard *listening* to the patient. This listening was not simply waiting as the patient described (often in minute detail) medical experiences, problems or medication lists. But they seemed to focus on statements made by the patient that would open the way for an interactive relationship. (E.g., Therapist [T]: *What are some of the goals for therapy that you have? You know, things you want to get back to doing?* Patient [P]: *I want to walk without a walker.* T: *Okay ...* [discussion about walking as a functional goal] *How about your hobbies? Are there any that you can't do now and want*

to get back to? Earlier you mentioned bowling . . .). In so doing, therapists used a variety of ways to communicate that they expected the patient to be part of the planning process.

Therapists with high usage incorporated the concept of education for participation throughout the evaluation. (E.g., T: *It is important that you tell me what type of things you need to be able to do to care for yourself at home. Then we can come up with exercises and activities to work on that will help us reach our goals. We may not accomplish it all at once, but each time we can make progress toward it.*) They often directed their efforts at supplying the patient with information so that they would be aware of the challenges and issues relative to their rehabilitation. (E.g., [while introducing physical therapy services to a patient who had recently been discharged from a rehabilitation facility] T: *I know that you had physical therapy for your knee in the hospital, but now that you are ready for out-patient therapy, we are going to approach your rehabilitation in a slightly different way. We are going to . . .* [described the differences in the next level of therapy services].)

The value of discussing assessment purposes, procedures and findings with patients was clear as we analyzed the evaluation encounters. Patients responded positively to information from the therapist about what the evaluation would involve, what the therapist was going to do and what they were expected to do. During evaluation procedures, therapists gave brief explanations of the procedures prior to asking the patient to perform them. It was rare for them to just begin a procedure with a patient without first giving some introduction to it or instruction regarding performance. Professional jargon may have been used, but the therapist explained meanings to the patient. (E.g., T: *This is a goniometer. With it I can measure how much your knee is able to bend and straighten. Measuring it gives us a*



*baseline so we can see how much better it gets during therapy. First, I want you to straighten your knee and hold it while I measure.)* Therapists often checked for patient comprehension, particularly when explaining procedures and results. (E.g., T: *Do you know what I mean? Stop me if you don't understand.*) They also engaged in frequent education regarding health-promoting habits and physical therapy routines, giving explanations and rationales for the activities they were recommending. In discussing the findings of evaluation procedures with the patient, therapists often explained how assessment findings were related to the patient's function.

As goals were being formed, collaborative therapists pulled together the information they had gathered throughout the evaluation. They often reminded patients of the concerns they had expressed earlier. Then the therapists segued the patient's verbalized concerns with their assessment findings to form the foundation for goal statements. Goals were stated in functional terms, rather than clinical ones. (E.g., T: *The goal is to get you strong enough to walk to your bathroom without having to sit down before you get there.* Rather than, T: *The goal is to ambulate 15 feet without stopping.*)

Finally, while listening to the therapists it was obvious that some level of patient participation can occur whatever the patient's age, educational level or prior experience with physical therapy. Also, gaining participation takes effort and skill on the part of the therapist. To assume a participative role takes willingness, readiness and effort on the part of the patient. Achieving these characteristics calls for education of both therapists and patients.

## **Conclusion**

We found that therapists do seek to involve their patients in goal-setting, but at levels that are short of the potential for participation that exists. This deserves attention because therapists and patients indicated that collaboration is an important aspect of quality care.

The subject of patient participation in treatment planning is multi-factorial. Our focus was on the initial evaluation encounter, which is only one area where patient participation can occur. But if the evaluation does not include collaboration, does that mean that it never happens? Certainly not. In fact, meaningful participation is most likely accomplished over time, from treatment to treatment, as the patient-therapist relationship develops. We collected data from the evaluation because it is the logistically correct place for patient participation to start.

Many circumstances in clinical practice may impact therapists who encourage patients to be active participants in their rehabilitation, some of which were explored in the literature review. However, in our view the most urgent are: (1) the need for patient and therapist education regarding the value of participation, and (2) the enhancement of patient readiness to assume greater responsibility in their care. In addition, the development of effective models for use in achieving patient participation is necessary. Models for patient participation have not traditionally been used in physical therapy practice. Ottenbacher and Cusick<sup>30</sup> note that most rehabilitation evaluations are subjective and anecdotal, resulting in goal-setting that is experimental in nature. With the realities of current physical therapy practice, we cannot afford ineffective goal-setting.

