Physical Therapists' Knowledge and Perceptions of Patient Care Team Meeting Styles in the Inpatient Rehabilitation Setting

Neisha Dickman  
*Grand Valley State University*

Christine Ritsema  
*Grand Valley State University*

Brenda Warner  
*Grand Valley State University*

Follow this and additional works at: [http://scholarworks.gvsu.edu/theses](http://scholarworks.gvsu.edu/theses)

Part of the [Physical Therapy Commons](http://scholarworks.gvsu.edu/theses)

**Recommended Citation**
[http://scholarworks.gvsu.edu/theses/153](http://scholarworks.gvsu.edu/theses/153)

This Thesis is brought to you for free and open access by the Graduate Research and Creative Practice at ScholarWorks@GVSU. It has been accepted for inclusion in Masters' Theses by an authorized administrator of ScholarWorks@GVSU. For more information, please contact [scholarworks@gvsu.edu](mailto:scholarworks@gvsu.edu).
PHYSICAL THERAPISTS' KNOWLEDGE AND PERCEPTIONS OF PATIENT CARE TEAM MEETING STYLES IN THE INPATIENT REHABILITATION SETTING

by

NEISHA DICKMAN, CHRISTINE RITSEMA, and BRENDA WARNER

THESIS

Submitted to the Department of Physical Therapy of Grand Valley State University Allendale, Michigan in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE IN PHYSICAL THERAPY

1993
ABSTRACT

PHYSICAL THERAPISTS' KNOWLEDGE AND PERCEPTIONS OF PATIENT CARE TEAM MEETING STYLES IN THE INPATIENT REHABILITATION SETTING

by

NEISHA DICKMAN, CHRISTINE RITSEMA, and BRENDA WARNER

May 1993

Advisor: Dr. Jane Toot
Major: Physical Therapy
Degree: Master of Science

This study was designed to analyze what types of team meetings are being utilized for patient care in the inpatient rehabilitation setting. It was also designed to look at physical therapists' knowledge of the criteria that differentiates the interdisciplinary team approach from the multidisciplinary team approach. A perceptual questionnaire was sent to physical therapists involved in the inpatient rehabilitation setting in the State of Michigan. Only 1.7% of the physical therapists are involved in a true interdisciplinary team. The other respondents reported that their teams have some characteristics of both the interdisciplinary and multidisciplinary team approach. However, when asked what type of team they perceive is utilized at their rehabilitation site, 61.3% of the physical therapists stated that they are involved in an interdisciplinary team. These findings show that physical therapists are unaware of the characteristics that define the interdisciplinary and multidisciplinary team approaches. They also indicate that it is a combination of these two team approaches which is being utilized in the inpatient rehabilitation units in Michigan.
DEDICATION

This is dedicated to all of our friends, family and God who have supported us unconditionally throughout our entire college career.
ACKNOWLEDGEMENTS

Appreciation is expressed to Dr. Jane Toot, John Ritch, and Alex Nesterenko for assistance in preparation of this thesis; Karen Burchard, for statistical assistance; Cindy Zehner and Sandy DeWal, for secretarial assistance; and to all the physical therapists who participated in this study.
# TABLE OF CONTENTS

Abstract i  
Dedication ii  
Acknowledgements iii  
List of Appendices v  

<table>
<thead>
<tr>
<th>Chapter 1 - INTRODUCTION</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Problem statement/question</td>
<td>2</td>
</tr>
<tr>
<td>Aims/purpose</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter 2 - LITERATURE REVIEW</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>5</td>
</tr>
<tr>
<td>Definition of terms</td>
<td>6</td>
</tr>
<tr>
<td>Criteria for the interdisciplinary team</td>
<td>9</td>
</tr>
<tr>
<td>Reasons for interdisciplinary team existence</td>
<td>11</td>
</tr>
<tr>
<td>Advantages of the interdisciplinary team</td>
<td>12</td>
</tr>
<tr>
<td>Interdisciplinary team problems</td>
<td>13</td>
</tr>
<tr>
<td>Implications for study</td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter 3 - METHODOLOGY</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design</td>
<td>16</td>
</tr>
<tr>
<td>Procedures</td>
<td>16</td>
</tr>
<tr>
<td>Population and sample</td>
<td>17</td>
</tr>
<tr>
<td>Instruments</td>
<td>17</td>
</tr>
<tr>
<td>Data analysis</td>
<td>18</td>
</tr>
<tr>
<td>Hypothesis</td>
<td>18</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter 4 - RESULTS AND DATA ANALYSIS</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Techniques</td>
<td>20</td>
</tr>
<tr>
<td>Discussion of findings</td>
<td>22</td>
</tr>
<tr>
<td>Results of data</td>
<td>23</td>
</tr>
<tr>
<td>Team leader appointment</td>
<td>24</td>
</tr>
<tr>
<td>Team composition</td>
<td>25</td>
</tr>
<tr>
<td>Format of team meeting</td>
<td>25</td>
</tr>
<tr>
<td>Perception of team meeting approach</td>
<td>27</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter 5 - DISCUSSION AND IMPLICATIONS</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application to practice/education</td>
<td>28</td>
</tr>
<tr>
<td>Limitations</td>
<td>30</td>
</tr>
<tr>
<td>Suggestions for further research</td>
<td>32</td>
</tr>
<tr>
<td>Conclusion</td>
<td>33</td>
</tr>
<tr>
<td>Appendix One</td>
<td>36</td>
</tr>
<tr>
<td>Appendix Two</td>
<td>39</td>
</tr>
<tr>
<td>Autobiographical Statements</td>
<td>44</td>
</tr>
</tbody>
</table>
LIST OF APPENDICES

