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Effects of Managed Care on the Professional Autonomy of Board Certified Physical Therapy Specialist's Practice

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**EFFECTS OF MANAGED CARE ON THE
PROFESSIONAL AUTONOMY OF
BOARD CERTIFIED PHYSICAL
THERAPY SPECIALIST'S PRACTICE**

**BY
CAMI DIEZEL**

**PHYSICAL THERAPY PROGRAM
COLLEGE OF ALLIED HEALTH
NOVA SOUTHEASTERN UNIVERSITY
1998**

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PROFESSIONAL AUTONOMY OF BOARD CERTIFIED
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BY

CAMI HEATHER DIEZEL

THESIS SUBMITTED TO THE PHYSICAL THERAPY PROGRAM

COLLEGE OF ALLIED HEALTH

NOVA SOUTHEASTERN UNIVERSITY

DAVIE, FLORIDA

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

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Date

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ABSTRACT

EFFECTS OF MANAGED CARE ON THE PROFESSIONAL AUTONOMY OF BOARD CERTIFIED PHYSICAL THERAPY SPECIALISTS' PRACTICE

CAMI DIEZEL

1997

Purpose: Identify perceptions of professional autonomy of Board Certified Physical Therapy Specialists (BCPTS) who practiced in managed care environments. **Guiding questions:** Do BCPTS perceive an increase in professional autonomy as a specialist than as a generalist? How do the perceptions of professional autonomy vary among each specialization? What variables affect perceptions of professional autonomy among BCPTS? **Method:** Two-hundred BCPTS throughout the country were randomly chosen as participants. One-hundred-eight respondents were used as subjects. **Data Analysis:** Frequency distributions and Pearson's correlation coefficient statistic were utilized. **Results:** Majority of respondents reported no increase in professional autonomy as a specialist. Greater than three-quarters of the respondents reported a decrease in professional autonomy due to managed care; geriatric specialists reported the least loss of professional autonomy. Variables were identified that reportedly detracted from professional autonomy such as "clinical decisions were overridden by decisions of insurance companies". Correlational analysis revealed that "percent of patients covered by managed care insurance" had a major influence upon how respondents practiced and perceived their professional autonomy. **Conclusion:** While there were reported differences in perceptions of professional autonomy among each specialization, there was an overall perceived decrease of professional autonomy due to managed care.

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INTRODUCTION

Chapter 1

Overview of the Problem

Managed care has changed modern American health care. Moreover, managed care has called for physical therapists to become more creative in their diagnostic and treatment procedures as well as becoming culpable for their actions. “Managed care at its most basic level challenges us to be accountable [for our actions]”¹ and “look at patient centered outcomes”. The bygone days of patients remaining under our care until we feel that they are rehabilitated are a faint memory as managed care now dictates how long our patients will remain under our care. It is up to physical therapists to make the treatment programs effective within the time parameters set by the patient’s insurer and above all, centered around the needs, concerns and/or expectations of the patient. Hence, managed care is calling for physical therapists to become accountable and focus their energies on outcomes that are geared toward the needs, concerns and/or expectations of the patient. However, the methods by which managed care is embedded into our health care delivery system has caused people and health to become lost in many cases.¹

Physical therapists have expressed concern that managed care is infringing upon their professional autonomy.² In some cases, insurance companies are dictating the number of visits a patient may receive and are calling for physical therapists to lower the amount of visits in the interest of lower costs. Furthermore, sociologists report that a lack of professional autonomy will ultimately cause a weakening or breakdown of a profession.³ Thus, it is imperative that perceptions of professional autonomy are explored.

Purpose of the Study

The purpose of this study was to identify the effect managed care has had on the professional autonomy of board certified physical therapy specialists' practice. The seven physical therapy specialties acknowledged by the American Physical Therapy Association are cardiopulmonary, clinical electrophysiologic, geriatrics, neurology, orthopedic, pediatric and sports medicine physical therapy.⁴

Those who are concerned about the constraints of managed care on professional autonomy as it relates to physical therapy specialists will be more informed after reviewing this research. The final chapter of this thesis will address possible proactive solutions which can be utilized in order to increase the level of professional autonomy that board certified physical therapy specialists' practice with in today's managed care environments.

Guiding Questions

1. Do board certified physical therapy specialists perceive that they have more professional autonomy as a specialist than as a generalist?
2. How do the perceptions of professional autonomy vary among each specialization?
3. What variables affect perceptions of professional autonomy among Board Certified Physical Therapy Specialist Practitioners?

Operational Definitions

For the purposes of this study, professional autonomy will be defined in the following way: the ability to provide warranted physical therapy care without the interruption in the plan of care from unwanted outside influences whose priority may not be the maximum health or independence of the patient.^{5,6} The term 'managed care' will encompass the following models:

managed indemnity (i.e., workers' compensation, utilization management) service plans, preferred provider organizations (PPOs), point-of-service health maintenance organizations (HMOs), open panel HMOs and closed panel HMOs.⁷ Managed care will be defined as a health care delivery system that attempts to control costs, quality and access to health care. Common to all models are a "panel of contracted providers, some type of limitation on benefits to subscribers who use non-contracted providers and some type of authorization system".⁷

LITERATURE REVIEW

Chapter 2

Introduction

For many years, the tentacles of managed care have been entering all sectors of the American health care delivery system. It is estimated that approximately seventy-five percent of workers in the United States are covered by managed care insurance.⁸ Some health care professionals feel optimistic about the changes that have come about due to managed care, some feel threatened by them. Regardless of how health care professionals feel, managed care has affected the manner in which they practice.

This literature review will focus on the history of managed care, the progression of managed care into 1998 and the implications managed care has had on physicians, physical therapists, and other members of the health care community. In addition, this review will provide a rationale as to why the specialists were chosen as the sample population for this study. Lastly, this review will encompass a critique of three studies that are most applicable to this research.

As I will illustrate in the following sections, managed care affects many aspects of the health care delivery system. There are articles written about the effects on various medical professional practices such as physicians, radiologists, nurses and psychologists. However, very limited research exists on the effects of managed care on the professional autonomy of physical therapists. Furthermore, there appears to be no research on the effects of managed care on the professional autonomy of board certified physical therapy specialist practitioners. This provides further evidence that research needs to be done in this area.

The History of Managed Care

Various literature exists on the origins of managed care. For example, in the nineteenth century, a form of managed care existed in a similar form to contemporary prepaid plans.⁹ These existed to serve certain populations such as those employees belonging to major industries such as railroads, mining and lumber. From this stemmed “private inpatient hospitals and rudimentary managed care plans”. Therefore, “prepaid group practice with its multispecialty and capitation payment characteristics might be a natural forerunner of managed care”.¹⁰

The late 1920's brought many exciting changes to health care. In 1929, the premier “prepaid medical cooperative in the United States” was established by Dr. Michael Shadid as “the Community Hospital Association of Elk City, Oklahoma”. The years 1927 through 1932 marked the commencement of comprehensive prepaid group practice (PGP). The Committee on the Costs of Medical Care (CCMC) devised principles as recommendations that requested the “organization of medical care on a group practice basis, meeting costs on a prepayment method through insurance, taxation or both”. The underlying root of these recommendations was to encourage high standards of practice and a close relationship among patients and their physician. However, as wonderful as the CCMC principles appeared, little was done to incorporate them into practice. Hence, the early twenties brought new ideas to health care, however, the early thirties did not agglomerate the new ideas into practice.

The 1930's and 1940's brought greater development to the concept of managed care. Many businesses took an avid interest in managed care, namely the Kaiser-Permanente Medical Care Program which can be equated to a primitive health maintenance organization (HMO). Other businesses that were interested in managed care were the Health Insurance Plan of Greater

New York and the Group Health Cooperative of Puget Sound.^{9,10} In 1937, the Group Health Association was formed¹⁰ as a cooperative for government employees and family. It was in this great time of change that employers became very intrigued by prepaid group practices.⁹ Thus, since World War II, employers have become the dominant source of health insurance for Americans.

As the cost of health care increased in the 1950's, prepaid health care grew, the volume of participants in prepaid health care programs grew.

In 1970, the term "Health Maintenance Organization" was coined. In 1973, as a solution to the looming health care problems, Congress enacted the Health Maintenance Organization Act of 1973. Thus, the 1970's brought contemporary HMO's into existence. The provisions of this act stated the following, "HMO's that were interested in being federally qualified were required to provide a basic package of benefits on a prepaid basis, subscriber enrollment is voluntary and the HMO assumed part of the financial risk or gain in the provision of services".¹⁰ In addition, HMO's had to have an open enrollment yearly and "premium rates for basic and supplemental services" were to be fixed by a community rating system. Under this Act, it was mandatory that employers of unions offer a federally qualified HMO to their employees. Hence, under the HMO Act of 1973, there were attempts to offer all union employees a federally qualified HMO health insurance.

The 1980's brought high medical costs for individuals. Therefore, health maintenance organization and preferred provider organization (PPO) enrollment grew from approximately 10 million to 45 million by the end of the 1980's.⁹ In 1987, HMO enrollment was 29 million and in 1993, it was 45 million. Similarly, PPO enrollment grew from 12 million in 1987 to 77 million in

1993. Therefore, it appears that the high health care costs of the 1980's were the fuel that has brought managed care to a new level in the 1990's.

