Future Psychologists' Perceptions of Managed Care

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The University of Southern Mississippi

FUTURE PSYCHOLOGISTS’
PERCEPTIONS OF MANAGED CARE

by

Michele Renae Blood

Abstract of a Dissertation
Submitted to the Graduate Studies Office
of The University of Southern Mississippi
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy

May 2008
ABSTRACT

FUTURE PSYCHOLOGISTS’ PERCEPTIONS OF MANAGED CARE

by Michele Renae Blood

May 2008

This study was designed to examine future psychologists’ perceptions of managed care, as well as their managed care related training and work experience. Data for this project were gathered electronically via a specially designed website. Participants were 119 future psychologists completing predoctoral internships in university counseling centers (n = 61) and hospitals (n = 58). Variables examined included predoctoral interns’ attitudes towards managed care and their perceptions of the importance of knowledge in three critical domains relevant to service provision in the contemporary marketplace (i.e., general reimbursement, risk management, mis-diagnosis). One measure, the Demographic and Practice Information Form (DAPIF), was created specifically for this study. The DAPIF was used to gather basic demographic information as well as information regarding the extent of respondents’ managed care related training and experience. The Practitioners’ Appraisal of Service Delivery Environments (PASDE) was used to measure participants’ attitudes toward managed care. Three subscales on the Practitioners’ Perception of Work Setting (PPOWS) were used to measure participants’ perceptions of knowledge and preparedness in general reimbursement, risk management, and mis-diagnosis. Experimental items were developed for use on PPOWS subscales 2 (i.e., risk management) and 3 (i.e., mis-diagnosis). The addition of the experimental items bolstered the internal consistency of the instruments; therefore, all experimental items were retained. Results of multiple linear regression analysis suggested that predoctoral
interns’ knowledge of both risk management and mis-diagnosis were significant predictors of their attitudes toward managed care, while their knowledge of general reimbursement was not. With one important exception, neither managed care experience, graduate program type (i.e., Ph.D. vs. Psy.D.), nor managed care related coursework was significantly predictive of knowledge in the three domains related to contemporary service provision. Managed care related work experience, however, was significantly related to knowledge/endorsement of mis-diagnosis. Analysis of responses to individual items on the mis-diagnosis subscale of the PPOWS suggested that some predoctoral interns may be inadequately prepared to appropriately navigate commonly encountered managed care related ethical scenarios. Implications for graduate students in psychology as well as those in the crucial position of providing their training are discussed, and suggestions are provided for future research.
DEDICATION

In loving memory of William E. Cayse (1919-2002) and Amelia Boyer (1914 - 1987).
ACKNOWLEDGMENTS

The completion of any scholarly work is rarely a solo achievement. This work is certainly no exception. The writer wishes to express her deep gratitude to those who have generously given their time, talent, and energy to support the realization of this project. For many years, Bill Wagner, dissertation committee chair, has remained dedicated to the completion of a project which became a far lengthier affair than originally intended. His encouragement, attention to detail, and willingness to address countless emails, phone calls and faxes was far and away beyond the call of duty. The writer also wishes to thank her other committee members, all of whom provided outstanding editorial support as well as deeply appreciated scheduling flexibility. Committee members included: Dr. Bill Lyddon, Dr. Darlys Alford, Dr. Emily Bullock, Dr. Bonnie Nicholson, and Dr. James T. Johnson. The writer also wishes to thank Michael Kane, who generously agreed to allow use of adapted versions of two instruments he created.

In addition to the scholarly support of those outlined above, the writer wishes to acknowledge her two sets of parents, who never gave up on this project (nor the writer), despite many hurdles. Without their emotional, spiritual, and financial support, this dissertation would not have been completed. Finally, the writer wishes to thank her amazing husband. His unwavering love, powerful encouragement, and technical expertise are without equal.
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CHAPTER I
INTRODUCTION AND LITERATURE REVIEW

Significance of the Study

The rapidly evolving landscape of the health care system in the United States serves as one of the primary contributors to and indicators of the state of the nation's economy. Data gathered from the Health Plan Employer Data Information Sets (HEDIS) indicate that national health care expenditures rose 9.3% between 2001 and 2002: a figure approaching $1.6 trillion (Cowan, Caitlin, Smith, & Sensenig, 2004). The Centers for Medicaid and Medicare Services (CMS) estimate the contribution of health care dollars to the gross domestic product (GDP) at 15%, and project national expenditures to reach 17% of the GDP by 2012 (Centers for Medicare & Medicaid Services, 2004). The vast majority of these dollars are wholly or partially subsidized by third parties, the most common of which are managed care organizations (Strom-Gottfried, 1998). Managed care organizations are responsible for providing health care for Medicaid recipients in at least 20 states (Busch, Frank, & Lehman, 2004). All military personnel and federal employees, nearly 60% of Medicaid beneficiaries, and 11% of Medicare beneficiaries receive their health benefits via the vehicle of a managed care organizations (Lawson, 2004). Three out of every four citizens of the United States receive healthcare benefits distributed through the vehicle of managed care (Kiesler, 2000). Clearly, mode of health care delivery is an issue of profound political, financial, and social import for citizens of the United States.