Appendix 1 - Sample of questionnaire
Appendix 2 - Graph 1 - During the meeting which format is utilized most frequently to determine goals?
- Graph 2 - Goals are set by: team or individual
- Graph 3 - Team leader in the inpatient setting
- Graph 4 - Team leader in the inpatient setting, not including the physician.
CHAPTER ONE
INTRODUCTION

In the rehabilitation setting, the appropriate use of team meetings is essential for optimal patient care. Teams are composed of professionals from various educational backgrounds and training. They are used to better coordinate patient care and to increase the efficiency and effectiveness of the rehabilitation process for each patient. As identified in the literature, there are two different types of approaches to team patient care in the inpatient rehabilitation setting: multidisciplinary and interdisciplinary.

In the multidisciplinary team approach, an aggregate of people from several different disciplines report information on patient progress. Goals are set by each individual professional prior to the team meeting. There may be an unequal representation of disciplines. This means that there may be more than one person representing a particular profession while there is only one person representing each of the other disciplines involved in the team meeting. Also, the patient and family are not always encouraged to participate in the team meetings.

An interdisciplinary team approach is a functional unit composed of varied specialized individuals as determined by the needs of the patient. It is characterized by a common purpose among its members, as well as, shared communication
and mutual trust. Goal setting is done during the meetings with input from all members. Meetings are scheduled regularly and there is an equal representation of each discipline. Involvement of the patient and family in the interdisciplinary team meeting is strongly encouraged.

Currently, of the two different types of patient care team approaches previously defined, research suggests that the interdisciplinary team approach is the most effective for optimal patient care. Many health care professionals are aware of the two types of team meetings, but are unaware of the characteristics that define each one. Due to this lack of information, clinicians believe that they are involved in interdisciplinary team approaches even when the format of the meetings or goal setting does not meet the criteria used to define an interdisciplinary team meeting. However, the authors' believe that multidisciplinary team meetings occur with the highest frequency throughout rehabilitation settings.

**Problem Statement/Question**

Many clinicians are unfamiliar with the differences between multidisciplinary and interdisciplinary teams and often use the terms interchangeably. This leads to a misconception about the particular type of team and approach that is utilized in patient care. It is suggested in the literature that patient care could be enhanced and be more efficient with the proper use of the interdisciplinary team in the rehabilitation setting. In order for
interdisciplinary teams to be implemented and work effectively, clinicians must be informed of the specific criteria to be met. This leads us to the following research question: Are physical therapists, as members of a patient care team in the rehabilitation setting, informed about the specific criteria that should be met by the team for it to be considered interdisciplinary?

Aims and Purpose

The purpose of this study is to determine whether physical therapists know the difference between interdisciplinary and multidisciplinary teams. This question will be answered through a survey of physical therapists working in an inpatient rehabilitation setting on the characteristics of patient care teams utilized in their facility. Physical therapists will be asked a variety of questions to determine what type of team they think exists at their facility. The therapists' responses will be compared to the two types of team approaches described (i.e. multidisciplinary and interdisciplinary). This will be done in order to determine if the type of team stated by the therapist coincides with the characteristics of the team as described in the literature. The results of the survey will also be analyzed in order to see which type of patient care team meeting is being utilized most frequently. Following analysis of the data, the results will be used to inform physical therapists about the team meeting style that is being utilized most frequently in the inpatient
rehabilitation settings throughout Michigan. Recommendations will be made regarding modifications that could optimize patient care.
CHAPTER TWO
LITERATURE REVIEW

Introduction

Traditionally, care of the patient in a rehabilitation unit has utilized a team approach involving various health care professionals i.e. physicians, physical therapists, occupational therapists, social workers, psychologists, nurses, speech pathologists, dietitians and others. The key hypothesis being that the group, functioning together, is greater than the sum of its individualized parts.\(^1\) It is this holistic approach that attempts to optimize assessment and management of the patient by the various members working together instead of working separately. The team approach also provides for improved time management, thus resulting in many cost benefits. It is a generally held belief in the inpatient rehabilitation setting that complex situations and/or patients are better managed through a team approach.\(^2\) The effectiveness of the team may depend on team composition, meeting style utilized and sharing of information and decision making among team members.

There are currently several terms being used to describe teams in the field of medicine and medical literature. Terms such as multidisciplinary and interdisciplinary are frequently interchanged among health care professionals and in publication. Some examples include Schmitt and associates publication (Gerontologist.
1988;28(6):753-764) in which the criteria for an interdisciplinary team is defined and later referred to as the "...definitional criteria of multidisciplinary team."3(P'754) The article further defines a geriatric evaluation unit (GEU) as employing "multidisciplinary teams"3(p.758) and then refers to the same unit as being an "interdisciplinary GEU."3(p.758) Another example of the terms being interchanged is Kapp's article (Gerontologist. 1987;27(5):547-552) which refers to the "interdisciplinary challenges"4(p.548) arising in health care institutions and then discusses "challenges calling for multidisciplinary attention"4(p.548) at these same institutions. The article further advocates "multidisciplinary cooperation in geriatric medicine"4(p.548) and later states that geriatric patients are best provided for by "interdisciplinary collaboration."4(p.548) While these terms may be related, the concepts behind them merit clarification.