We have not attempted to suggest rigid methods for achieving patient participation based on our findings. We appreciate the individual nature of the evaluation encounter and the individuality of physical therapists. Still, actively including the patient in goal-setting holds potential for improving patient management.

Considering the positive impact that increased levels of patient participation can have on treatment outcomes and patient satisfaction, the subject deserves research attention within the profession. Future research may include identification/development of effective models to increase participation in goal-setting, examination of attributes that enable therapists to use collaborative approaches, outcome studies that track participation over the course of treatment, assessment of patient readiness for participation, and education in participation methods in both professional and continuing education settings.

**APPENDIX A**  
**EXPANDED LITERATURE REVIEW**

## Literature Review

The benefits of patient participation in treatment planning and goal-setting were discussed earlier in this report. In this Appendix an expanded review of the literature is presented.

### *Patient Participation Studies*

Neistadt<sup>5</sup> studied occupational therapy patients in long-term care settings who realized significant gains in the ability to perform activities of daily living and community living skills when they collaborated in goal-setting. These results are noteworthy because the subjects had been previously discharged from occupational therapy services when the treating therapist did not believe any further progress could be made. After Neistadt's course of treatment, data were collected regarding the level of patient participation in goal-setting. The patients reported that in their previous course of therapy the goals had been unilaterally set by the therapist; whereas, during the study they had participated in goal-setting. Neistadt speculates that participation in treatment planning made a difference that resulted in positive outcomes.

In a comparison of nursing interventions and their impact on nursing home residents, Blair<sup>6</sup> examined three methodologies used to increase self-care: (1) combination of mutual (resident-nurse) goal-setting and operant behavioral management, (2) mutual goal-setting alone, and (3) usual nursing care. Residents significantly improved in independent self-care as a result of the combination of mutual goal-setting and operant behavioral management. Residents who participated in goal-setting alone represented the next highest level of

independence. Usual nursing care, which typically does not involve patient participation, resulted in a continuation of dependency behaviors.

In a study designed to determine patient perceptions, Nelson<sup>29</sup> interviewed adult occupational therapy patients. Variables of interest were (1) their perceptions about how they were involved in the treatment planning process, (2) whether occupational therapy was a valuable intervention, and (3) their description of the interpersonal relationship with their therapist. Nelson reported that most patients believed they were involved in goal-setting, treatment planning and outcome evaluation, but were not clear about how these activities took place. The patients indicated that occupational therapy was a valuable service, and approximately 50 percent stated that the relationship with their therapist was satisfactory. Nelson concludes that even though patients stated they had an active role in goal-setting, it was generally difficult for them to identify the nature and extent of their involvement.

#### *Participation Attitudes and Skills*

Several authors have identified assumptions that form a basis for patient participation models. These assumptions refer to therapist attitudes and skills that promote collaborative treatment planning.

King suggests that a collaborative process between the nurse and patient will include: "(1) mutual goal-setting; (2) exploration of means to achieve the goal with agreement by both nurse and client; and (3) evidence of behavior that moves toward goal attainment."<sup>15</sup>

Cahill, also within the nursing context, identifies five necessary attributes for successful nurse-patient partnering: "(1) a relationship must exist between provider and patient; (2) there must be a narrowing of the appropriate information, knowledge and/or

competence gap between the nurse and patient using suitable modalities in different contexts (i.e. provision of information to the patient in language that is understandable to him/her, including information regarding diagnosis, treatment expectations, treatment alternatives and expected outcomes); (3) there must be a surrendering of a degree of power or control by the nurse; (4) there must be engagement in selective intellectual and/or physical activities during some of the phases of the health-care process; and (5) there must be a positive benefit associated with the intellectual and/or physical activity."<sup>31</sup>

Northen<sup>12</sup> cites several factors that are important to monitor when active participation is desired. These are: (1) viewing the patient as an equal partner; (2) use of effective communication methods, such as active listening, clarification of terms and issue exploration; (3) patient identification of his/her problems and development of goals so that a sense of responsibility is developed by the patient; and (4) providing orientation to the patient regarding diagnosis, treatment protocols and expected outcomes.