The availability of high quality health care hinges largely on the actions and attitudes of the practitioners providing the service. Undoubtedly, attitudes of health care
providers influence their job satisfaction, job performance, and consequentially, the quality of health care received by patients or clients. This study is designed to explore factors related to future psychologists’ (i.e., predoctoral interns) attitudes toward managed care as well as their perceptions of preparedness to function successfully in the current service delivery environment.

Review of the Literature

This chapter will provide a review of literature related to the influence of managed care on the practice and practitioners of psychology. First, a general overview of the health care industry in the United States will be provided, including a brief history of the evolution of managed care as well as an explanation of the contemporary methods used to achieve its primary goals. This will be followed by a description of the purpose, function, and scope of managed behavioral health care organizations. Finally, an explanation of the influence of managed care on the practice (i.e., medical necessity, brief therapies, empirically supported therapies, psychological testing, and liability issues) and practitioners of psychology (i.e., ethical dilemmas, clinical autonomy, job satisfaction, and training) will be provided.

Managed Care

History. Managed care had its critical debut during the early 1970s (Sederer & Bennett, 1996). During this time, Health Maintenance Organizations (HMOs) were flourishing, and the Nixon administration began encouraging cost-containment on a larger scale. The next decade led to astronomical increases in the number of psychiatric and substance abuse facilities (Galanter, Keller, Dermatis, & Egelko, 2000), with
accompanying inflation in treatment costs. Following that extreme rise in psychiatric care costs, various cost-containment mechanisms were quickly yoked to reimbursement.

*Purpose.* The original intent of the federally sponsored HMOs or variants now collectively referred to as managed care organizations (MCOs) was to circumvent the moral hazard of inappropriate use. A primary goal was to provide physicians with a disincentive for ordering superfluous tests and procedures, and to discourage the practice of keeping patients hospitalized for inordinate amounts of time, in an attempt to maximize reimbursement from indemnity-based insurance companies (Shore, 1998). Essentially, the development of HMOs was an attempt to eliminate indiscriminate spending and promote the pursuit of patient health and healing (Madonna, 2000).

*Cost-containment mechanisms.* Two primary cost-containment methods were quickly established to achieve this purpose. First, to be eligible for future reimbursement, practitioners were required to obtain approval from HMO overseers prior to providing the service. Second, caps (i.e., dollar limits) were placed on the level of reimbursement provided (Wickizer & Lessler, 1998). A further incentive for the judicious use of medical care and resources was accomplished on the patient side of the equation through the requirement of co-pays, co-insurance, and deductibles (i.e., the portion of payment for which the patient is personally responsible). This double-barreled approach to financial risk management, therefore, was intended to curtail excessive spending and create a system of accountability which would ultimately benefit the consumers of medical care. Some researchers have provided data which demonstrated additional cost savings through the implementation of preventive behavioral health interventions (Dorfman & Smith, 2002). Publicly funded programs have met with similar financial success following the
implementation of managed care strategies (Zhao-Siegel, 2002). These approaches to cost-containment remain in effect today, as the fee-for-service (indemnity) model of health care reimbursement fades into history (Gibelman & Whiting, 1999; Morgan & Morgan, 2001).

In addition to the cost-containment measures of pre-authorization requirements, patient contributions and preventive interventions, HMOs developed watch dog procedures, such as credentialing, concurrent review, and retrospective review (Tuttle & Woods, 1997). Credentialing is the term used to describe the process of validating proper education and licensure of providers on a given panel or group of approved practitioners for which the managed care organization will provide reimbursement. Credentialing procedures are designed to protect the insured from inappropriate or dangerous medical procedures provided by an improperly trained healthcare provider.

Concurrent review provides an opportunity for the HMO to continually assure that additional procedures, medication, hospitalization, or continued treatment remain necessary and appropriate. Consumers receive yet another level of protection through the application of retrospective reviews, whereby managed care organizations carefully review documentation of procedures which have already been authorized and implemented. Most managed care organizations reserve the right to decline payment for any procedure they subsequently conclude was either inappropriate or unnecessary, regardless of whether the practitioner obtained the required authorization for service in advance of its provision (Galanter, Keller, Dermatis, & Egelko, 2000; Zieman, 1998).

*Managed Behavioral Health Care Organizations (MBHOs)*
Purpose and function. The medical procedures for which these cost-containment strategies exist also include services which are provided by psychologists. Miller (1996b) described the evolution of managed behavioral healthcare as a fairly gradual movement from lower to higher levels of intrusion and restriction, ranging from the establishment of provider networks, to the addition of more aggressive utilization review and treatment proscriptions, to provider-managed financial risk sharing.