**Definitions of Terms**

In the past, the most common term used in the team meeting concept has been multidisciplinary. It implies a management process in which professionals from more than one discipline assess a patient and communicate their individual findings and plans to other professionals involved in the patient's care.5 These various evaluations are carried out independently of each other without opportunity for professional interaction, comparison, debate or integrated planning.1 Bennett states: "While this mode of functioning
may appear efficient, it sacrifices the potential benefits of group synthesis.\textsuperscript{1}(p.307)

The interdisciplinary team process arose in the 1970's with the creation of groups such as interdisciplinary stroke units in the rehabilitation setting, as well as interdisciplinary teams in special education and hospice settings.\textsuperscript{3,6-10} In 1975 Public Law 94-142, the Education for All Handicapped Children Act, was passed which required interdisciplinary teams to become an integral part of special education.\textsuperscript{6-8} As noted by Rine and Toot:

In a school setting involved in serving special education students, many professionals of very diverse training and expertise are involved in developing programs for children with complex needs.\textsuperscript{9}(p.28)

Teams may include a variety of health care professionals as well as teachers, special education coordinators, parents and the child when appropriate.\textsuperscript{9} Team members are involved in creating an individual education plan (IEP) and monitoring the students progress towards meeting these IEP goals.\textsuperscript{6} The interdisciplinary team approach is also fundamental to the hospice concept in caring for the terminally ill patient.\textsuperscript{10} Hospice guidelines call for involvement of many health care professionals as mentioned previously with the addition of a chaplain, legal advisor and volunteer since "no one person has all the answers to the problems of the dying patient and family."\textsuperscript{10}(p.73)
While the interdisciplinary team has been in existence for approximately twenty years, its use is still not as prevalent as it would appear to be in the rehabilitation setting. Popularity of the term interdisciplinary has increased significantly in the past few years but it is often used incorrectly to describe a team functioning as multidisciplinary. Fiorelli has noted:

Many work groups labeled as "interdisciplinary teams" may be functioning more like multidisciplinary teams (Bennett, 1982) without the synergy, commonalty of purpose, and creative problem solving one would associate with the interdisciplinary team approach.

The interdisciplinary process is defined by Fiorelli as one "which involves multidisciplinary participation, collaborative sharing of information, case coordination and goal setting achieved through group input in the decision making process." Bennett (Except Child. 1982;48(4):1-12) further notes that interdisciplinary team members participate in mutual sharing of information and mutual decision making, therefore, the team meeting is very important. From the emergence of interdisciplinary teams comes the term transdisciplinary team which implies working across disciplines. A transdisciplinary effort would allow one professional i.e. a physical therapist to perform the role of another team member such as an occupational therapist. This requires that a member perform outside of their primary area of expertise. The term is used by some
...to describe an ideal type of interdisciplinary functioning in which there is not only mutual sharing of assessment results, but actual professional involvement and participation across traditional discipline boundaries.1(p.307)

This process "requires flexibility, tolerance and understanding among and between the involved individuals."11 Toot (Top Acute Care Trauma Rehabil. 1987;July:49-58) further notes that this process does not guarantee equal sharing of responsibility or mutual honor and trust among individual team members. Therefore, as indicated in the literature, an interdisciplinary approach would appear to provide more efficient and optimal patient care than both the multidisciplinary and transdisciplinary approaches.

Criteria for the Interdisciplinary Team

A true interdisciplinary team must display certain identifiable standards and characteristics that require further definition. Within the team there must be a common sense of purpose, shared communication, mutual trust and a congruent system of values.2 According to Ducanis and Giolin, team composition must consist of two or more individuals.12 While most members of an inpatient rehabilitation interdisciplinary team are health care professionals, it is recommended that the patient and the family be included in the actual team meeting and are considered members of the team. Face-to-face configurations are used predominantly i.e. the team meets regularly with direct and immediate communication.12 Non face-to-face configurations may be appropriate in times of emergency.
where communication is achieved through an exchange of written reports or even by telephone. A third characteristic of the interdisciplinary team composition is that there is always an identifiable leader. According to Ducanis and Giolin: "The leadership of the team may shift due to the changing nature of the task; however, at any point in time the leadership can be identified." 12(p.6)

The interdisciplinary team can also be characterized by its' function and operational style. Roles of team members are defined by their individual professional expertise and the nature of the task to be completed. 12 Ducanis and Giolin explain that teams may differ in: (1) the amount of overlapping among roles; (2) the distinction between roles; and (3) versatility of previously determined roles, but these differences are team characteristics. 12 Members of an interdisciplinary team collaborate, thus combining their diverse skills and specialized knowledge to provide solutions to specific problems. 12 Teams also develop specific modes of operation and means to accomplish its' task. 12 Whether these guidelines are unwritten group norms of behavior of formal written protocols, the team method is easily identifiable. 12