### *Participation Models*

Models for patient participation have not traditionally been used in physical therapy practice. Ottenbacher and Cusick<sup>30</sup> note that most rehabilitation evaluations are subjective and anecdotal, resulting in goal-setting that is experimental in nature. In an effort to make participative goal-setting systematic, two models have been advanced: goal attainment scaling and Payton's patient participation in program planning.

Goal Attainment Scaling (GAS) is a practice-based, practitioner-oriented tool that was developed for use in mental health facilities.<sup>32</sup> Because the main function of GAS is to measure outcomes, it has been studied for use in rehabilitation settings.<sup>33</sup> In this model the

therapist and patient collaboratively set treatment goals and then scale them. The format allows patients to express what outcomes they want from therapy. The therapist is able to state goals that he/she considers reasonable and achievable. When the course of treatment is over, therapist and patient review the goals and grade them according to their perspective of goal attainment.

GAS research in physical therapy has not been extensive. Notwithstanding, Reid and Chesson<sup>23</sup> commend its value in identifying goals and providing a mutual basis for collaboration. They conclude that utilization of GAS would provide a systematic way for therapists and patients to evaluate physical therapy outcomes.

Payton, Nelson and Ozer<sup>4</sup> have developed a patient participation program that outlines an active role for the patient, facilitated by the therapist. Emphasis is placed on patient education for participation, which begins as early as the patient is ready to participate in planning. The first stage of participation is in the planning process, where goals and objectives are clarified and refined. Next the patient has an evaluative role in which time frames for goal attainment are established and outcomes assessed. This role is ongoing throughout the course of treatment as revisions to the initial plan become necessary. In the last phase of participation, the patient has a role in designing how the treatment will be implemented. While this model demands therapist training for effective use, it is a comprehensive approach to the philosophy of participation.



**APPENDIX B**

**STUDY INSTRUMENTS AND FORMS**

Patient Subject # : \_\_\_\_\_  
 Therapist Subject # : \_\_\_\_\_

Date of Evaluation: \_\_\_\_\_  
 Facility: \_\_\_\_\_

Length of Evaluation: \_\_\_\_\_

### Participation Method Assessment Instrument (PMAI)

1.	Introduces physical therapy services to patient	Attempted	Not Attempted
2.	Verbally prepares patient for initial and ongoing treatment	Attempted	Not Attempted
3.	Presents assessment purposes and procedures to patient, family, and significant other(s)	Attempted	Not Attempted
4.	Presents assessment purposes in a manner consistent with the patient, family and/or significant other's level of understanding	Attempted	Not Attempted
5.	Discusses assessment findings with patient, family or significant other(s)	Attempted	Not Attempted
6.	Discusses assessment findings in a manner consistent with the patient, family and/or significant other's level of understanding	Attempted	Not Attempted
7.	Discusses how the individual is to participate in goal-setting and treatment planning, unless contraindicated by circumstances unique to the individual	Attempted	Not Attempted
8.	Informs patient of the nature and potential outcomes of treatment	Attempted	Not Attempted
9.	Introduces exploration of concerns	Attempted	Not Attempted
10.	Elicits the patient's concerns	Attempted	Not Attempted
11.	Attempts to gain more specific information regarding verbalized concerns by using open-ended questions	Attempted	Not Attempted
12.	Attempts to gain more specific information regarding verbalized concerns by using clarification questions/statements	Attempted	Not Attempted
13.	Asks patient to establish priority of concerns	Attempted	Not Attempted
14.	Confirms major concerns	Attempted	Not Attempted
15.	Introduces exploration of goals	Attempted	Not Attempted
16.	Explains cooperative role of patient in goal identification	Attempted	Not Attempted
17.	Collaborates with patient to establish goals	Attempted	Not Attempted
18.	Incorporates patient's stated concerns in or during exploration of goals	Attempted	Not Attempted
19.	Explores/explains additional goals not identified by the patient, but relevant to his/her rehabilitation	Attempted	Not Attempted
20.	States goals to patient, family and/or significant other(s)	Attempted	Not Attempted
21.	States goals in manner consistent with patient, family and/or significant other's level of understanding	Attempted	Not Attempted