The support of managed care by employers in the last forty years combined with high health care costs has been driving force in the growth of managed care. Managed care may have had archaic beginnings in the 19th century, but it has evolved into an issue that provokes fear in some and excitement in others. Is it the growth of managed care that scares some health care professionals, or is it the loss of autonomy that scares them? Does managed care really cause us to become accountable for our actions as professionals? This shall be explored in the succeeding sections of this literature review.

Autonomous Practice: What is It?

To gain an in-depth understanding of the implications managed care has had on board certified physical therapy specialists, it is elementary to understand the word 'autonomy'. The word 'autonomy' is of Greek origin. "Autos" means self and "nomos" means law.¹¹ Together, they mean self-law or governing one's self. When this concept is applied to autonomous physical therapy practice, the concept of practicing within one's own set of rules applies. Thus, a very basic definition could be practicing within the boundaries of one's own set of laws. Further exploration of the concept of autonomy is necessary, however, because within the aforementioned definition, there is no mention of practicing with regards for the well-being and safety of one's patients.

When one accepts the responsibility to become a licensed physical therapist (generalist and specialist), it is expected that she or he will "adhere to certain ethical norms and practice in a consistently competent manner".⁵ These ethical norms are based on the concepts of

accountability and agency. Accountability refers to physical therapists monitoring their professional performance and the performance of their colleagues. Furthermore, accountability refers not only to monitoring, but taking proper action to cease performances that endanger therapists or their patients. Agency refers to the concept that we have a responsibility to our patients to protect their interests without putting our own financial gain above the interests of our patients. Furthermore, we are to advocate for them when necessary. With these two concepts in mind, it is now possible to relate them to the concept of professional autonomy. Professional autonomy is not a right that one is born with or is arbitrarily given. Professional autonomy is a professional responsibility that is given to a medical health care professional in exchange for practicing accountably and as an agent with regard to one's patients. When the medical professional fails to be accountable and an agent for their patient, their professional autonomy will erode or eventually cease to exist. Thus, for the purposes of this research, professional autonomy is the ability to provide warranted physical therapy care without the interruption in the plan of care from unwanted outside influences whose priority may not be the maximum health or independence of the patient.^{5,6}

Existing Research on the Effects of Managed Care on Professional Autonomy

Sage conducted research on 245 physical therapists throughout the state of Florida in various clinical settings regarding perceptions of professional autonomy.¹² The data revealed that overall, the respondents did not feel a decrease in their professional autonomy. The instrument that was utilized was the Dempster Scale of Autonomous Behavior^{12,13}. The limitations to Sage's study were that the instrument was originally devised for nurses and therefore, validity and reliability had not been established when applied to physical therapists' second, the therapists

practiced in the state of Florida, therefore, this decreased the ability of the results to be generalizable to all therapists; third, the instrument was devised in 1990 and in lieu of the rapid changes in health care today, I felt that a newer instrument needed to be devised that took into consideration the aspects of physical therapy practice that therapists dealt with regarding managed care and its effects on their professional autonomy. In addition, this study made no distinction between responses of generalists versus specialists. To improve upon this research, I will survey board certified physical therapy specialists throughout the country using a newly devised instrument.

A study conducted by Curtis and Martin surveyed one-hundred-eighty-eight physical therapists regarding the role of stress in the acute care setting.¹⁴ The results indicated that health care system constraints were identified as factors that contributed to role stress among novice physical therapists in the acute care setting. The low response rate of this study, 37.4%, was a limitation. This could have been attributed to the time required to fill out the 27-item survey which was about 20 minutes. Various literature stated that physical therapists in acute care settings were feeling time pressures due to decreased staffing and decreased time to treat patients.^{14,15} Therefore, they possibly did not have the time to respond to a 27-item survey. Another limitation was that the researchers reported that health care system constraints contributed to role-stress among novice physical therapists, however, they failed to identify what these health care system constraints were. To improve upon this research, I devised an instrument that consisted of 10 questions and required approximately 10 minutes to complete.

A study conducted by Deckard and Present surveyed 187 physical therapists from the state of Missouri.¹⁵ The results indicated that constraints upon practice were identified as a major

stress factor for physical therapists. A limitation of this study could have been attributed to the fact that the researchers used a sample of convenience which could have decreased the ability of the results to be generalizable to therapists throughout the country. Also, the reliability and validity of the instruments that were utilized were never addressed. And, lastly, the term "constraints upon practice" was never identified. This appears to be a consistent limitation in the Curtis and Martin study as well as this study. It is apparent from all of the literature I reviewed that "constraints upon practice" have been identified as significant stress factors and has negatively impacted professional autonomy.^{14,15} To improve upon these studies and contribute to the body of knowledge of physical therapy, I have done a thorough review of the literature and identified possible constraints such as decreased clinical decision making ability, insufficient durations of care, documentation requirements and practicing within insurance coverage limitations that health care professionals have claimed could decrease their level of professional autonomy.^{2,5,6,14,15}

In a research report conducted by Dorwart, et. al., published in 1996, managed care constraints placed upon psychiatrists in hospital settings were assessed.¹⁶ Approximately 2,500 psychiatrists with active hospital affiliations completed a survey. These psychiatrists were chosen from a list of American Psychological Association (APA) psychiatrists who participated in a survey in 1988. The survey consisted of demographic questions and questions relating to feeling pressure to discharge early, to change inpatient practices and to dissuade admission of certain types of patients. The results demonstrated that greater than three quarters of the participants experienced some pressure from insurers who desired earlier discharges of patients than did the psychiatrists. Two thirds of the respondents reported limitations on length of stay in their primary

hospital. Two thirds of the respondents dealt with requirements of an insurance company for authorization for a hospital stay. Twenty percent (20%) were pressured not to admit Medicaid-HMO patients. Eighteen percent (18%) were pressured not to admit extremely ill patients. Furthermore, the results suggested that if the psychiatrist was a woman, was new to the field, had a high net income (before taxes were removed), or attended medical school outside of the United States of America, he or she would be more likely to suffer from a loss of professional autonomy. This research demonstrated the loss of autonomy in making medical decisions regarding patients who were covered by a managed care organization.

This data, however, was somewhat misleading because the methods that were utilized to perform the data analysis were obscure. The researchers chose to use linear regression models to draw conclusions of cause and effect between demographic variables and variables relating to constraints upon practice procedures. They stated the frequencies of responses and listed linear regression models in the form of percentages of likeliness to suffer from loss of autonomy if the psychiatrist fell within certain risk-groups. For example, if the psychiatrist had been practicing for a long time, he or she was approximately 30.1% less likely to suffer from pressures to discourage the admission of uninsured patients. If this person was a woman, she was 13.0% more likely to suffer from pressures to discourage the admission of uninsured patients. The researchers felt that the results were generalizable to psychiatrists. The discrepancy arose in that there was no listing of correlation coefficients, nor were there any references that would have demonstrated that they were tested for. Therefore, the linear regression models were incapable of demonstrating a cause and effect relationship or even significant correlations from which conclusions could be drawn.

This study could have been greatly improved with the application of bivariate

correlation coefficient analysis to draw conclusions of significant correlations and then linear regression analysis could be performed to draw conclusions of cause and effect relationships.

The Implications of Managed Care on Health Care Providers

Managed care may be attractive to physicians because there is a “guaranteed flow of patients”.⁹ However, this trade off may be one sided as physicians' fees are lowered and constraints on professional autonomy are imposed upon them. Under managed care contracts, physicians can be dictated the number of diagnostic tests they can perform on patients or the number of physician visits the patient is allowed to have. “As the managed care market approaches maturity, and the growth rate falls, physicians will likely see an increase in the infringement on their autonomy ... [and] see more constraints and guidelines for the more costly therapies and medications”. In addition, “physician groups will feel the pressure of constraints placed upon them”. “As more physician practices increase their involvement with managed care, autonomy begins to erode”.¹⁷

Physician specialists are feeling the crunch of managed care as they are gradually phased out of the managed care arena. “Many managed care organizations restrict access to specialists because they tend to perform more tests and procedures than generalist physicians.”¹⁷ The professional autonomy of physician specialists is being infringed upon as much as that of generalists. Thus, if physician generalists and specialists are experiencing the loss of autonomy due to managed care, surely other areas of the health care system are experiencing this as well.

An article entitled *The Challenge of Managed Care and Managed Competition* decrees that radiologists will bear the brunt of managed care favorably.¹⁸ “As a whole, radiologists have

emphasized good quality at moderate cost and elimination of unnecessary procedures"; thus, the professional autonomy of radiologists will not suffer. However, the authors feel that cost will overcome quality for the reason that "cost is easier to measure" and radiologists will experience pressure to reduce costs.