In addition, there are certain unique features associated with the interdisciplinary team that separates it from multidisciplinary. The team is client-centered i.e. "the client is the focus of the teams’ efforts and the teams’ reason for existence." 12(p.7) The interdisciplinary
team is also a task-oriented group whose major concern is to improve the client's life by dealing with the problems that have brought them to the rehabilitation unit.\textsuperscript{12,2} Traditionally rehabilitation team meetings have been headed by physicians, however, the interdisciplinary team leader is not generally a physician.\textsuperscript{2} The leader may be from any of the involved disciplines, but is most commonly a nurse or social worker. Leadership may also change hands depending on the specific needs of the patient.\textsuperscript{2} Interdisciplinary teams display no pyramid of authority, input from each discipline represented is considered to be equal and the exchange of knowledge, ideas and concerns is in a collegial model.\textsuperscript{2}

Reasons for the Interdisciplinary Team Existence

Now that criteria for interdisciplinary teams have been established, their reasons for existence may be noted. According to Toot (\textit{Top Acute Care Trauma Rehabil.} 1987;July:49-58) the first and foremost reason being that a single individual or discipline cannot provide all the necessary components of patient care at a quality level for the multiply involved patient such as those seen in a rehabilitation unit. A second major reason is the advantage of more efficient time management that may reduce costs for both the professionals and the patient/family.\textsuperscript{2} Lastly, the interdisciplinary team requires that the specialized expertise of each discipline is integrated into a cohesive program that is utilized throughout the treatment
progression and is presented to the client and family.² It is a general assumption that the "collaborative" team approach results in more effective care of the complex rehabilitation patient than individual approaches or non-collaborative multidisciplinary approaches.³

**Advantages of the Interdisciplinary Team**

Further advantages are noted by Gaitz *(Gerontologist. 1987;27(5):553-556)* who states that a good team will thoroughly identify the patients' biomedical, social and psychological needs: "All members come from professions with inherent differences in purpose and each will, therefore, emphasize different patient capacities and deficits when making assessments."¹³(p.553) The effectiveness of these various professionals will depend on their ability to communicate with the patient and with each other. As Gaitz notes: "Each team is a unique blend of the professional and personal characteristics of its members, its effectiveness determined in large part by the dynamics of that configuration."¹²(p.9) Ongoing communication between and flexibility among team members is essential to provide optimal comprehensive care for the patient.¹⁴,¹³ Toot *(Top Acute Care Trauma Rehabil. 1987;July:49-58)* adds that utilization of interdisciplinary teams may also prevent burnout, and the sense of commitment by team members will lead to a stronger team. Garner reinforces the "client-centered" approach by stating that true teamwork guarantees clients will not be caught in the middle of conflicts.
between team members. Ideally when conflicts between members of an interdisciplinary team arise it is because they are "...defending the interests and needs of their clients rather than using them as pawns in personal struggles against other employee groups or individuals." \(^{15}\)

Interdisciplinary team meetings provide the opportunity for ongoing communication and feedback. As Gaitz notes: "Regular team meetings are an opportunity to evaluate treatment plans, change them when necessary and adjust the teams operation and organization." \(^{13}(p.553)\) Ducanis and Giolin add that both formal and informal feedback received during team meetings provides information to members which may result in changing the goals and activities of the interdisciplinary team. \(^{12}\)

**Interdisciplinary Team Problems**

While the interdisciplinary team approach has many advantages, problems may arise when it is not utilized correctly. It has been noted that physicians and other health care professionals may have problems with leadership of the team by non-physicians. \(^2\) Since physicians have traditionally headed the team they may find it difficult to abandon their role as team leader. \(^2\) Other health professionals may also feel uncomfortable as team leaders because they have lost the protection previously given by the supervisory role of the physician. \(^2\) Bennett further states that physicians do not have a natural interest in interdisciplinary teamwork partly because it is not
developed in medical school education, internships or residency experience. Because of the traditional pyramid of authority among health care professionals, there may be a natural tendency of other disciplines to be suspicious of the physicians' commitment to the interdisciplinary process. Another major issue is the protection of professional turf that may be found between team members. Bennett notes: "Newer disciplines often feel the need to rigidly outline their perceived areas of expertise and may respond negatively and defensively to sharing these areas with closely related fields." Problems may also arise with professionals who utilize different assessment and management approaches and who come from different philosophical training. A final barrier to effective interdisciplinary work may be the lack of flexibility and responsibility taken on by each individual team member. Potential problems may arise when there is "unwillingness of any one professional, including the case manager, to feel personally accountable and responsible for the direction, interpretation and follow-up care of a given case." The problems noted may be negated if the team members are willing to compromise and are able to "appreciate both the strengths and weaknesses of the interdisciplinary process." Flexibility and an attitude of openness toward other team members will also increase the strength of the interdisciplinary team.
leadership at all times is also essential to avoid the aforementioned problems.\textsuperscript{1,12}

**Implications for Study**

While the disadvantages of using the interdisciplinary team approach are relevant, the advantages outweigh them.\textsuperscript{2} Why the interdisciplinary process is not utilized more frequently may be attributed to inadequate training of health care professionals.\textsuperscript{1,2} Toot notes: "Why it is not consistently used is a matter of lack of training and attitudes that are bound by professional turf."\textsuperscript{2(p.51)} Education of health professionals about the interdisciplinary process is valid and necessary to ensure its proper utilization. Schmitt notes: "Currently very little is known about the processes and outcomes associated with systematically organized and implemented interdisciplinary care."\textsuperscript{3(p.763)} To date there have been few research efforts made dealing with the interdisciplinary process and a need for adequate training of health professionals is relevant.\textsuperscript{2}
CHAPTER THREE

METHODOLOGY

Design

This study was designed to determine whether interdisciplinary or multidisciplinary teams were utilized with inpatient rehabilitation care teams. It was also designed to determine whether physical therapists were knowledgeable of the criteria required for a true interdisciplinary team approach.