Psychologists review diagnoses, prognoses, symptom changes, and treatment plans with case reviewers who, in turn, determine whether or not continued sessions warrant authorization. This process can assist psychologists in terms of accountability and access to an impartial view of therapeutic effectiveness (Doherty & Heinrich, 1996). Through the frequent review of patient progress, the psychologist is encouraged to carefully identify presenting problems, appropriately document patient progress toward meeting treatment goals (for which a direct link to a presenting problem is required), and vigilantly maintain an exclusive focus on alleviating those problems. The credentialing process helps to assure consumers of mental health services that the chosen provider is legitimately trained, licensed, and in good standing, thereby potentially limiting the liability of the MBHO (Higuchi, 1994; Newman & Bricklin, 1994). Unfortunately, for many independently practicing psychologists, these procedures also require an investment of a considerable number of non-reimbursed work hours with an accompanying income reduction (Salyer, 2004).

Carve-outs vs. carve-ins. In carrying out the above mentioned procedures, psychologists most typically do not deal directly with the managed care organization (MCO). Rather, psychologists interact with representatives of the company with whom
the MCO has contracted to administer behavioral health benefits. These managed behavioral health care organizations colloquially known as “carve-outs” involve the separation of certain subset(s) of insurance coverage from general medical/surgical benefits. Further, establishment of a secondary level of carve-outs (e.g., substance abuse benefits managed separately from other behavioral health benefits) are also common (Cavanaugh, 2005).

Curiously, carve-in arrangements have rapidly begun to regain popularity. In a carve-in arrangement, both physical and mental health care benefits are managed within the same organization. Gray, Brody and Johnson (2005) identified several drawbacks of carve-out arrangements which appear to be motivating this shift back to a more unified approach to the management of physical and mental health care benefits. These drawbacks include the tendency for mental health care costs and responsibilities to be shifted to the primary care arena (e.g., the primary care provider becomes the de facto psychological health care provider); failure to consider associated, escalating pharmacy costs (e.g., the increasing popularity of SSRIs as the first-line treatment for depression, particularly among primary care providers); and duplication of administrative functions. A study of more than a quarter of a million enrollees, conducted in part by a large Midwest health plan, suggested that more research is vital to developing approaches to minimize the significantly higher rate of use by behavioral health patients of medical services (nearly 4 times those not diagnosed with substance use and mental illnesses) (Kathol et al., 2005).

Scope. The management of psychiatric and substance abuse/chemical dependency benefits in both the private and public sectors are frequently contracted out to managed
behavioral health care organizations. In fact, it is estimated that 88% of the insured population is covered through some form of mental health care carve-out (Rothbard, Kuno, Hadley, & Dogin, 2003; Sanchez & Turner, 2004b). Of the estimated 52 million American citizens who experience a mental health problem during a given year, more than 31 million are covered by an MBHO for reimbursement of mental health-related visits (Madonna, 2000). Kiesler (2000) estimated that 88% of managed healthcare corporations provide behavioral health benefits through an independently operating entity.

Murphy, DeBarnardo, and Shoemaker (1998) reported that half of the clients of psychologists they surveyed in 1996 were managed care clients. This is a notable increase from the estimates of 10% to 15% of clients provided for 1991. Three years after the Murphy et al. (1998) examination, more than 90% of surveyed mental health counselors indicated that managed care had affected their practice (Danzinger & Welfel, 2001). Clearly, the scope of influence of managed care on the profession of psychology is quite broad. Moreover, the growth of this industry is projected to continue. Because clients with MBHO-managed benefits comprise such a significant portion of the caseload of the typical mental health clinician in private practice, a baseline evaluation of emerging practitioners’ attitudes toward managed care coupled with their perceived preparedness to navigate in the current service delivery environment is both timely and imperative.

*Mental Health Parity Act.* The intent of The Mental Health Parity Act of 1996 was to equalize mental health and medical/surgical benefit maximums. This act was significantly limited, however, in that it requires neither employers of less than 50 persons nor employers who do not offer mental health benefits at all, to comply. In
addition, the required equity refers to benefit maximums, and does not include parity in required patient contribution (e.g., co-pays, co-insurance, deductibles). Unfortunately, the patient contribution portion (i.e., the cost to the consumer) represents the primary barrier to seeking mental health treatment for most clients in the U.S. (Bossolo, 2004). Efforts to address these issues have been more effective at the state level. Thirty-five states have enacted legislation that supports bolstering insurance benefits for behavioral health to equal those already provided for physical health.