**INTERACTIONAL STYLE ASSESSMENT FORM (ISAF)**

Patient Subject # \_\_\_\_\_

Date of Eval \_\_\_\_\_

Therapist Subject # \_\_\_\_\_

Facility \_\_\_\_\_

Level 1: Free Choice (asks open-ended questions regarding goals)

Frequency:

Total:

Level 2: Multiple Choice (asks questions and offers suggestions regarding goals)

Frequency:

Total:

Level 3: Forced Choice (asks questions and offers answers regarding goals)

Frequency:

Total:

Level 4: No Choice (prescribes, does not ask, tells what to do regarding goals)

Frequency:

Total:

Level 5: No Statement of Goals (therapist does not articulate goals during the evaluation)

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Comments:

## Therapist Opinion Survey

Subject Number: \_\_\_\_\_

Total Submitted Evals: \_\_\_\_\_

Facility: \_\_\_\_\_

Tracking Numbers: \_\_\_\_\_

*Please circle the number which corresponds most closely to your level of agreement.*

	Strongly Disagree		Neutral		Strongly Agree
1. I find it easy to establish initial rapport with a patient.	1	2	3	4	5
2. I usually have adequate time to do a thorough evaluation with a new patient.	1	2	3	4	5
3. During the evaluation, I ask the patient to explain the problem(s) they are having which cause(s) them to need PT.	1	2	3	4	5
4. Most patients know what outcomes they expect from having PT prior to coming for the evaluation.	1	2	3	4	5
5. It is important for patients to help set goals for their PT treatment.	1	2	3	4	5
6. I seek to involve patients in setting goals for their PT treatment.	1	2	3	4	5
7. Patients will reach their goals more successfully if they help to set them.	1	2	3	4	5
8. Most patients are not able to cooperate with the PT in establishing the goals for their treatment.	1	2	3	4	5
9. Patients may be knowledgeable about their medical condition, but they are not able to set realistic goals for their PT treatment.	1	2	3	4	5
10. It is important for a PT to develop his/her diagnostic skills.	1	2	3	4	5
11. In PT school I learned how to involve patients in goal-setting.	1	2	3	4	5
12. Geriatric patients (65+ years) are more difficult to talk to than patients from younger age groups.	1	2	3	4	5

*Thank you.*

## Patient Opinion Survey

*This survey relates to the physical therapy evaluation that you just received. Your answers will be confidential and will not affect your physical therapy treatment. Please circle the number that best describes the way you feel.*

	Strongly Disagree		Neutral		Strongly Agree
1. During this physical therapy evaluation I was comfortable with the physical therapist.	1	2	3	4	5
2. The physical therapist asked me to explain the problem which causes me to need physical therapy.	1	2	3	4	5
3. The physical therapist was knowledgeable about my medical condition/problem.	1	2	3	4	5
4. The physical therapist explained to me how physical therapy can help me with the problem(s) I am having.	1	2	3	4	5
5. The physical therapist answered my questions in language that I understood.	1	2	3	4	5
6. I know what help I want to receive from having physical therapy.	1	2	3	4	5
7. I discussed what help I want to receive from having physical therapy with the physical therapist.	1	2	3	4	5
8. The physical therapist and I together set goals for me to achieve from having physical therapy.	1	2	3	4	5
9. I think that receiving physical therapy will be helpful to me.	1	2	3	4	5
10. Overall, rate your satisfaction with this physical therapy evaluation.					
1	2	3	4	5	
Extremely Dissatisfied	Dissatisfied	Average Satisfaction	Very Satisfied	Extremely Satisfied	

*Now place the survey in the envelope you received, SEAL IT and give it to the physical therapist.  
Thank you for participating in this study.*