Procedures

In order to conduct the study, a survey was sent to physical therapists throughout Michigan who were involved in the inpatient rehabilitation unit. The survey had been approved by the human subjects review board at Grand Valley State University prior to being used for this study. The inpatient rehabilitation sites were either free-standing rehabilitation hospitals or small rehabilitation units within larger hospitals. The surveys were sent to the director of the physical therapy department and/or rehabilitation unit and he/she was asked to distribute a copy to the appropriate physical therapists. Along with the survey a return envelope was sent so the individual physical therapists could return the survey as soon as it was completed in a confidential manner. The physical therapists were given three weeks to return the surveys. At this time, if the overall return rate was less than 33%,
the directors would be contacted and asked to remind the therapists to complete and return the surveys.

**Population and Sample**

A sample of convenience was taken from a list provided by the Michigan Association of Hospital Rehabilitation Program Administrators (MAHRPA). Obtained from this list were the inpatient rehabilitation units throughout the State of Michigan, which included the number of inpatient rehabilitation beds at each site. To calculate the approximate number of physical therapists at each site, the researchers divided the number of beds at each site by four.

Physical therapists were chosen in order to get the perception of the individuals from one profession. However, the survey was not designed specifically for physical therapists and could be given to other professional disciplines involved with inpatient rehabilitation care teams.

**Instruments**

The author's designed an objective survey instrument which incorporated the characteristics of interdisciplinary and multidisciplinary teams. The characteristics were obtained from the literature and from specific definitions of multidisciplinary and interdisciplinary teams. The survey questioned physical therapists on their perceptions of the teams they were involved with at their respective sites. The questionnaire was designed specifically for this study.
Data Analysis

When the data was analyzed the researchers used descriptive statistics to report the results of the study. The research team also used a chi square test to show the difference between observed frequency and expected frequency of the type of response made by the physical therapists. The study looked at the normal distribution of the results to see what the typical perception of the inpatient rehabilitation team meeting style was as seen by the physical therapists.

Hypothesis

The research team expected to have a questionnaire return rate of no less than 33%. Of the questionnaires returned, it was expected that 90% of the physical therapists would have indicated that their individual sites utilized the interdisciplinary style of team meeting for inpatient rehabilitation care teams. However, the researchers anticipated only a small percentage, less than 10%, of the physical therapists who stated involvement in interdisciplinary teams would have actually verified this fact by their responses on the questionnaire. Therefore, the hypothesis that physical therapists in the inpatient rehabilitation setting were lacking in knowledge of the specific characteristics of the team meeting styles would be supported. Based on the criteria used to identify both multidisciplinary and interdisciplinary team approaches, the authors hypothesized that the majority (70%) of physical
therapists who responded were actually functioning in a multidisciplinary team process or a combination of the interdisciplinary and multidisciplinary approaches, as determined by their responses on the questionnaire.
CHAPTER FOUR
RESULTS AND DATA ANALYSIS

Techniques

A perceptual objective survey was sent to a convenience sample of physical therapists involved in the inpatient rehabilitation setting of patient care (see appendix 1). The purpose of the survey, designed specifically for this study, was to see how physical therapists in this setting perceived the team meeting style utilized for patient care at their particular sites. The survey was also designed to analyze the physical therapists' knowledge of the specific characteristics of interdisciplinary and multidisciplinary team meeting styles. The level of confidence was set at alpha less than .05.

Frequency tests were run on each question of the survey in order to find percentages in which particular answers occurred. Also, a multi-variable frequency test was run to see how many physical therapists answered the questions appropriately regarding criteria for the interdisciplinary team meeting style and who also stated that they are involved in an interdisciplinary team.

The multi-variable frequency test was run according to the specific characteristics of the interdisciplinary team meeting style. The specific criteria presented were pertinent for implementing a true interdisciplinary team. A primary characteristic was that the team should consist of a
varied group of professionals, as well as the patient and family members, who were brought together to address the patient's needs. The team members' specialized knowledge and abilities were utilized fully for optimal patient care. The group met regularly and there was an equal representation of all professions at each team meeting. There was also equal responsibility among all of the members of the team when making decisions.

There was a team leader at each meeting and the leader was chosen by team consensus. Although not a specific characteristic of an interdisciplinary team, generally the composition of the team varied according to the patient's changing needs.

When the interdisciplinary team meeting style was utilized, goals were set as a group during the actual team meetings and they were clearly understood and stated prior to implementation. All team members were willing to integrate goals.

The individual team members were able to state their opinions and views openly during the team meetings. They also felt that they could consult and get assistance from other team members as needed. These characteristics depicted the interdisciplinary team meeting style, as well as the team itself. The characteristics were included in the questions of the survey. It was these same characteristics that the multi-variable frequency test was run on in order to find the percentage of physical
therapists who were aware of the criteria that characterize the interdisciplinary team.