Although the initiatives referenced above seem to be a step in the right direction, in terms of supporting psychologists in their efforts to reach underserved populations and provide services for otherwise marginalized groups (e.g., those living in poverty, the seriously mentally ill), there is evidence to suggest that they may not have resulted in appreciable changes. For example, Murray and Henriques (2004) noted continued, significant inequities along a number of dimensions (i.e., number of required reviews, number of certification denials, number of inpatient days denied, and number of days denied on the basis of patients having exceeded benefit maximums). True parity for mental health benefits remains an issue of extensive debate among legislators, particularly at the state level (Feldman, Bachman, & Bayer, 2002). Until the benefits of parity legislation are tangibly realized, it is likely to remain an issue for which ethical psychologists must vigorously advocate.

Some leaders in the field of psychology have recommended doggedly maintaining current efforts to ensure fundamental change in the mental health care delivery system as a whole. Russ Newman, APA’s Executive Director for Practice, for example, has encouraged members to implement seven specific strategies designed to create flexibility
of response to potential, upcoming changes in health care, and to influence the changes themselves. These recommendations include: pursuing mental health parity at the state and federal level, promoting the value of psychological services at preventive and remediation levels to consumers and pivotal political decision-makers, advocating for the integration of mental and physical health benefits, supporting efforts to hold managed care organizations legally and fiscally responsible for choices that may result in adverse impact, and financially supporting appropriate organizations in their lobbying efforts (Newman, 2004).

**Practice Impact**

*Medical necessity.* Not surprisingly, certain aspects of managed care which have been problematic for consumers (e.g., treatment limitations) are similarly problematic for the practice of psychotherapy in general. For example, some therapists, training sites and therapists-in-training have expressed deep concern regarding the difficulties associated with providing high-quality mental health care within the constraints of the brief psychotherapy formats and medical necessity requirements for MBHO approval of initial and ongoing treatment (Daniels, 2001; Spruill & Pruitt, 2000).

Psychologists and psychologists-in-training may perceive interaction with managed care reviewers to be somewhat strained, in that they may be required to exert considerable time and effort to successfully negotiate authorization for initial and ongoing sessions. Part of this dilemma stems from the requirement to provide acceptable evidence that the proposed treatment is medically necessary. Proper understanding and documentation of medical necessity are essential components of managed care preparedness (Kane, Hamlin, & Hawkins, 2003a). Nineteen states have enacted
legislation requiring independent, external review of denials of care based on the controversial premise of medical necessity (Mariner, 2002). Standard 10.10c of the American Psychological Association’s (APA) Ethics Code (Terminating Therapy) addresses this thorny issue by exempting psychologists from responsibility for providing pretermination counseling in cases in which they are precluded from doing so due to managed care restraints.

Sabin and Daniels (1994) attributed much of the impetus for the frequently adversarial relationship between psychologists and managed care case reviewers to a fundamental difference in the three basic models used to define “medical necessity.” The first and the one most generally embraced by MBHOs is the “normal function model” (p. 54). The goal of this model is to decrease the impact of a disease or disability, using medical definitions of clinical deviance from the norm to determine which DSM-IV-TR diagnosable conditions qualify as a diseases or disabilities. Decisions are made based on the unique criteria of individual MBHOs. V-code diagnoses, in particular, rarely qualify as reimbursable conditions (Cohen, Marecek, & Gillham, 2006; Simola, Parker, & Froese, 1999).

In contrast, many clinicians believe that medical necessity should be assessed using either Sabin and Daniels’ (1994) “personal capability” (p. 54) or “welfare” (p. 55) model. In general, the goals of these models are to enhance personal capability and potential for happiness, respectively. Rather than a medically defined restoration of functioning, these models cast a wider net by adopting goals based on clinical necessity, and more specifically, diminished experience of personal capability and limits on potential for happiness (Sabin & Daniels, 1994).
Medical necessity has been defined by Ford (1998) as encompassing the following qualifications: "for the treatment of sickness or injury, consistent with generally acceptable medical practice, efficient, in the sense that a less expensive treatment works as well as a more expensive treatment, and not for the patient's or provider's convenience" (p. 183). Ford reported that utilization of this definition in the field of mental health is woefully inadequate.

Ford (1998) suggested using an alternative definition. This alternative is termed "clinical necessity," and would require the following attributes for reimbursement:

for the treatment of mental illness and substance use disorders, or symptoms of these disorders, and impairments in day-to-day functioning or for the purpose of preventing the need for a more intensive level of mental health and substance abuse care or for the purpose of preventing relapse of persons with mental illness and substance use disorders, and consistent with generally accepted clinical practice for mental and substance use disorders, and not for the patient's or provider's convenience. (p. 184)

The concept of clinical necessity, if embraced by MBHOs, may be one answer to the problem of strict session limitations that place clinicians in the ethical bind of either having to refer a client, continue to see the client on a self-pay basis or at no charge, or alter the diagnosis in such a way that would maximize the possibility that services would be reimbursed by the MHBO (i.e., upcoding).