Although exiguous information exists on the effects of managed care on physical therapy practice, the few articles that exist state opposing perceptions. One physical therapist states that "in a capitated payment system or HMO medical care system, where less care equates to lower cost, higher profit and increased salaries, defining severity [of a musculoskeletal impairment] becomes more important".² However, another physical therapist states that the intent of managed care is to challenge us [physical therapists] to be accountable for our assessments and treatments and focus on outcomes that are centered around our patients¹, not provide less care. The problem, then, may not be the basis of managed care, but the fact that the methods used to implement managed care far exceed the basic premise of managed care.

Why is it Important to Study Board Certified Physical Therapy Specialists?

While it was not the intent of the author to postulate that generalists have more professional autonomy than specialists or vice-versa, physical therapy specialists were chosen as the subject group because physical therapy specialists practice in various employment settings and have never been taken into consideration in pre-existing research. It is important that specialists be recognized in this era of managed care because so far, there has been no research generated on their perceptions toward the ever changing health care system, therefore, nothing has ever been generalizable to them specifically.

Furthermore, the literature that was available on physical therapy specialists deemed them as leaders of their profession. In 1981, Ms. Susanne Hirt, the sixteenth Mary-Mc Millan lecturer devoted her entire lecture to the specialists.¹⁹ At that time, the term "clinical specialist" was just gaining formal recognition from the American Physical Therapy Association with the award of "certified clinical specialist". She stated that the role of the specialist was to be a "role model, a preceptor, and a teacher of teachers" and that the specialists would help to signify the role of the physical therapist in modern society and therefore, may display behaviors or attitudes toward managed care that can serve as a foundation to enhance professional autonomy. Ms. Ruth Purtilo, a speaker at the 1997 Combined Sections Meeting, felt that governmental bodies will base decisions regarding the physical therapy profession and its services upon how the specialists affect the cost and quality of physical therapy services.²⁰

Conclusion

Is it possible that the growth of managed care is a type of renaissance or rebirth of the health care system? Can we, as physical therapists, benefit from managed care? Can we practice in a manner in which our professional autonomy will not be infringed upon? The premise of managed care emphasizes quality, effective interventions, guidelines for practicing effectively, and low cost.²¹ How can this be detrimental to physical therapist's professional autonomy? Managed care, in its most pure form, seeks to enforce 'accountability' and 'agency' through processes such as peer-review, external review and utilization review.⁶ However, it is just these processes that some medical professionals claim are eroding their professional autonomy. How can this be? Possibly the answer lies within the most stringent types of utilization review in which there is a denial for services received, thus leading to payment denial. This leads to a negative incentive for

providing a particular service. However, going back to the theories of accountability and agency, the vitality of our professional autonomy lies within placing the needs of our patients above financial interests and being an advocate for the patient if necessary.

“As vital health professionals, physical therapists are well positioned to anticipate, shape and influence the answers to” the aforementioned questions. It is apparent that managed care is continuously evolving, thus, physical therapists should be on the cutting edge of the changes.

After completing a literature search, I was unable to find data on the effects of managed care on autonomous practice on board certified physical therapy specialization practitioners. There is a gap in the available research about this topic. As illustrated in this literature review, there are various literature works on other medical health care professionals, including physical therapists, and the manner in which managed care effects them. However, there is a chasm into which board certified physical therapy specialist practitioners fall concerning this area of research.

Research in the area of the effects of managed care on autonomous practice of board certified physical therapy specialists needs to be done. It is important for physical therapists who are wishing to enter a specialization practice to know the amount of professional autonomy or lack thereof they will possess directly relating to managed care.

The succeeding chapter will illustrate the methodology of this study on the effects of managed care on the professional autonomy of board certified physical therapy specialists' practice.

METHODOLOGY

Chapter 3

Overview

This chapter will illustrate the methodology of the research project. The design of the study, the sample population, the instrument, the informed consent and data analysis will be described. Lastly, a conclusion will bring all of the information in this chapter together.

Design of the Study

The study was a qualitative descriptive design. The independent variables were the specialization, percent of patient load of patients covered by managed care insurance, employment setting, years of experience as a physical therapist prior to becoming a specialist, years of experience as a specialist, geographic area and direct-access/non-direct-access state. The dependent variables were variables associated with professional autonomy and the perceived level of professional autonomy within managed care which was measured by a self-generated survey. The survey consisted of 10 questions which were the dependent variables.

The Sample Population

The accessible population or the sample consisted of 200 randomly chosen board certified physical therapy specialists in the areas of geriatrics, pediatrics, neurology, orthopedics, cardiopulmonary, and sports medicine who practiced in the United States of America. The systemic sampling technique was used to insure a random selection of specialists. A list of board certified physical therapy specialists was obtained from the management information systems department of the American Physical Therapy Association. Each person on the list was given a number corresponding to the order in which they appeared on the list. Next, a random number

generator was applied to this list to ensure the most optimal random selection of participants in the study.²²

During the month of August, 200 surveys were randomly distributed to board certified physical therapy specialists throughout the United States of America. This reflected approximately one eighth of the total population of board certified physical therapy specialists in the country.²³

The Instrument

The subjects were interviewed by a self-generated written questionnaire. The instrument employed a series of questions regarding the perceived level of autonomy in a managed care environment and variables that may affect the level of professional autonomy. The respondents choose from a set of five responses (never, almost never, sometimes, almost always, always) to answer each question. The questions that appeared on the survey were derived from various literature that referred to managed care and its effects on autonomous practice.^{2,5,6,14,15,16} The operational definition of professional autonomy was included on the survey instrument so that the respondents could answer the questions within the context of the definition of professional autonomy. After completing a pilot study on the instrument in which 20 board certified physical therapy specialists were surveyed, there were no consistent suggestions of corrections to be made other than one mnemonic which was 'certified' rather than 'licensed' in a particular specialization. See Appendix A for a sample copy of the demographics sheet, the survey instrument and the informed consent form.

The Informed Consent

Prior to participating in the interview, the subjects were given an informed consent to read and keep. In order to protect confidentiality of respondents, the respondents were not required to mail back a signed consent. A statement was added to the consent form that if the respondent returned the survey filled out, he or she had given consent for the responses to be used in the study.

Data Analysis

The responses were measured using a 5-point Likert Scale which reflected the attitudes expressed by the participants. Frequency distributions illustrated the frequency of responses of any given variable.

Pearson's correlation coefficient was calculated for all variables to locate any correlations that may have existed.²² This was the appropriate statistic to use to analyze qualitative ordinal data.

Conclusion

In conclusion, this was a qualitative descriptive study that employed the use of a self-generated written questionnaire. Two hundred board certified physical therapy specialists were selected throughout the country and asked to answer the questions on the survey as honestly as possible. The surveys were returned to the researcher in self-addressed-stamped envelopes. The data was analyzed using frequency distributions and the Pearson's correlation coefficient test.

CHAPTER 4

Data Analysis

The following chapter illustrates the data analysis that was performed on the data. SPSS for Windows 7.5 was the statistical package utilized to perform the data analysis for this study.

The Sample Population

Out of the 200 surveys that were mailed out with self-addressed-stamped envelopes, 111 were returned correctly filled out (55.5% response rate). For the purposes of this study, the demographical data obtained reflected the independent variables. The following figures represent the highest frequency of responses (in percentage) to questions regarding demographics. The specialization most represented by this sample size was the orthopedic specialization (47.7% of the sample population).

Figure 1: Specialization (n=111)

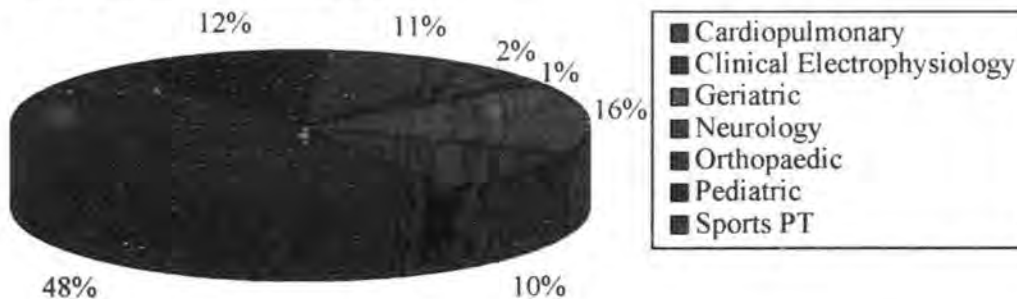


Figure two illustrates the highest frequency of years of experience as a licensed physical therapist which was eleven to fifteen years (40.5% of the sample population).

Figure 2: Years of Experience as a PT (n=111)

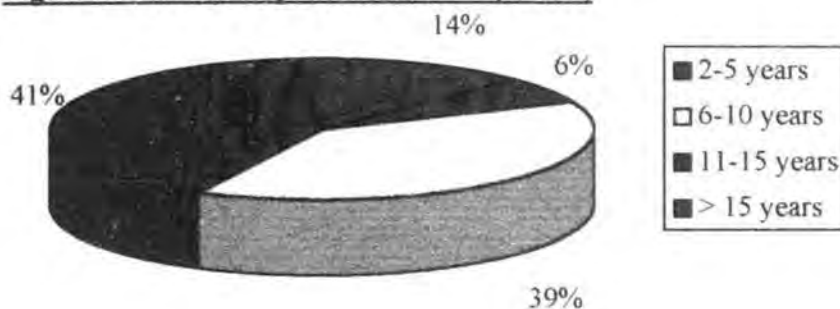


Figure three illustrates the highest frequency of years of experience as a board certified physical therapy specialist which was two to five years (63.1 % of the sample population).