Discussion of Findings

From the results of the frequency test, the researchers found that the majority of the physical therapists who responded to the survey were involved in teams that had some interdisciplinary characteristics. From this test it was determined that 61.3% of the physical therapists surveyed perceived that their team functions in an interdisciplinary manner. However, after running the multi-variable frequency test, the researchers found that only 2 of the 119 (1.7%) physical therapists who responded answered all of the questions appropriately to describe a true interdisciplinary team. This supported the researchers' hypothesis that physical therapists involved in the inpatient rehabilitation setting were uninformed about the specific criteria of the interdisciplinary team. Few of the physical therapists who responded to the survey were aware of the characteristics of the interdisciplinary team meeting style.

A chi-square test was run on the questionnaire to see if there was statistical significance between how the physical therapists' responded to the questions and their perceptions and the style of team meeting that was utilized at their sites of employment. It was found that there was no relationship between these two variables. This supported the researchers' hypothesis that physical therapists were unaware of the specific criteria that distinguish the
multidisciplinary team approach from the interdisciplinary team approach. If the physical therapists were informed of the characteristics that define the different team approaches, there would have been a strong correlation between the way that they answered the questions and what type of team approach they perceive is utilized at the inpatient rehabilitation unit in which they are involved.

The research suggested that the interdisciplinary team approach was the most effective for optimal patient care. However, in order for this type of team to be implemented and effective, physical therapists and all other professionals working in the inpatient rehabilitation setting need to be made aware of the criteria required for an interdisciplinary team. The level of effectiveness of the team meeting can not be reported until the true characteristics of the interdisciplinary team are implemented.

Results of Data

Of the 282 surveys distributed, 119 were returned. This allowed for a return rate of 42.2%. Physical therapists from 31 of the 38 hospitals chosen for the study completed and returned the survey. This allowed for an 81.6% response rate from the hospitals in which at least one physical therapist completed and returned the survey.

All of the individuals who responded indicated that their team meetings involved a wide variety of professionals. The majority of the respondents reported
that there was an equal representation of all professions at the inpatient rehabilitation team meetings. Only 17.7% of the physical therapists indicated that family members were involved in the team meetings, and 16.0% stated that the patients were involved.

**Team Leader Appointment.**—When asked about a leader for each team meeting, 95.8% indicated that there was always a definite leader. The majority (84.9%) of the physical therapists stated that the leader did not change per team meeting.

Of the physical therapists who responded, 86.6% indicated that the physician led the team meetings (see graphs 3 and graph 4 in appendix 2). In the interdisciplinary team meeting description, the physician was not always the leader of the team meetings. The team leader changed from meeting to meeting for the interdisciplinary team based on the patient needs and goals. However, this response suggested that there was a pyramid of authority with the physician at the top. In interdisciplinary team meetings there was no pyramid of authority and each member of the team was given equal levels of authority.

When asked how the team leader was chosen, 20.2% responded that the leader was always the physician. Once again, this indicated that the physician had more authority than the other professionals involved in the team meetings. This was contrary to the criteria of an interdisciplinary
team meeting in which all members of the team were considered equal. Also, 40.3% stated that the physician designated the team leader. In an optimal interdisciplinary team meeting, the leader was chosen by team consensus, thus allowing an equal contribution among all team members in the decision making process.

Team Composition.—Of the physical therapists who responded, 88.2% stated that the composition of the team changed according to patient needs. This was an important criteria of interdisciplinary teams because the team and the team meeting were developed according to the specific needs of each patient. The whole existence of the team was for optimal patient care.

Format of Team Meeting.—One hundred and nineteen (100%) of the physical therapists who responded to the survey stated that team meetings were scheduled regularly. The team meeting schedule varied from once a week to once a month with the majority of the team meetings being held once a week.

Only 45.4% of the physical therapists who responded stated that the format of their team meetings was characterized by discussing and setting goals during the actual team meeting (see graph 1 in appendix 2). This suggested that over 50% of the physical therapists who responded were involved in team meetings in which goals were set by the individual professionals outside of the actual team meeting (see graph 2 in appendix 2).
Approximately 99% of the physical therapists stated that they felt that they could state their opinions and views openly during team meetings. And, 100% indicated that they could consult with other members of the team when needed. 90.8% felt that goals and objectives were clearly stated and understood prior to implementation.

Only 67.2% of the physical therapists who responded felt that there was equal responsibility of decision-making among team members. Once again, this indicated that there was a pyramid of authority in which there were some team members who were given more authority than others.

When asked if they felt that all team members' specialized knowledge and abilities were fully utilized, 84.9% of the physical therapists responded affirmatively. This indicated that, in 15% of the responses, the role definition was vague and the roles of individual professionals were not utilized to maximize their strengths. In the interdisciplinary team meeting style, role definition and differentiation was important so that all members' special training and abilities were fully utilized, resulting in optimal patient care.

In response to the question regarding goal integration, 99.2% of the physical therapists stated that the team members were willing to integrate goals. This was an important criteria of interdisciplinary teams because, for optimal patient care, all the professionals should have the
same goals in order to make treatment effective and to keep the patient focused.