Many authors cite 20 sessions as the maximum, prototypical, annual outpatient visit benefit provided by MBHOs (Miller, 1996c; Stern, 1993). However, an increasing number of practitioners have expressed concern that, unless deemed medically necessary
in the eyes of the managed care company's reviewer, even brief therapy treatment requests can be either denied or initially authorized for only 4-8 sessions, with additional sessions approved only in the case of crises and/or life-threatening behaviors.

Miller (1996c) asserted that some managed care policies, notably the criteria regarding medical necessity, are responsible for decreasing the availability of psychological services and are making effective treatment impossible for some clients. Miller and others (Callaway & Hall, 2000; Sabin & Daniels, 1994; Tubbs & Pomerantz, 2001) have cited problematic incidents including allegedly discriminatory denial of services, failure to adequately serve those who do have partial access, and specific denial of services to patients requiring longer-term treatment.

**Brief therapy.** The current managed care philosophy and approach to the treatment of psychological disorders is one of brief stints of psychotherapy throughout the lifetime of the insured rather than the more traditional approach of a single, more lengthy, permanent or curative experience (Gibelman & Whiting, 1999; Segal, Akutsu, & Watson, 1998). Daniels, Alva and Olivares (2002) estimated that approximately 73% of graduate school training programs in clinical psychology, counseling psychology and social work incorporate some training in brief therapies within their curriculum. Constantine and Gloria (1998) predicted that applicants with quality training in brief therapy models may be more viable candidates in the competitive area of intern selection.

Due in part to common cost-containment strategies including a shift from inpatient to outpatient formats and a related shift from open-ended to more stringently circumscribed outpatient care (Gray, Brody, & Johnson, 2005), brief therapy formats have become the rule rather than the exception. Managed care, therefore, is largely seen
as necessitating the utilization of brief therapeutic models. Curiously, some therapists seem to be somewhat biased against the use of this theoretical model (Warner, 1996). Analogously, Vyhmeister (2001) found that job satisfaction for psychologists is significantly and negatively correlated with endorsement of the belief that managed care has negatively affected their practice through limitations on treatment choice (e.g., brief term approaches vs. other treatment approaches a clinician may prefer).

In addition, training in and utilization of brief forms of psychotherapy is not limited to service delivery in a managed care format. Some university counseling centers (a primary predoctoral internship training site type), for example, have begun incorporating brief, empirically supported treatments into their training agendas (Hays et al., 2002). Interestingly, in a study conducted in a Canadian university, Warner (1996) found no statistically significant difference for clients in reported levels of satisfaction with brief therapies (3 or fewer sessions) versus longer duration therapeutic encounters. However, Warner found that therapists were less satisfied with the briefer-term encounters. He attributed this, in large part, to counselor bias against brief therapies.

Despite this apparent bias, practitioners are increasingly obligated to work within the parameters of brief therapy, regardless of their preferred theoretical orientation, treatment approach or work setting. Dziegielewski (1997) provided a synopsis of contemporary forms of brief psychotherapy used in delivering what managed care organizations describe as medically necessary psychological services. She reported that "brief" can mean as few as 6 or as many as 20 sessions. The first form of brief treatment is interpersonal psychotherapy (IPT), which concentrates on guiding the client’s focus to the here and now while highlighting interpersonal events directly related to the client's
mood states. The second form of brief treatment Dziegielewski summarized is cognitive-behavioral, which focuses on replacing maladaptive thought patterns with more effective ones in order to eliminate problematic emotional experiences and accompanying behaviors. She also discussed solution-focused therapy (SFT) in which the client and therapist engage in "change talk" rather than "problem talk" (p. 226). In SFT, the spotlight is more on client strengths and the innate tendency to move toward more healthy solutions. Dean (1998) described another form of brief treatment, narrative therapy, which is a post-modern approach that emphasizes therapy as a reflexive conversation in which both client and therapist develop new stories about the client's problem and about solutions to that problem. Notably absent are the more traditional theoretical orientations, such as psychodynamic approaches (Demos, 2001; Eckardt, 2002; Sperling & Sack, 2002). The array of treatment avenues available to therapists and clients can be considerably curtailed when managed care companies limit access to more traditional methods. On a positive note, utilization of brief term types of treatment approaches preferred by MBHOs have been correlated with therapists' more positive attitudes toward current service delivery environments (Kane, Hamlin, & Hawkins, 2003a).

Empirically supported therapies. The brief treatment approaches of choice for many MBHOs are empirically supported therapies (ESTs). The APA encourages psychologists to carefully differentiate between evidence-based practice in psychology (i.e., EBPP) and the use of ESTs. Although it may incorporate ESTs, EBPP is a broader concept, and is defined as "the integration of the best available research with clinical expertise in the context of patient characteristics, culture, and preferences" (APA
Presidential Task Force on Evidence-Based Practice, 2006, p. 273). Proper implementation of an EST requires strict adherence to written guidelines (e.g., manuals) that specify the parameters within which the practitioner must operate. Comprehensive guidance addressing patient characteristics, culture, and preferences may or may not be included in such a manual.