Figure 3: Years of experience as a specialist (n=111)

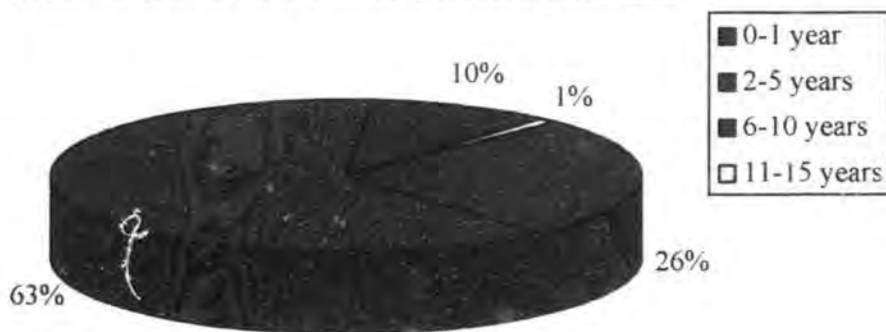


Figure four illustrates the highest frequency of percentage of patients covered by managed care insurance reported by the respondents was 1% to 25% (30.6 % of the sample population).

Figure 4: Percentage of Patient Load Consisting of Patients Covered by Managed Care Insurance (n=111)

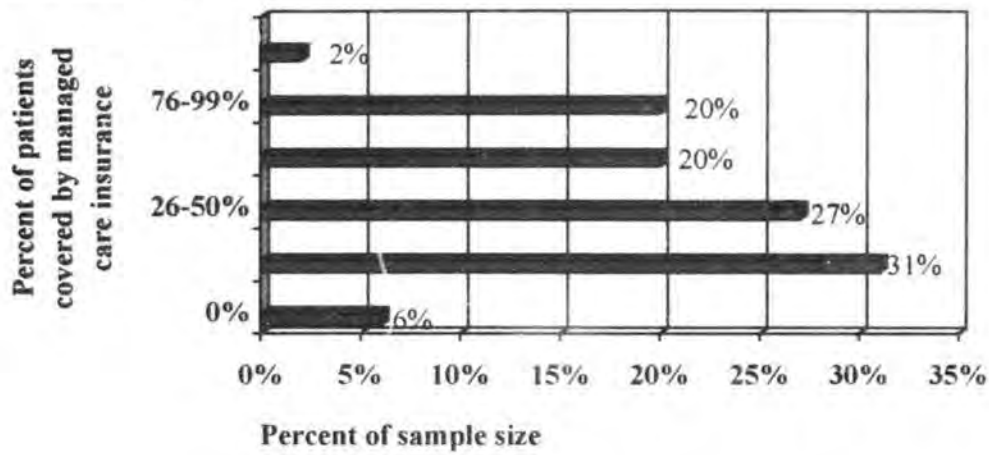


Figure five illustrates the highest frequency of response for the employment setting was an out-patient clinical setting (49.5% of the sample population).

Figure 5: Employment Setting (n=111)

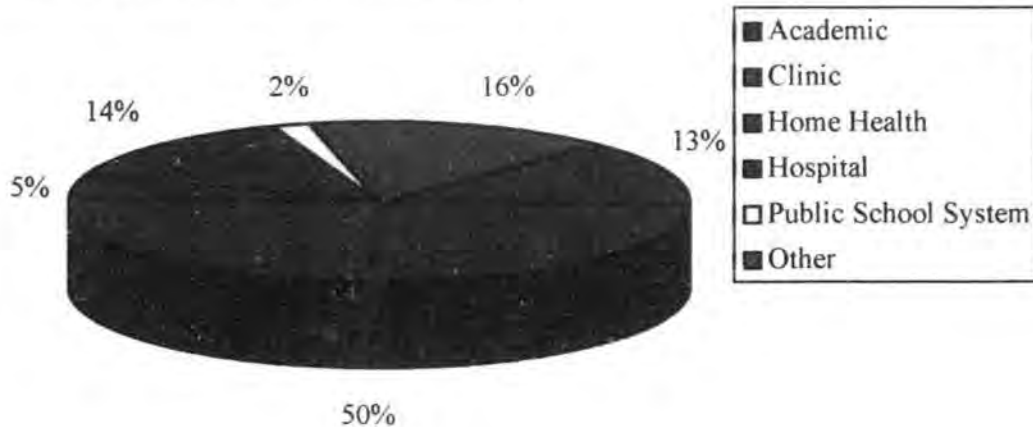


Figure six illustrates the highest frequency of geographical area represented was the northeast (47.0% of the sample population).

Figure 6: Geographical Area

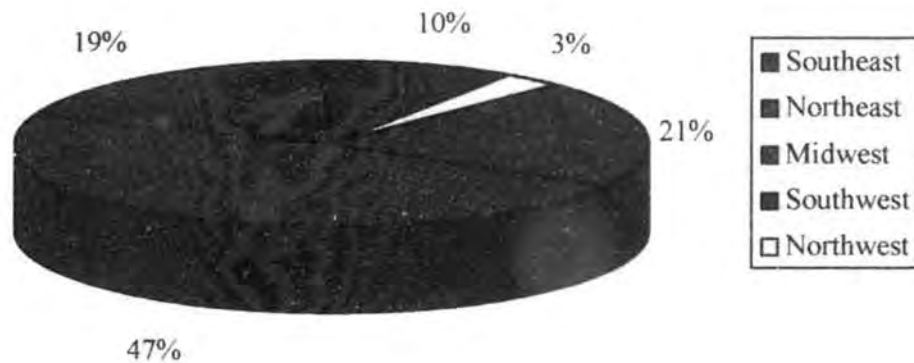
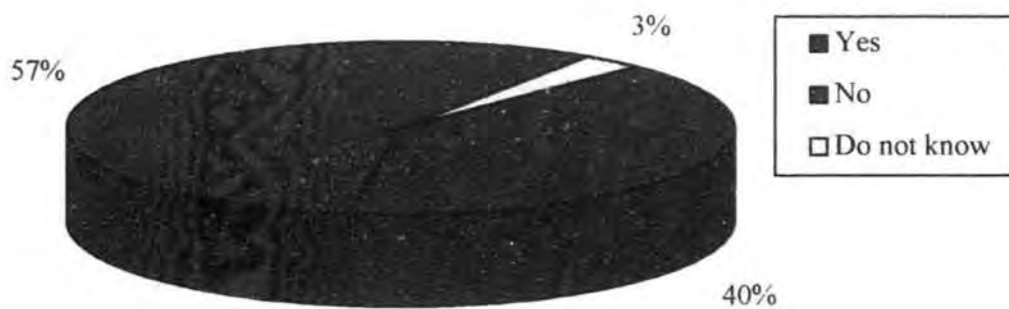


Figure seven illustrates that 56.8% of the respondents did not practice in a direct-access state.

Figure 7: Direct access state



Overview of Significant Findings

The responses on the survey of each participant represent the dependent variables. The responses are listed below in Table 1. Graphs in Appendix B provide a graphical representation of the following responses.

Table 1: Numerical values of amount of respondents (N) and percentage of sample population (%) and the corresponding responses to questions 1-10 on the survey

Question #	Response of always (5)		Response of almost always (4)		Response of sometimes (3)		Response of almost never (2)		Response of never (1)	
	N	%	N	%	N	%	N	%	N	%
1 - felt a change in practice procedures	22	19.8	45	40.5	29	26.1	6	5.4	9	8.1
2 - felt a decrease in professional autonomy	14	12.6	29	26.1	41	36.9	18	16.2	9	8.1
3 - treat patients less frequently than necessary	12	10.9	11	9.9	50	45.5	11	10.0	12	10.9
4 - document more thoroughly	19	17.4	23	21.1	37	33.9	22	20.2	8	7.3
5 - insurance companies dictate number of patient visits	23	20.9	49	44.5	24	21.8	10	9.1	4	3.6
6 - seeing more patients for evals and treatment	6	5.6	19	17.6	22	20.4	36	33.3	24	22.2
7 - standards of PT profession will increase	20	18.9	35	33.0	38	35.8	11	10.4	2	1.9
8 - treat all patients equally	40	36.4	32	29.1	20	18.2	16	14.5	2	1.8
9 - more professional autonomy as a specialist than as a generalist	2	1.8	7	6.3	28	25.2	41	36.9	33	29.7
10 - clinical decisions overridden by decisions of insurance companies	5	4.6	13	11.9	55	50.5	24	22.0	12	11.0

Frequency distributions were implemented to identify the frequency of responses pertaining to specific specializations. Note that since there were only two respondents representing the cardiopulmonary specialists and one respondent representing the electrophysiology specialists, they were eliminated from the data analysis. Thirty-eight and seven-tenths percent (38.7%) of the respondents surveyed always or almost always felt that they had a decrease in professional autonomy due to managed care. Whereas, 24.3% of those surveyed never or almost never felt that they have a decreased amount of professional autonomy due to managed care. The highest frequency of responses, 36.9%, fell within the category of sometimes in which the respondents felt a decreased amount of professional autonomy due to managed care. According to this data, there appears to be a slightly higher amount of respondents who felt a loss of professional autonomy due to managed care, however, the percentages were not overwhelmingly skewed toward either extreme. Through data analysis, it was revealed that the pediatric specialists felt the highest loss of professional autonomy due to managed care (53.8%), followed by orthopedic specialists (41.5%), neurology specialists (36.4%), sports physical therapy specialists (30.8%). The geriatric specialists (27.8%) experienced the least loss of autonomy due to managed care.