## Therapist Demographic Information

*Please provide the following demographic information. Thank you.*

Name \_\_\_\_\_ Facility \_\_\_\_\_

Subject Number \_\_\_\_\_ Tape Numbers \_\_\_\_\_

1.      Male                              Female
  
2.     Racial Background:  
  
        Asian  
        Black  
        Caucasian  
        Hispanic  
        Other
  
3.     PT Degree:    Certification    BS    MS    MPT    DPT
  
4.     Other Degrees/Professions: \_\_\_\_\_
  
5.     Year of graduation from PT school: \_\_\_\_\_
  
6.     Years of PT practice: \_\_\_\_\_
  
7.     Specialist Certification:    Yes    No  
          Which specialty: \_\_\_\_\_
  
8.     Name of PT school where graduated: \_\_\_\_\_

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*Do Not Write Below This Line*

**PATIENT INFORMATION**  
**(To be completed by physical therapist)**

Subject Number \_\_\_\_\_

Facility \_\_\_\_\_

**Demographic Information**

DOB \_\_\_\_\_ Age \_\_\_\_\_ Racial Background \_\_\_\_\_

 Male Female

Date of Evaluation \_\_\_\_\_

Primary Medical Diagnosis

Primary PT Diagnosis, if different

Significant Comorbidities

Highest Level of Completed Education (if known) \_\_\_\_\_

Type of Insurance \_\_\_\_\_

Is patient:     oriented     confused     withdrawn     c/o pain

**APPENDIX C**

**MISCELLANEOUS TABLES**



**Table A.** Usage frequency of participation methods by therapists with high/low usage

Participation Method Assessment Instrument Item	Attempted (%) Mean (SD)*	# Attempting PMAI Item		
		High n=3	Mid n=8	Low n=11
<i>Patient Preparation</i>				
1 Introduces physical therapy services to patient	12.7 (22.4)	3	4	2
2 Verbally prepares patient for initial and ongoing treatment	57.6 (38.9)	3	8	7
3 Presents assessment purposes/procedures to patient, family and/or significant other(s)	60.4 (40.9)	3	7	7
4 Presents assessment purposes/procedures in manner consistent w/patient, family, etc., level of understanding	58.3 (40.3)	3	7	7
5 Discusses assessment findings with patient, family and/or significant other	69.2 (35.4)	3	8	8
6 Discusses assessment findings in a manner consistent with patient, family, etc., level of understanding	64.0 (40.5)	3	8	6
7 Discusses how the individual is to participate in goal-setting and treatment planning, unless contraindicated	6.8 (19.8)	2	1	0
8 Informs patient of the nature and potential outcomes of treatment	52.6 (43.6)	3	7	4
<i>Concerns Clarification</i>				
9 Introduces exploration of concerns	10.4 (18.6)	3	2	1
10 Elicits the patient's concerns	59.5 (40.7)	3	8	5
11 Attempts to gain more specific information regarding verbalized concerns by using open-ended questions	46.8 (44.7)	3	7	4
12 Attempts to gain more specific info re: verbalized concerns by using clarification questions/statements	59.0 (41.5)	3	7	7
13 Asks patient to establish priority of concerns	3.2 (11.3)	1	1	0
14 Confirms major concerns	19.4 (25.6)	3	4	2
<i>Goal-setting Processes</i>				
15 Introduces exploration of goals	24.1 (33.9)	3	4	2
16 Explains cooperative role of patient in goal identification	5.9 (15.3)	2	1	0
17 Collaborates with patient, family and/or significant other (s) to establish goals	18.9 (34.7)	3	3	0
18 Incorporates patient's stated concerns in or during exploration of goals	34.9 (40.9)	3	6	2
19 Explores/explains additional goals not identified by patient, but relevant to his/her rehabilitation	36.0 (37.2)	3	7	3
20 States goals to patient, family and/or significant other(s)	49.6 (40.9)	3	6	6
21 States goals in manner consistent with patient, family, significant other's level of understanding	49.6 (40.9)	3	6	6

\*Mean calculated on number of attempts within therapists, then on total therapist group