One important contributor to the increased frequency of managed care-related ethical dilemmas is the application of related business strategies that some MBHOs have pursued (e.g., mandated use of ESTs). These forms of psychotherapy can present an assortment of ethical dilemmas, which will be described in greater detail below. One such strategy is standardization of individual and group therapy (Mitchell, 2001). Despite empirical evidence supporting the utility of certain ESTs for specific presenting problems (e.g., panic control therapy) (Addis et al., 2004), such approaches have been disparagingly described by some psychologists skeptical of their utility as "assembly line practice" (Suarez, 2004, p. 128). Ironically, depressed patients receiving empirically supported treatment in the form of psychotropic medication from their primary care physicians may be precluded from receiving other forms of empirically supported treatment (i.e., cognitive behavioral therapy) from psychologists (Clemens, 2004a). Magellen Health Services, formerly the largest MBHO in the United States, provided several justifications for the use of standardized forms of treatment, including a reduction in the variability of practice, increased consumer satisfaction, and decreased denials of care (Marques, 1998). Other authors have noted that the mandated use of these protocols by managed care companies is on the rise, a trend that is likely to continue (Sanchez & Turner, 2004b; Strosahl, 1998).
A significant issue in the use of ESTs is that of proven utility, which can be assessed by one of two basic methods. Either efficacy or effectiveness studies (or preferably both) should be conducted to explore the utility of a given, standardized treatment protocol (Addis et al., 2006). Lyddon and Chatkoff (2001) succinctly conceptualized this efficacy versus effectiveness concept in terms of internal versus external validity criteria (respectively), and further highlighted the complexities of measurement in the face of the often diverse or competing goals of clients, practitioners, and MBHOS. Carroll (1997) defined efficacy as "results obtained under ideal treatment conditions, such as those present during rigorous clinical trials" (p. 352). Effectiveness, on the other hand, is defined as "the results obtained under normal conditions of treatment delivery" (p. 354). Stone (2001) pointed out that efficacy is not enough, particularly in a managed care environment in which meticulous resource allocation is a fundamental goal.

Unfortunately, much of the research in this area involves efficacy rather than effectiveness studies; therefore, the actual clinical utility of the given approach outside an intensive research setting remains unclear. Former APA president Nicholas Cummings (Cummings, 2006) astutely highlighted the fact that it is incumbent on the profession to recognize that developing and refining evidence-based treatment protocols is imperative in the contemporary managed-care controlled marketplace. He suggested that open dialogue between researchers and practitioners is essential. Some clinicians and researchers are beginning to forge significant inroads in this area, and are taking steps to bridge the gap between the laboratory and the office. For example, Addis et al. (2006) compared the effectiveness of panic control therapy (PCT) and treatment as usual in a
group of 80 managed care patients. In their statistical analysis of the utility of PCT, Addis et al. incorporated aspects common to laboratory studies (e.g., random assignment to treatment condition, standardized treatment protocol training for therapists) as well as aspects which commonly occur in clinical settings (e.g., concurrent medication use, co-morbid diagnoses, premature termination).

Strosahl (1998) highlighted several problematic aspects associated with widespread use of manual-based ESTs (e.g., PCT) for behavioral health program directors, line clinicians, and consumers of behavioral health services. One concern is the tendency for these approaches to be effective only with relatively "pure" versions of a given disorder. When clients have co-morbid diagnoses or present with a more complex clinical picture, the utility of a specific approach fades. A related problem is the complaint of the restrictive nature of the treatment protocols. They are not seen as "user friendly," and the document can often be rather unwieldy and difficult to access when immediately needed in order to make a complicated or pressing clinical decisions.

In addition to the complications mentioned above, factors related to the working environment of the practitioner may influence accuracy of implementation. Results of an in-depth case study of 15 psychologists employed in the brief treatment division of a managed care company revealed that the accuracy with which ESTs were implemented was negatively influenced by the company's policies and organizational culture (Levine, 2003). Furthermore, the cost to train a practicing clinician in one of these models can approach levels that make it inaccessible to many, particularly in large organizations where numerous practitioners would require this training. One potential solution to circumventing the financial barrier to more widespread utilization of ESTs involves the
incorporation of coursework and supervised practice into existing graduate school training programs (Addis & Krasnow, 2000).