Respondents were asked if they ever felt that they saw patients for treatments less frequently than necessary (according to their professional judgment) and 23.0% never or almost never experienced that, whereas 20.8% always or almost always experienced that. These figures are fairly equal. The remaining respondents fell into the middle-ground answering that they sometimes have experienced seeing a patient less frequently than necessary. It is evident that there was a normal distribution of responses to these questions with no skew in either direction.

The specialists who experienced this the most were the pediatric specialists (55.5%), followed by the orthopedic specialists (37.7%), the neurology specialists (36.4%), the geriatric specialists (33.3%). The sports physical therapy specialists (7.7%) felt the least effects in this area.

There was a response of 65.4% answering always or almost always to the question number five on the survey. Respondents were asked if they felt, that as a result of managed care, insurance companies dictated the number of visits their patients received. The specialization that experienced this the most was the orthopedic (73.6%), followed by pediatric (66.6%), geriatric (61.1%), neurology (54.4%). The sports physical therapy specialists (46.2%) experienced this the least.

As a follow-up to the above question, respondents were asked if they felt that clinical decisions regarding patient treatments or plans of care were overridden by decisions of insurance companies. Fifty and five-tenths percent (50.5%) of the respondents answered that sometimes they felt that this had occurred to them, 33.0% felt that this had never or almost never occurred to them and 16.5% felt that this always or almost always occurred to them. Pediatric specialists (30.8%) have experienced the highest incidence of this, followed by geriatric specialists (22.2%), orthopedic specialists (15.7%), neurology specialists (9.1%). The sports physical therapy specialists (0.0%) experienced this the least.

Respondents were asked whether they felt that the growth of managed care would lead to an increase in the standards of practice of the physical therapy profession. Fifty-one and nine-tenths percent (51.9%) felt that the standards of the physical therapy profession would always or almost always increase as a result of managed care, whereas 12.3% felt the standards of the physical therapy profession would almost never or never increase due to managed care.

When the respondents were asked if they treated all patients equally regardless of coverage limitations, 65.5% answered that they always or almost always treated patients equally and 16.3% never or almost never treated patients equally.

The respondents were asked if they experienced an increased amount of professional autonomy as a specialist than as a generalist and 66.6% of the respondents felt that they never or almost never felt an increase in professional autonomy. A small percentage, 8.1%, of respondents felt that they always or almost always experienced increased professional autonomy as a specialist than as a generalist and 25.2% sometimes experienced an increase in professional autonomy. Of those who answered always or almost always, the following specialists have experienced this increase in professional autonomy: geriatric specialists (16.7%), followed by the sports physical therapy specialists (15.4%), the neurology specialists (9.1%), the pediatric specialists (7.7%), and the orthopedic specialists (3.8%).

Pearson's bivariate correlation tests were used to identify any significant correlations between two variables. Portney and Watkins suggest the following guideline when assessing the strength of association between two variables: $r = .50-.75$ prove a moderate to good association.²² Taking this into consideration, significant correlations ranged from $r = .614$ to $r = .192$, $n = 111$, $p\text{-value} = .01$. The associations that fell into the $r = .50-.75$ range show a moderate to good degree of relationship. Please refer to the table below for an illustration of each correlation that fell within this range.

Table 2: Pearson's Correlation Coefficient Values $|r|$ moderate to good association

VARIABLE 1	VARIABLE 2	r
Feeling a decrease in professional autonomy as a result of managed care.	See patients less frequently than necessary as a result of managed care.	.614
Feeling a decrease in professional autonomy as a result of managed care	Feeling that clinical decisions regarding patient care are	.665

care.	overridden by decisions of insurance companies.	
Feeling a decrease in professional autonomy as a result of managed care.	Feeling a change in practice procedures as a result of managed care.	.575

There were many correlations that fell into the fair range of association ($r=.25-.49$)²² and therefore all will not be mentioned, however, some key trends can be identified from these number groupings. A significant correlation was identified between feelings of less professional autonomy when it came to patient treatment and the percent of patients covered by managed care ($n=111$, $r=.322$, $\alpha=.01$). A significant correlation was identified between feelings of less professional autonomy and insurance companies that dictated the number of visits a patient received. A significant correlation was found between percentage of patients covered by managed care insurance and insurance companies that dictated the number of visits a patient received ($n=111$, $r=.272$, $\alpha=.01$).

The following chapter will present a discussion of these results.

CHAPTER 5

Discussion

Answers to Guiding Questions

To answer guiding question number one, the majority of respondents did not perceive an increase in professional autonomy as a specialist than when they were a generalist (66.6%). Of the small percentage of respondents who perceived an increased amount of professional autonomy as a specialist than as a generalist (8.1%), the geriatric specialists perceived the highest increase in professional autonomy.

In response to guiding question number two, it is interesting to note that overall, the respondents felt an intrusion into professional autonomy as a result of managed care. Seventy-five and six-tenths percent (75.6%) of the respondents reported a decrease in their level of professional autonomy due to managed care with responses ranging from sometimes to always. Of that 75.6% of respondents, the highest frequency of responses came from the pediatric specialists, followed by the orthopedic, neurology, and sports physical therapy specialists. The geriatric specialists expressed the least loss of professional autonomy due to managed care.

In response to guiding question three, there appeared to be variables which detracted from the amount of professional autonomy with which these therapists practiced. Over 50% of those surveyed felt that their clinical decisions were sometimes overridden by the decisions of insurance companies. Furthermore, 65.4% of therapists surveyed felt that they always or almost always experienced insurance companies that dictated the number of visits the patients received, and lastly 45.5% sometimes felt that they saw a patient less frequently than necessary. These claims were further supported by the fact that correlational analysis revealed that the aforementioned

three variables had moderate to good associations with a decrease in professional autonomy. These findings were consistent with claims made by various health care professionals including physical therapists. Mooney stated that physical therapists were being forced to define the severity of an impairment, but insurance companies were calling for therapists to provide less care in order to lower costs². In other words, insurance companies were allowing patients less visits for treatments and evaluations in order to lower their (the insurance company) costs. This data suggests that insurance companies may not be making decisions based on the well-being or interests of the patients. If insurance companies are dictating the number of visits a patient may receive and yet the physical therapists, the experts in movement related dysfunction, do not feel that they are seeing the patient as frequently as necessary, the patient is not receiving the optimal amount of consideration or care from their insurance company. Thus, dealing with managed care insurance companies was an area where professional autonomy decreased according to these respondents.

Correlational analysis revealed that the percent of patients covered by managed care insurance had an influence upon how the respondents perceived their level of professional autonomy. A significant correlation was identified between percent of patients covered by managed care and perceived loss of professional autonomy when it came to their patient's treatment ($n=111$, $r=.322$, $\alpha=.01$). In other words, as the percentage of patients covered by managed care insurance increased, feelings of loss of professional autonomy increased as well. This could have been due to increased involvement of insurance companies in the plan of care of the patient (i.e. pre-authorization for visits, coverage limitations, reimbursement issues).

How do the Results of this Study Relate to Previous Studies?

The results of this study do not agree with the results of Sage's study in that overall, the respondents in this study perceived a loss of professional autonomy, whereas in Sage's study, therapists did not perceive a loss of professional autonomy. I attribute this to three possibilities. The first could be that Sage's study could have identified perceptions of generalists while this study identified perceptions of specialists. The second possibility could be differing methodologies and testing instruments. However, I feel that the more likely possibility is that Sage's study was done in 1996 and it is now 1998. I feel that this study identified current trends. If this possibility is in fact the correct one, it is evident how the perceptions of professional autonomy have changed over the course of two years.

As previously mentioned, the findings of this study are consistent with the following claims: insurance companies are dictating the number of visits a patient may receive, therapists are seeing patients less frequently than they [the therapists] feel is necessary and clinical decisions are being overridden by the decisions of insurance companies and all of these claims were implicated as variables that decrease the amount of professional autonomy that the respondents practiced with.

What Does the Future Hold?

Fifty-one and nine-tenths percent (51.9%) of the therapists surveyed agreed that managed care always or almost always will cause the standards of the physical therapy profession to increase. In Chapter 1, reference was made to the fact that "managed care at its most basic level challenges us to be accountable and look at patient centered outcomes"¹ and in Chapter 2, reference was made to the premise of managed care which emphasized quality, effective

interventions and guidelines for practicing effectively.²¹ It would stand to reason that when taking these claims into consideration, the standards of the physical therapy profession should increase as a result of managed care. The results of this research indicate an agreement with this extrapolation.