Perception of Team Meeting Approach.—When asked what type of team meeting style was utilized at each site, 61.3% of the physical therapists stated that they perceived the team meetings as being interdisciplinary, 31.1% said multidisciplinary, 2.5% said both, and 5.0% stated that they were unsure. However, when a statistical test was run to determine the percentage of physical therapists who answered the questions appropriately regarding criteria for an interdisciplinary team and who also stated that the interdisciplinary style of team meeting was utilized at their sites, only 1.7% of the physical therapists who responded answered all the questions correctly. This supported the researchers' hypothesis that physical therapists were not informed about the specific criteria that differentiate the interdisciplinary from the multidisciplinary team meeting style.

From the results of the data analysis, it was found that 98% of the physical therapists who responded to the questionnaire were not involved in an interdisciplinary team. They were involved in either a multidisciplinary team approach or in a team meeting style that was a combination of the multidisciplinary approach and the interdisciplinary approach, according to the physical therapists' perceptions of their team meetings.
CHAPTER FIVE

DISCUSSION AND IMPLICATIONS

Application to Practice/Education

From the surveys received few of the inpatient rehabilitation teams met all of the specific criteria that constitute an interdisciplinary team. Although only two of the 119 surveys returned met all the criteria, 61.3% of the physical therapists indicated that they were a part of the interdisciplinary team. This indicated a lack of knowledge by the physical therapists surveyed about the specific criteria required to be considered a true interdisciplinary team. Therefore, further education should be done with physical therapists and other health professionals regarding the interdisciplinary team model. The education should have emphasis on the specific criteria that make up the interdisciplinary team approach. Specific attention should be paid to the criteria as defined in the survey instrument that was sent to the physical therapists.

Knowledge of the specific criteria defined in this particular survey included the following: (1) the patient and family are important members of the team and should be included in the regularly scheduled meetings; (2) no power of authority should be present in any form; (3) the final decision regarding patient goals and length of stay should be determined by consensus of the team not determined by one particular person, namely the physician; (4) decision making
and input should be equal among team members, as all team members specific knowledge is equally important; and (5) goals and objectives need to be clearly stated and understood prior to implementation. This means that decisions regarding the patient’s treatment plan need to be clearly understood by all members of the team including the patient and family.

Education of rehabilitation professionals regarding the interdisciplinary team approach should optimally begin in the professional education curriculum. This would include physicians specializing in Physical Medicine and Rehabilitation. This education could be enhanced through inservice education of clinicians that are assigned to the inpatient rehabilitation unit, as well as, special education and hospice settings. These inservices would include the specific criteria and the rationale for its use.

Knowledge about the specific criteria that constitute an interdisciplinary team approach would improve patient care in a variety of ways. As indicated in the literature, team effectiveness and efficiency can be improved if the interdisciplinary team approach is used in its true form. The interdisciplinary approach would help improve communication between all health professionals, the patient and the family. In turn this would improve carry over throughout the patients activities of daily living and level of independence both during the rehabilitation process and at home. Efficiency may be improved if the family and the
patient are included in the team meeting because this would decrease the need for extra individual family conferences, and achieve patient and family participation early on in the rehabilitation process.

With the current emphasis on health care reform, education of health professionals regarding team approaches to patient care is imperative. This is indicated in The Pew Health Professions Commission report published in October, 1991.16 This report focuses on the need for education of health professionals in both the academic and clinical setting.16 The report states that educational curriculum should be revised in order to emphasize the importance of interaction between a variety of health care providers to promote optimal patient care.16 According to the Commission: "Practitioners should be able to work effectively as team members in organized settings that emphasize high quality cost-effective integrated services."16(p.18) Another issue raised by the Commission is the involvement of the patient and family in the decision-making process.16 By including these individuals as team members, this will promote quality care and cost-effective treatment.

Limitations

One of the main limitations of the study was that it involved a convenience sampling of the accessible population who were readily available. The interdisciplinary team
survey was distributed to all Michigan physical therapists working in an inpatient rehabilitation setting. The sample was not randomized and is geographically biased because only Michigan subjects were chosen. The sample was also biased because it included only subjects from the inpatient rehabilitation setting.

The survey was distributed to physical therapists only, thus it excluded all other health care professionals involved in patient care team meetings in a rehabilitation hospital. This was a judgmental sampling as physical therapists were judged as most appropriate for the study and most likely to respond to a survey created by physical therapy students. The sample was again biased because the perceptions of only one of the many professions involved in the team meeting was studied.

The survey was a perceptual study based on the subjective reports of the participants. The definitive answers of the team approach as interdisciplinary versus multidisciplinary were based on the physical therapists prior knowledge of the criteria for an interdisciplinary team. If the criteria for an interdisciplinary team approach were given prior to the survey the subjects may have had a more accurate prediction of the team approach used at their facility.

The questionnaire also consisted of a number of closed-ended questions. While these may have been quicker and easier to answer, they led the respondent in certain
directions and may not have allowed him to express his own unique answer. Some potential respondents may not have been given the opportunity to answer. The surveys were mailed to the director of physical therapy at each site with a letter requesting that it be distributed to each physical therapist in their department. It was possible that the surveys did not reach the therapists at certain hospitals.