Although graduate and post-graduate training in ESTs and other brief therapies may bolster practitioners’ adherence to MHBO treatment protocols, some clients may be unable to reap the potential, associated benefits. ESTs developed and found to be efficacious in laboratory studies may not be effective when applied outside of the research setting. For example, despite numerous reports of success in laboratory/research based psychotherapy with children and adolescents (Weisz & Weiss, 1989), Weisz, Weiss and Donenberg (1992) noted the lack of evidence for parallel findings with clinic-based children. Weisz et al. proposed that this gap between research therapy and therapy that has been “shaped in the crucible of real life” (p. 1584) might be bridged by forging closer alliances between practitioners and researchers, and that such a collaboration could be profoundly beneficial to all concerned parties. Welfel (2004) cautioned clinicians working with children and adolescents in managed care systems to be acutely cognizant of the unique ethical dilemmas that can arise when working with this population. That is, children represent a group of consumers for whom psychologists are remanded to advocate and provide especially vigilant attention and care.

People diagnosed with serious mental disorders (e.g., schizophrenia) represent yet another group which may be particularly vulnerable to adverse effects from the mandated use of ESTs. For example, Wilf (2004) revealed a disturbing situation in a major MCO’s procedures for prescribing specific antipsychotic medications for persons diagnosed with schizophrenia. He contended that the organization’s policy of urging providers to avoid combining atypical antipsychotics without first trying clozapine were inappropriate,
impractical (e.g., required frequent laboratory testing), risky (e.g., potentially severe side effects), and detrimental for patients who exhibited chronic psychotic behavior.

*Psychological testing.* Problematic reimbursement for psychological testing by MBHOs has been documented in several studies (Piotrowski, Belter, & Keller, 1998; Turchik, Karpenko, Hammers, & McNamara, 2007; Werthman, 1995). Some of the most common psychological testing related hurdles that arise for psychologists in a managed setting include: preauthorization denials and delays, inadequate reimbursement for time invested (typically 2 hours for administrating, scoring, interpreting, and report writing), and failure to approve feedback sessions (Turchik, Karpenko, Hammers, & McNamara, 2007).

In their survey of members of APA's Division 29 (Division of Psychotherapy), Norcross, Hedges and Castle (2002) found that personality and projective testing had declined over the past 20 years. Over 40% of a sample of child and adolescent psychologists reported significant constraints on psychological testing due to managed care policies (Cashel, 2002). Rupert and Baird (2004) provided insights into psychologists' perceptions of the impact of managed care in the area of psychological testing. Specifically, participants in this study indicated that their choice of instruments had been curtailed, and that reimbursement for psychological testing was decreasing as a result of managed care restrictions. Maruish (2002) offered recommendations for increasing the likelihood of receiving reimbursement for the use of a variety of psychological instruments. For example, he suggests that the prudent practitioner learn to work with managed care by educating care managers about the value of psychological testing, becoming familiar with each client's benefit structure and providing support for
requests that address the major concerns of the MBHO (e.g., facilitating proper diagnosis, determining appropriate level of care, minimizing treatment cost/duration). Remarkably, although the viability of reimbursement for a variety of psychological testing protocols in the era of managed care has been seriously compromised and widely documented, less than 1/3 of surveyed APA approved training programs have adapted their curricula to reflect these changes (Belter & Piotrowski, 2001). Stedman, Hatch and Schoenfeld (2001) speculated that the status quo of graduate training in this area does not properly prepare students for the harsh realities they may face when they enter the working world.

Interestingly, a related window of opportunity has developed in the managed care marketplace for psychologists who are well versed in test development. Bobbit (2006) prudently highlights that the accreditation process for MBHOs places them in the somewhat ironic position of requiring high quality metrics which can assess the effectiveness of various treatment protocols.

**Liability.** In today's litigious society, both corporate entities and individuals are well-advised to ensure that they adopt appropriate strategies with which they may protect themselves. Most MCOs, for example, require panel members to sign a contract indicating that they are not employees of the organization, presumably to insulate the company from vicarious liability lawsuits related to provider malpractice (Salyer, 2004). A U.S. Supreme Court opinion issued by Justice Thomas on June 21, 2004, in the consolidated cases of *Aetna Health Inc. v. Davila* (2004) and *CIGNA Healthcare of Texas v. Calad* (2004) limited the financial liability of managed care organizations to the cost of the denied procedure. The 5th Circuit of the United States Court of Appeals held that MCOs exempted by the Employee Retirement Income Security Act are not financially
liable for damages related to negligent medical judgment. The responsibility for the vast majority of treatment decisions rests with the mental health care provider alone (Mariner, 2004). A sobering article by Wysoker (1999) focused attention on litigation in which a physician was successfully prosecuted for failure to challenge a denial based on the concept of medical necessity that allegedly led to the death of a prematurely discharged client. Presumably, other allied health professionals (e.g., psychologists) could be similarly vulnerable.