Data obtained from this research indicated that only 36.4% of the respondents always treat all patients equally regardless of coverage limitations. This means that out of 100 patients, there are 63 who are receiving unequal treatment.

An interesting trend was identified through analyzing two particular demographic characteristics of the sample population. It is clear that while 80.0% of the respondents had been a licensed physical therapist for two to ten years prior to becoming a specialist, 63.0% of the respondents had been specialists for two to five years and only 1.0% had been a specialist for eleven to fifteen years. This trend indicates that specialists possibly may not be renewing their certification after the required ten years. The American Physical Therapy Association requires that all Board Certified Physical Therapy Specialists renew their certification every ten years and must show proof of having completed two-thousand clinical hours within that ten year span.²³ They have the option of taking a recertification exam or presenting a portfolio to become recertified. Thus, as illustrated by the demographic characteristics of this randomly selected sample population, the majority of specialists do not appear to be getting recertified after ten years. One possible speculation is that in reviewing the results of this research, they may be suffering from a loss of professional autonomy. Another speculation could lie in the current controversy over specializations in physical therapy. Opponents of specialization in physical therapy have expressed concern that specialization will cause therapists to become too focused on a

particular area of expertise and may lose the ability to look beyond that specialization to broader issues or treatments or diagnoses. It could be that after becoming a specialist, the respondents came to feel this way as well and therefore, did not become recertified. It was not the intent of this study to identify cause and effect regarding this trend, therefore, should be addressed in another study.

Generalizability of Results

Every measure was taken to ensure a random selection of participants, therefore, the amount of respondents from each specialization was not able to be controlled for, nor was the amount of respondents from each geographical area controlled for. Unfortunately only one respondent represented the electrophysiology specialists and two respondents represented the cardiopulmonary specialists. Therefore, the results as they apply to each specialization individually are not generalizable, however, the results as they apply to the sample group are generalizable to specialists as a collective group.

Limitations of the Study

- The randomization process was a limitation because I was not able to control for a specific amount of specialists from each field.
- The results of this study are only generalizable to the participants in this study. I feel that the following occurrences detracted from the ability of these results to be generalizable to all specialists throughout the country. First, there was an inadequate amount of specialists represented by the cardiopulmonary and clinical electrophysiology specializations. Second,

while I received a 55.5% response rate, this only represented approximately 10% of the certified specialists throughout the country.

- The instrument was not tested for reliability, therefore, it was not possible to deduct if the instrument would be successful in identifying perceptions of autonomy in further research.
- The instrument has face validity. I did have the instrument reviewed by a faculty member, however, in retrospect, I do not feel that one expert opinion is enough to establish content validity.
- This research was conducted through the mail, therefore, the respondents may not have answered completely truthfully. This could have contributed to an external threat to validity.

Suggestions for Further Studies

Topics for further research include the following:

- Use the instrument of this study to survey generalists and draw comparisons between generalists and specialists perceptions (omit question number nine).
- Identify proactive behaviors of specialists and generalists in managed care environments who do not feel an intrusion of professional autonomy.
- Increase the sample size of this study and control for respondents from each of the specializations.
- Conduct the same study in two years to see if the same trends are occurring in two years that were identified in this study.

Conclusion

The trends identified in this study give reason for further inquiry about behaviors and attitudes toward managed care as it affects professional autonomy. Overall, the respondents felt

that they practiced with a decreased amount of professional autonomy, however, they also stated that only 36.4% of them always provided equal care to their patients regardless of coverage limitations. Is this an ethical issue or a reimbursement issue?

Autonomy is not a right that one is arbitrarily given just for being a physical therapist. Autonomy is a right that is earned. Physical therapists are given professional autonomy in exchange for practicing accountably and as a change agent for our patients. Furthermore, therapists must practice with patient-centered interests, not interests of financial gain. Principle 3.3 of the Guide to Physical Therapists' Practice states that "a physical therapists' professional practices shall take preference over business practices."²⁴

Now, the global question becomes "how can we, as physical therapists, stop the actions that are detracting from our professional autonomy?" I suspect that this is a multifaceted answer, but we can begin with proactive actions. The following suggestions have been offered by various authors. One of our responsibilities is to be a change agent for our patients⁶ and fight for as much time as we need to optimize their functional independence. Even if we cannot get what we feel is the necessary amount of visits, we need to be creative and cost-conscious when it comes to patient treatments. We need to ask ourselves, "Is this effective and efficient for this patient?" The answer should always be, "Yes." If it is not, it is up to us to rework the plan of care until we can answer, "Yes" to that question. We cannot continue to complain about the constraints of managed care upon professional autonomy because we know that they are already there. It is up to us to focus our energies on patient-centered outcomes¹ and by doing that, we can act as proactively as possible in a managed care environment. Furthermore, by focusing our energies on patient-centered outcomes and being accountable for our actions, we will be practicing within the

basic premise of managed care^{1,5}. The more physical therapists there are who practice in this proactive manner, the more we will be able to maintain our right of practicing with professional autonomy.

It appears that managed care is here to stay. At some point in most therapist's careers in the United States of America, they will encounter it at some level. How we view managed care may effect how we are treated by it. In other words, an optimistic proactive view needs to be taken in order to optimize the health of our patients in a limited amount of time.

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²¹*The Power of Physicians: Autonomy and Balance in a Changing System*. The American Journal of Medicine. 1995;99:579-586.

²²Portney LG., Watkins MP. Analysis of Survey Data. In: *Foundations of Clinical Research Applications to Practice*. East Norwalk, Conn: Appleton & Lange; 1993:267-268.

²³Bedwell C. 27 Board-Certified PT Specialists to be Honored for Recertification at CSM. PT Bull. Feb. 7, 1997;20.

²⁴*Guide for Professional Conduct*. American Physical Therapy Association. 1997.

APPENDIX A

NOVA
SOUTHEASTERN
U N I V E R S I T Y
COVER LETTER

Dear Board Certified Physical Therapy Specialist:

I am conducting research on the perceived effects that managed care has had on autonomous practice of Board Certified physical therapy specialists. I would greatly appreciate your honest responses on the following survey.

There will be no risk to you as I have assured confidentiality. I will request that you fill out the attached demographics form, however, your name will never be disclosed to me

A benefit to you is that you will be part of what I hope will be a study that lays the groundwork for many to follow in its place. Furthermore, this study will benefit future therapists as they emerge into their chosen field of specialization. They will know how much the perceived level of professional autonomy is in their specialization and can act proactively to enhance the professional autonomy in that specialization.

There will be no monetary cost to you. I have included a self-addressed-stamped envelope for you to place your completed survey in. I realize that you are a very busy individual, therefore, I have calculated the time necessary to completely fill out the survey to be about twenty minutes.

If you have any questions, please do not hesitate to call me. My telephone number is (305)558-5532 or you can e-mail me with questions at Cdiezel@hpd.acast.nova.edu.

Thank-you for your time and your participation in this study. I am hoping to become a Board Certified Physical Therapy Specialist in the future and I look forward to contributing to the field as much as you have.

I have been satisfactorily informed of the above-described procedure with its possible risks and benefits. I understand that by returning the completed survey to Cami H. Diezel, I am giving my permission for my participation in the study. I understand that I am free to withdraw my participation in this study at any time, even after returning the survey.

HEALTH PROFESSIONS DIVISION

COLLEGE OF OSTEOPATHIC MEDICINE • COLLEGE OF PHARMACY • COLLEGE OF OPTOMETRY
COLLEGE OF ALLIED HEALTH • COLLEGE OF MEDICAL SCIENCES • COLLEGE OF DENTAL MEDICINE

3200 South University Drive • Ft. Lauderdale, Florida 33328 • (954) 262-1000 • Fax (954) 262-1714

Please return this completed survey to **Cami Diezel, 15650 Bull Run Road, Apartment #605J, Miami Lakes, FL 33014** in the enclosed self-addressed stamped envelope by **SEPTEMBER 19, 1997**. Thank-you for your participation in this research.

DEMOGRAPHICAL INFORMATION

1) Please check the specialization in which you are certified:

- | | |
|--|--|
| <input type="checkbox"/> Cardiopulmonary | <input type="checkbox"/> Orthopaedic |
| <input type="checkbox"/> Clinical Electrophysiologic | <input type="checkbox"/> Pediatric |
| <input type="checkbox"/> Geriatric | <input type="checkbox"/> Sports Physical Therapy |
| <input type="checkbox"/> Neurology | |

2) In general what percentage of your patient load consists of patients covered by managed care insurance? (Please check one).