**Table B.**Rank order of *Participation Methods Assessment Instrument* items

Rank	Participation Method Assessment Instrument Item	Mean *
1	Discusses assessment findings with patient, family and/or significant other(s)	69.2
2	Discusses assessment findings in a manner consistent with patient, family and/or significant other(s) level of understanding	64.0
3	Presents assessment purposes/procedures to patient, family and/or significant other(s)	60.4
4	Elicits the patient's concerns	59.5
5	Attempts to gain more specific information regarding verbalized concerns by using clarification questions/statements	59.0
6	Presents assessment purposes/procedures in manner consistent with patient, family, significant other(s) level of understanding	58.3
7	Verbally prepares patient for initial and ongoing treatment	57.6
8	Informs patient of the nature and potential outcomes of treatment	52.6
9	States goals to patient, family and/or significant other(s)	49.6
10	States goals in manner consistent with patient, family, significant other's level of understanding	49.6
11	Attempts to gain more specific information regarding verbalized concerns by using open-ended questions	46.8
12	Explores/explains additional goals not identified by patient, but relevant to his/her rehabilitation	36.0
13	Incorporates patient's stated concerns in or during exploration of goals	34.9
14	Introduces exploration of goals	24.1
15	Confirms major concerns	19.4
16	Collaborates with patient, family and/or significant other(s) to establish goals	18.9
17	Introduces physical therapy services to patient	12.7
18	Introduces exploration of concerns	10.4
19	Discusses how the individual is to participate in goal-setting and treatment planning, unless contraindicated	6.8
20	Explains cooperative role of patient in goal identification	5.9
21	Asks patient to establish priority of concerns	3.2

\*Mean calculated on number of attempts within therapists, then on total therapist group

**Table C.**

Percentage attempts at patient preparation participation methods by therapists (T)

Novice T	Participation Method Assessment Instrument Item-Patient Preparation							
	1	2	3	4	5	6	7	8
T-2 (1)* <sup>M</sup>	0	100	100	100	100	100	0	0
T-3 (2) <sup>M</sup>	100	100	100	100	100	100	0	100
T-7 (5) <sup>M</sup>	20	100	60	60	80	80	0	100
T-10 (2) <sup>L</sup>	0	100	0	0	0	0	0	0
T-14 (5) <sup>L</sup>	20	60	60	40	40	0	0	0
T-15 (4) <sup>H</sup>	25	100	100	100	100	100	0	100
T-17 (2) <sup>M</sup>	0	50	100	100	100	100	0	50
T-19 (5) <sup>L</sup>	0	20	100	100	60	60	0	0
T-20 (4) <sup>M</sup>	0	50	100	100	100	100	0	75
T-22 (3) <sup>L</sup>	0	33.3	33.3	33.3	33.3	33.3	0	66.7
Exp T	Participation Method Assessment Instrument Item-Patient Preparation							
	1	2	3	4	5	6	7	8
T-1 (4) <sup>L</sup>	25	25	25	25	50	0	0	75
T-4 (5) <sup>M</sup>	20	60	40	40	100	100	20	80
T-5 (4) <sup>M</sup>	25	100	75	75	100	100	0	100
T-6 (3) <sup>L</sup>	0	0	0	0	0	0	0	0
T-8 (2) <sup>L</sup>	0	0	100	100	100	100	0	50
T-9 (1) <sup>L</sup>	0	0	0	0	0	0	0	0
T-11 (2) <sup>M</sup>	0	100	0	0	50	50	0	100
T-12 (1) <sup>L</sup>	0	0	0	0	100	100	0	0
T-13 (4) <sup>H</sup>	25	100	75	75	75	75	50	100
T-16 (4) <sup>L</sup>	0	50	100	75	75	50	0	0
T-18 (5) <sup>H</sup>	20	80	100	100	80	80	80	100
T-21 (5) <sup>L</sup>	0	40	60	60	80	80	0	60

\*Therapist ID (number of audiotapes submitted)

<sup>H</sup> Therapist with high usage of PMAI items<sup>M</sup> Therapist with mid usage of PMAI items<sup>L</sup> Therapist with low usage of PMAI items

**Table C (continued).**

Percentage of attempts at concerns clarification participation methods by therapists (T)