Suggestions for Further Research/Modifications

Further studies of clinicians' perceptions of interdisciplinary and multidisciplinary teams could be carried out in other settings where they are frequently utilized. Hospice and special education school systems are legally required to use the interdisciplinary team process. Whether or not these other teams are meeting the criteria of an interdisciplinary team as established in this research study could be determined by using a survey similar to the one used for the inpatient rehabilitation unit and hospital setting. The type of team members involved could be expanded to include teachers and special education coordinators in the school setting and volunteers and chaplains in the hospice setting.

The survey could also be distributed to all members of the interdisciplinary team to see how the professionals from other disciplines perceive the team meeting process. A follow up survey could be sent to all team members at the initial surveyed hospitals. Comparisons could be made
between the physical therapists' responses and the other health care professionals responses. A comparison could be made of the present knowledge of interdisciplinary team criteria and the amount of interdisciplinary team education received in the professional educational curriculum of various rehabilitation professionals.

A similar study could be done by distributing the definitions of multidisciplinary and interdisciplinary teams along with the survey. Some of the survey respondents requested these definitions be included in the survey; however, if the definitions had been provided this would no longer be considered a perceptual study. The survey with definitions could be distributed to physical therapists in inpatient rehabilitation settings in another state. Comparisons could then be made of how accurately each group predicted whether they were interdisciplinary or multidisciplinary.

**Conclusion**

As indicated by this study, there is a vast need for education of health care professionals regarding the specific criteria that define an interdisciplinary team. By incorporating a true interdisciplinary team approach, the quality of patient care should improve while health care costs should diminish. With the current need for health care reform, decreased cost along with improved patient care would be an optimal change.
REFERENCES


APPENDIX ONE
Grand Valley State University
Department of Physical Therapy
Masters Thesis
Interdisciplinary Team Survey

1. At a team meeting, which of the following are present: (If more than one, please identify how many are present)

- Dietitian
- Family Member
- Nursing
- Occupational Therapist
- Patient
- Physical Therapist
- Physician
- Psychologist
- Social Worker
- Speech Pathologist
- Other (Please Identify)

2. Is there a leader at each team meeting?
   □ Yes □ No

3. If so, does the leader change with each individual team meeting?
   □ Yes □ No

4. Please check the professional who leads the team meeting. (If more than one, check all that apply.)

- Dietitian
- Nursing
- Occupational Therapist
- Physical Therapist
- Physician
- Psychologist
- Social Worker
- Speech Pathologist
- Other (Please Identify)

5. How is the team leader chosen?
   □ Team Member Consensus
   □ Designated by Physician
   □ Established Rotational Basis
   □ Other (Please Identify)

6. Does team composition vary according to the patient needs?
   □ Yes □ No

7. Are meetings scheduled regularly?
   □ Yes □ No
8. How often is the team meeting held?
   □ Weekly □ Every Other Week □ Once a Month
   □ Other (Please Identify) ____________________________

9. During the meeting which format is utilized most frequently?
   □ Reporting without discussion
   □ Discussion of goals set prior to meeting
   □ Discussion of goals to be set during meeting

10. Goals are set by:
    □ Team
    □ Individual Professional

11. Do you feel you can state your opinions and views openly during the team meeting?
    □ Yes □ No

12. Do you feel you can consult and get assistance from other team members?
    □ Yes □ No

13. Are goals/objectives clearly understood and stated prior to implementation?
    □ Yes □ No

14. Is responsibility for decision-making equal among team members?
    □ Yes □ No

15. Do you feel that all team members' specialized knowledge and abilities are fully utilized?
    □ Yes □ No

16. Are team members willing to integrate goals?
    □ Yes □ No

17. How would you describe your team?
    □ Interdisciplinary
    □ Multidisciplinary

Describe the Patient Population Treated by your Team ________________________________

Number of Beds in Hospital ______________________________________________________
Number of Beds in Rehabilitation Unit ____________________________________________
Name of Hospital ______________________________________________________________

Thank you for your time. Please use the back of this sheet to comment on the effectiveness of your team.
APPENDIX TWO
During the meeting which format is utilized most frequently to determine goals?

- C - During meeting: 184 / 32%
- B - Prior to meeting: 180 / 31%
- A - No discussion: 213 / 37%

Physical Therapists' Perceptions
Graph 1
Goals are set by:

Physical Therapists' Perceptions

Based on responses to survey sent to inpatient rehabilitation settings

Graph 2
Team Meeting Leader
Inpatient Rehabilitation Setting

DIETICIAN
NURSING
OCCUPATIONAL THERAPY
PHYSICAL THERAPY
PHYSICIAN
PSYCHOLOGIST
SOCIAL WORKER
SPEECH THERAPY
REHAB MANAGER
CASE WORKER

Frequency
Physical Therapists' Perceptions
Graph 3
Team Meeting Leader
Inpatient Rehabilitation Setting

Frequency
Physical Therapists' Perceptions

Graph 4, same as Graph 3, not including physician
AUTobiographical Statements

NA Dickman is a senior physical therapy student, Grand Valley State University, Allendale, MI 49401.

CA Ritsema is a senior physical therapy student, Grand Valley State University, Allendale, MI 49401.

BS Warner is a senior physical therapy student, Grand Valley State University, Allendale, MI 49401.

This study was completed in partial fulfillment of the requirements for the authors' Master of Science Degree in Physical Therapy at Grand Valley State University.

This study was approved by the Human Subjects Review Committee at Grand Valley State University.