- | | | |
|------------------------------------|------------------------------------|------------------------------------|
| <input type="checkbox"/> 0% | <input type="checkbox"/> 1% - 25% | <input type="checkbox"/> 26% - 50% |
| <input type="checkbox"/> 51% - 75% | <input type="checkbox"/> 76% - 99% | <input type="checkbox"/> 100% |

3) What is your current employment setting? (Please check the one response that applies to your job setting most)

- Academic (Physical Therapy academic programs)
- Clinic (Private or Out-Patient)
- Home Health
- Hospital
- Public School System
- Researcher
- Other (Please state) _____

4) How many years did you practice as a licensed physical therapist before you became a Board Certified Physical Therapy Specialist? (Please check one response)

- 0 - 1 2 - 5 6 - 10 11 - 15 More than 15

5) How many years have you been a Board Certified Physical Therapy Specialist? (Please check one response)

- 0 - 1 2 - 5 6 - 10 11 - 15 More than 15

6) Geographical area: (Please write the state in which you are licensed in below)

7) To the best of your knowledge, is your state a "direct - access" state? (Please check one response)

- Yes No I do not know

On the following survey, please recall your experiences of practicing within a managed care health system. Choose the response that best applies to your experiences.

Response choices:

5=ALWAYS

4=ALMOST ALWAYS

3=SOMETIMES

2=ALMOST NEVER

1=NEVER

QUESTIONS

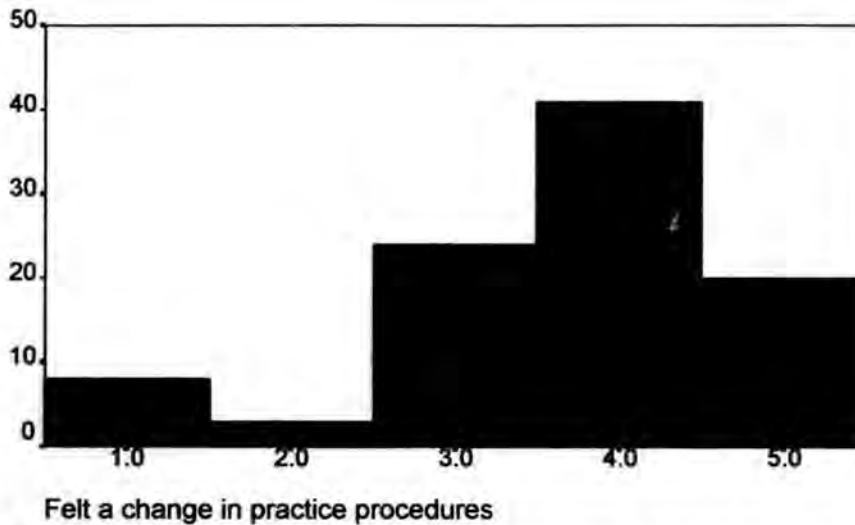
RESPONSE

5 4 3 2 1

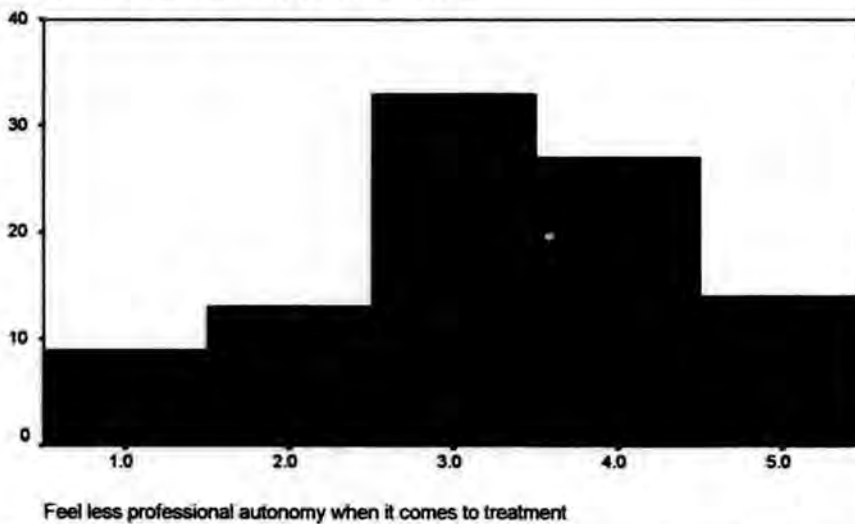
1) I feel (<i>felt</i>) a change in my practice procedures as a result of managed care.					
2) As a result of managed care, I feel (<i>felt</i>) that I have (<i>had</i>) less professional autonomy* when it comes (<i>came</i>) to patient treatments.					
3) As a result of managed care, I feel (<i>felt</i>) that I see (<i>saw</i>) my patients less frequently than they need(<i>needed</i>).					
4) As a result of managed care, I feel (<i>felt</i>) that I have (<i>had</i>) to document more thoroughly.					
5) As a result of managed care, insurance companies dictate (<i>dictated</i>) the number of visits my patients receive (<i>received</i>).					
6) As a result of managed care, I am seeing (<i>saw</i>) more patients for evaluations and treatment.					
7) As a result of managed care I feel that the standards of the physical therapy profession will increase.					
8) I would treat a patient who is (<i>was</i>) covered by managed care insurance in the same manner as one who had private insurance regardless of the coverage limitations.					
9) As a Board Certified Physical Therapy Specialist, I notice (<i>noticed</i>) that I have more professional autonomy* than when I was a physical therapy generalist.					
10) I feel (<i>felt</i>) that my clinical decisions regarding patient treatment are (<i>were</i>) overridden by the decisions of the insurance companies.					

* Operational definition - **Professional autonomy** - The ability to provide warranted physical therapy care without the interruption in the plan of care from unwanted outside influences whose priority may not be the maximum health or independence of the patient.

APPENDIX B

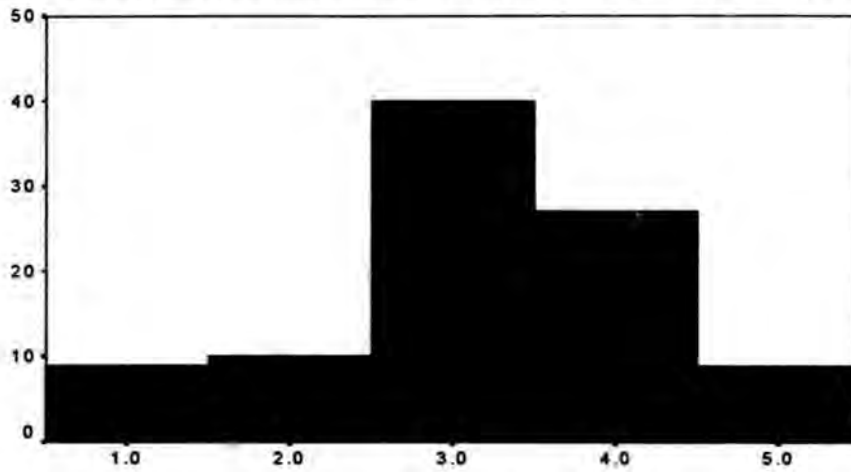
APPENDIX B**GRAPH 1 - PERCENTAGE OF RESPONDENTS WHO FELT A CHANGE IN PRACTICE PROCEDURES AS A RESULT OF MANAGED CARE**

LEGEND (X-AXIS): 1=never, 2=almost never, 3=sometimes, 4=almost always, 5=always

GRAPH 2 - PERCENTAGE OF RESPONDENTS WHO FEEL LESS PROFESSIONAL AUTONOMY WHEN IT COMES TO PATIENT TREATMENT AS A RESULT OF MANAGED CARE

LEGEND (X-AXIS): 1=never, 2=almost never, 3=sometimes, 4=almost always, 5=always

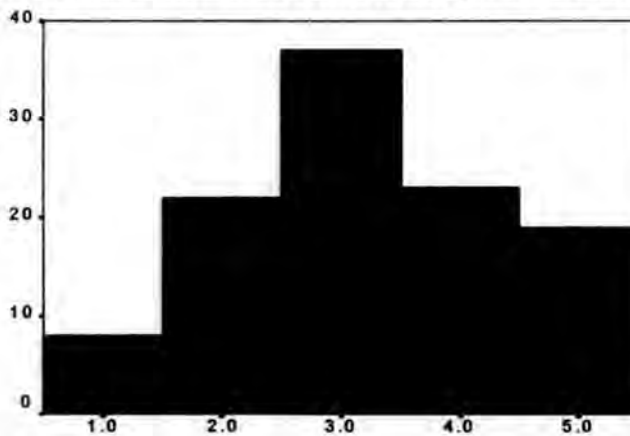
GRAPH 3 - PERCENTAGE OF RESPONDENTS WHO SEE PATIENTS LESS FREQUENTLY THAN NEEDED AS A RESULT OF MANAGED CARE



See patients less frequently than needed

LEGEND (X-AXIS): 1=never, 2=almost never, 3=sometimes, 4=almost always, 5=always

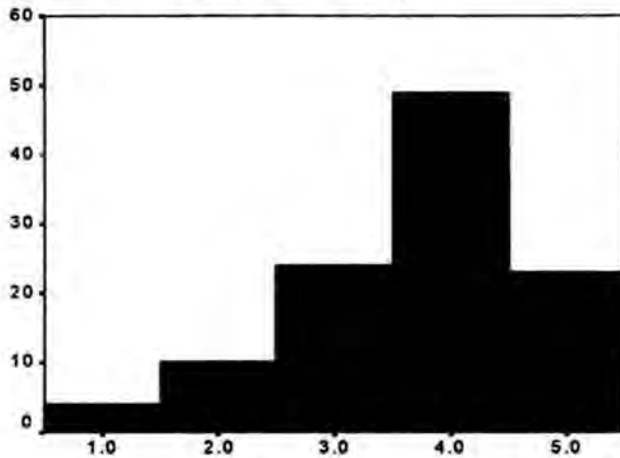
GRAPH 4 - PERCENTAGE OF RESPONDENTS WHO ARE REQUIRED TO DOCUMENT MORE THOROUGHLY AS A RESULT OF MANAGED CARE