Novice T	Participation Method Assessment Instrument Item-Concerns					
	9	10	11	12	13	14
T-2 (1) <sup>M</sup>	0	100	100	100	0	0
T-3 (2) <sup>M</sup>	0	100	100	100	0	0
T-7 (5) <sup>M</sup>	0	100	100	80	0	60
T-10 (2) <sup>L</sup>	0	0	0	0	0	0
T-14 (5) <sup>L</sup>	0	0	0	0	0	0
T-15 (4) <sup>H</sup>	50	100	100	100	50	50
T-17 (2) <sup>M</sup>	0	100	50	50	0	0
T-19 (5) <sup>L</sup>	0	40	20	40	0	0
T-20 (4) <sup>M</sup>	25	75	0	0	0	0
T-22 (3) <sup>L</sup>	0	66.7	100	33.3	0	66.7
Exp T	Participation Method Assessment Instrument Item-Concerns					
	9	10	11	12	13	14
T-1 (4) <sup>L</sup>	0	75	25	100	0	25
T-4 (5) <sup>M</sup>	0	80	100	80	20	60
T-5 (4) <sup>M</sup>	0	75	25	100	0	25
T-6 (3) <sup>L</sup>	33.3	66.7	100	100	0	0
T-8 (2) <sup>L</sup>	0	0	0	0	0	0
T-9 (1) <sup>L</sup>	0	100	0	100	0	0
T-11 (2) <sup>M</sup>	50	50	50	50	0	50
T-12 (1) <sup>L</sup>	0	0	0	0	0	0
T-13 (4) <sup>H</sup>	50	100	100	100	0	50
T-16 (4) <sup>L</sup>	0	0	0	25	0	0
T-18 (5) <sup>H</sup>	20	80	60	100	0	40
T-21 (5) <sup>L</sup>	0	0	0	40	0	0

**Table C (continued).**

Percentage of attempts at goal-setting participation methods by therapists (T)

Novice T	Participation Method Assessment Instrument-Goal Setting							Mean Eval Length $\bar{x}=29.20$ min
	15	16	17	18	19	20	21	
T-2 (1) <sup>M</sup>	0	0	0	0	0	0	0	20.0
T-3 (2) <sup>M</sup>	0	0	0	100	50	100	100	30.0
T-7 (5) <sup>M</sup>	20	0	60	80	80	100	100	31.0
T-10 (2) <sup>L</sup>	0	0	0	0	0	50	50	15.0
T-14 (5) <sup>L</sup>	0	0	0	0	0	0	0	26.0
T-15 (4) <sup>H</sup>	75	0	50	50	100	75	75	33.7
T-17 (2) <sup>M</sup>	0	0	0	50	50	0	0	30.0
T-19 (5) <sup>L</sup>	0	0	0	0	0	0	0	35.0
T-20 (4) <sup>M</sup>	50	0	0	0	25	75	75	36.2
T-22 (3) <sup>L</sup>	0	0	0	33.3	33.3	66.7	66.7	35.0
Exp T	Participation Method Assessment Instrument-Goal Setting							Mean Eval Length $\bar{x}=31.63$ min
	15	16	17	18	19	20	21	
T-1 (4) <sup>L</sup>	50	0	0	25	50	75	75	38.7
T-4 (5) <sup>M</sup>	80	40	80	80	80	80	80	42.0
T-5 (4) <sup>M</sup>	50	0	25	100	50	75	75	27.5
T-6 (3) <sup>L</sup>	0	0	0	0	0	0	0	20.0
T-8 (2) <sup>L</sup>	0	0	0	0	0	50	50	22.5
T-9 (1) <sup>L</sup>	0	0	0	0	0	0	0	20.0
T-11 (2) <sup>M</sup>	0	0	0	50	50	100	100	25.0
T-12 (1) <sup>L</sup>	0	0	0	0	0	0	0	20.0
T-13 (4) <sup>H</sup>	100	50	100	100	100	100	100	41.2
T-16 (4) <sup>L</sup>	25	0	0	0	25	25	25	27.5
T-18 (5) <sup>H</sup>	80	40	100	100	100	100	100	33.0
T-21 (5) <sup>L</sup>	0	0	0	0	0	20	20	62.0

**Table D.**  
Length of evaluations (in minutes)

<b>Therapist Group</b>	<b>Mean</b>	<b>SD</b>
All (n=22)	30.4	13.0
Novice (n=10)	29.2	7.0
Experienced (n=12)	31.6	12.6
Low Usage (n=11)	29.2	13.2
Mid Usage (n=8)	30.2	6.7
High Usage (n=3)	36.0	4.5

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