Have to document more thoroughly

LEGEND (X-AXIS): 1=never, 2=almost never, 3=sometimes, 4=almost always, 5=always

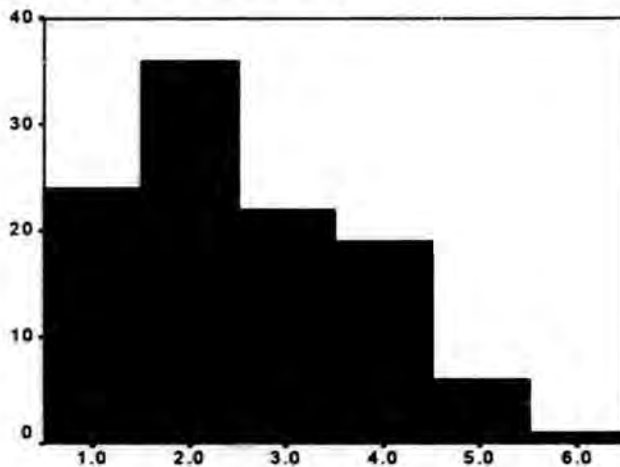
GRAPH 5 - PERCENTAGE OF RESPONDENTS WHO FEEL THAT AS A RESULT OF MANAGED CARE, INSURANCE COMPANIES DICTATE THE NUMBER OF PATIENT VISITS



Insurance companies dictate the number of visits my patients receive

LEGEND (X-AXIS): 1=never, 2=almost never, 3=sometimes, 4=almost always, 5=always

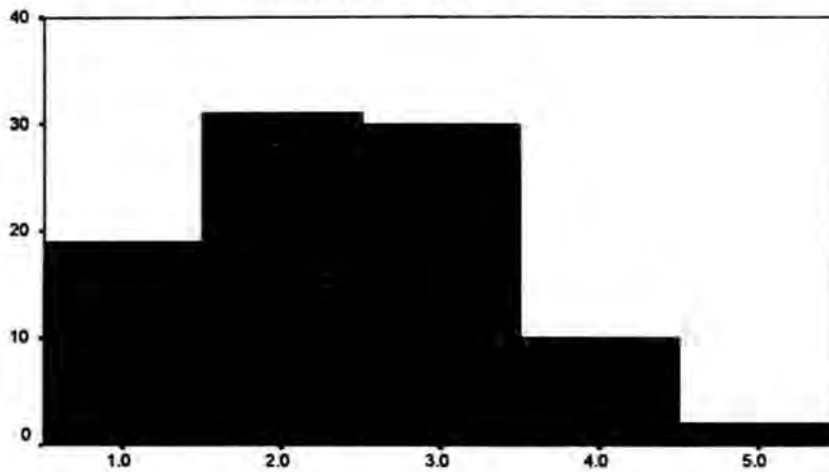
GRAPH 6 - PERCENTAGE OF RESPONDENTS WHO FEEL THAT AS A RESULT OF MANAGED CARE, THEY ARE SEEING MORE PATIENTS FOR EVALS AND TREATMENT



I am seeing more patients for evaluations and treatments

LEGEND (X-AXIS): 1=never, 2=almost never, 3=sometimes, 4=almost always, 5=always

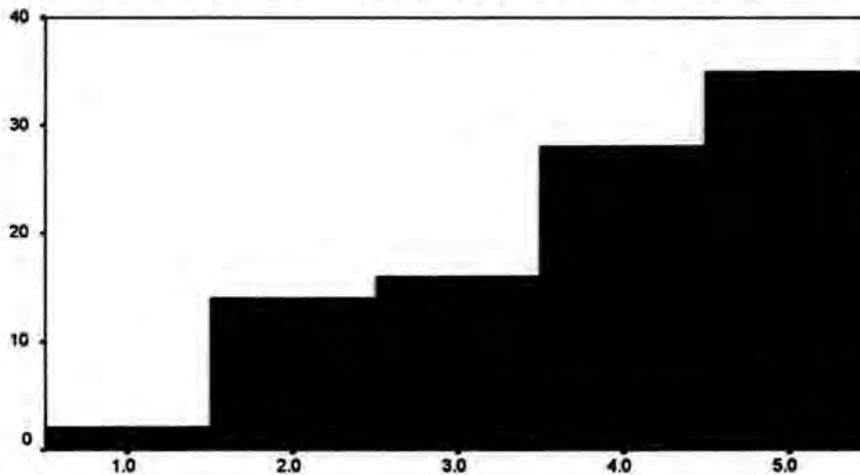
GRAPH 7 - PERCENTAGE OF RESPONDENTS WHO FEEL THAT THE STANDARDS OF THE PHYSICAL THERAPY PROFESSION WILL INCREASE AS A RESULT OF MANAGED CARE



Standards of the physical therapy profession will increase

LEGEND (X-AXIS): 1=never, 2=almost never, 3=sometimes, 4=almost always, 5=always

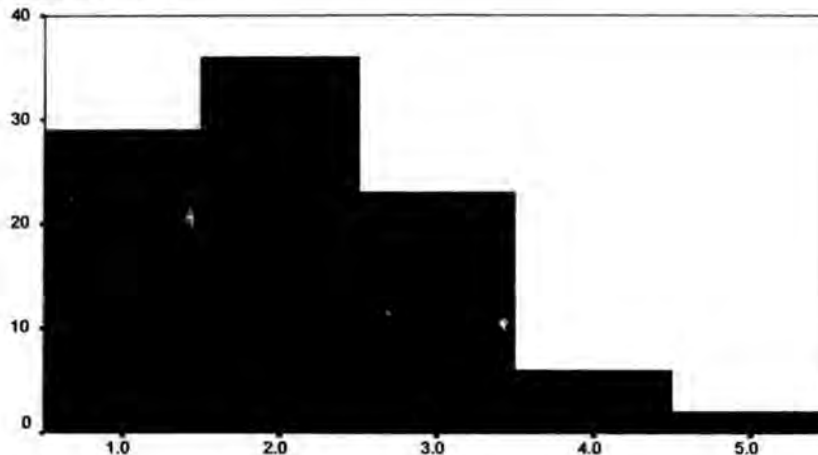
GRAPH 8 - PERCENTAGE OF RESPONDENTS WHO TREAT PATIENTS EQUALLY REGARDLESS OF INSURANCE COVERAGE LIMITATIONS



Treat a patient covered by managed care insurance in the same manner as

LEGEND (X-AXIS): 1=never, 2=almost never, 3=sometimes, 4=almost always, 5=always

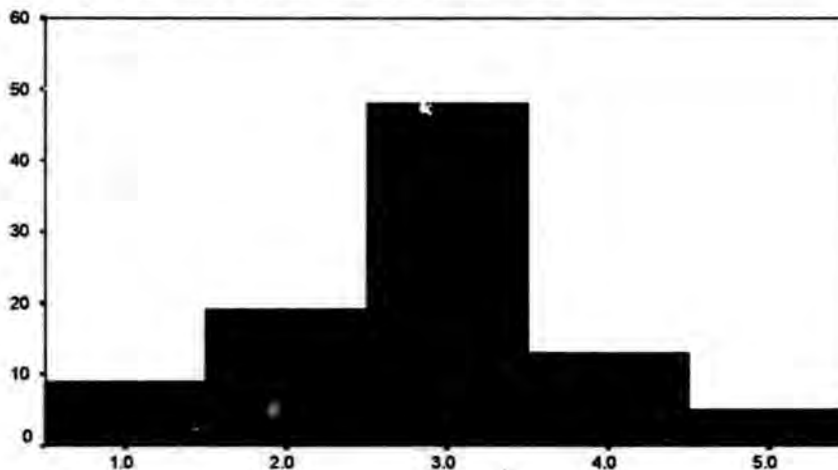
GRAPH 9 - PERCENTAGE OF RESPONDENTS WHO FEEL THAT THEY HAVE MORE PROFESSIONAL AUTONOMY AS A SPECIALIST THAN AS A GENERALIST



More professional autonomy as a specialist than when I was a generalist

LEGEND (X-AXIS): 1=never, 2=almost never, 3=sometimes, 4=almost always, 5=always

GRAPH 10 - PERCENTAGE OF RESPONDENTS WHO FELT THAT CLINICAL DECISIONS REGARDING PATIENT TREATMENT ARE OVERRIDDEN BY DECISIONS OF INSURANCE COMPANIES



Clinical decisions regarding patient treatment are overridden by decision

LEGEND (X-AXIS): 1=never, 2=almost never, 3=sometimes, 4=almost always, 5=always