Unfortunately, there is evidence to suggest that some mental health professional trainees (i.e., masters level interns in social work) feel ill-prepared by both classroom and field work to avoid managed care-related lawsuits, particularly with respect to appropriate documentation (Kane, 2001). It seems reasonable to posit that other future mental health professionals (i.e., predoctoral interns in counseling, clinical and school psychology) may meet with similar struggles during their tenure as trainees. Vicarious liability for the malpractice, negligent, fraudulent or otherwise sub-standard practice of predoctoral interns can be extended to supervisors of these prelicensed therapists (Magnuson, Norem, & Wilcoxon, 2000; Robb, 2004). Administration of training sites as well as the organizations themselves may be similarly vulnerable (Kane, Hamlin, & Hawkins, 2003b). Prudent risk management strategies must include a thorough assessment of the managed care preparedness of predoctoral interns (as well as other staff members). An examination of their preparedness to appropriately address managed care-related ethical dilemmas, particularly those with possible legal ramifications, is clearly needed.
Psychologists must also take great care to consider the legality of collectively negotiating with managed care organizations. Collective fee negotiations between practitioner groups and MBHOs, for example, frequently fall under the jurisdiction of the Federal Trade Commission and the U.S. Department of Justice, and may be considered an anti-competitive form of fee fixing or illegal boycott (DeLeon, Bock, Richmond, Mays, & Cullen, 2006).

Provider Impact

The advent and growth of managed care has deeply affected doctoral level providers of mental health services. These effects include: decreased income (Greggo, 2001; Phelps, Eisman, & Kohout, 1998), treatment duration limitations (Bilinsky & Vernaglia, 1998; Dziegielewski, 1997; Miller, 1996a), expectations for increased use of more cost-effective group interventions (Taylor et al., 2001), inappropriate triangulation of the therapeutic relationship (Cooper & Gottlieb, 2000; Daniels, 2001; Masters, 1998; Sanders, 1998), increased rates of relapse (Bezold, MacDowell, & Kunkel, 1996; Segal, Akutsu, & Watson, 1998; Wickizer & Lessler, 1998), a number of legal and ethical challenges (Danzinger & Welfel, 2001; Davidson & Davidson, 1996; Doherty & Heinrich, 1996; Hanson & Sheridan, 1997; Miller, 1996a, , 1996d; Shore, 1998), subjective distress related to increased frequency of managed care-related ethical dilemmas (Stevens, 1998), perception of decreased autonomy in clinical decision-making (Buckloh & Roberts, 2001; Greggo, 2001; Herron, Eisenstadt, Javier, Primavera, & et al., 1994; Murphy, DeBernardo, & Shoemaker, 1998; Pipal, 1995; Shore, 1998; Stern, 1993) and decreased career satisfaction (Kalman & Goldstein, 1998; Phelps, Eisman, & Kohout, 1998; Plante, Boccaccini, & Andersen, 1998; Russell et al., 2000; Vyhmeister,
2001; Wilkinson, 1991). The call for more empirical studies to further elucidate these issues has been issued by numerous researchers (e.g., Sanchez & Turner, 2004a).

In cooperation with the Practice Directorate of the APA, Phelps et al. (1998) surveyed nearly 16,000 members regarding the influence of managed care on their professional practice. Approximately 80% of the respondents reported that managed care had a negative impact on their practice. Changes in clinical practice as well as ethical dilemmas generated by managed care were cited by respondents as notable concerns. Although problems related to excessive pre-certification requirements and reduced income were endorsed by 49% of the total sample, this varied by primary work setting. Sixty-two percent of psychologists primarily involved in independent practice endorsed this concern, whereas only 28% of psychologists in an academic setting responded similarly.

Murphy et al. (1998) surveyed 442 members of APA’s Division 42 (Division of Independent Practice) and found that 70% believed managed care had negatively affected their work. The authors highlighted some of the adaptations that psychologists are making in order to successfully navigate the changing landscape of managed care practice. These included moving from solo to larger practices, obtaining hospital privileges, increasing the proportion of Medicare clients, and hiring additional clerical staff.

On a Likert-like scale ranging from 1 to 9 (with 9 being “a great deal”), 80% of respondents ranked the following item as a 7 or higher: “To what extent have you found the limits imposed on number of sessions interfering with services you deliver?” The modal response to this item was 9. Problems specifically related to session limits and
caps on total expenditures per insured customer have been well-documented (Bilynsky & Vernaglia, 1998; Herron, Eisenstadt, Javier, Primavera, & et al., 1994; Miller, 1996b, , 1996d; Sederer & Bennett, 1996; Stern, 1993). Miller (1996c) outlined the potential outcome of continued limits on reimbursement for mental health services. He asserted that treatment denials will increase, current clients will be underserved, and clients with moderate to severe psychological problems will be denied access to treatment.

In an extension of the Murphy et al. (1998) study, Orr (2000) administered a revised version of the original survey as well as the Maslach Burnout Inventory to a group of 128 psychologists. Orr’s results not only support the core findings of the Murphy et al. (1998) study, but also indicate that depletion of psychologists’ emotional stamina is an additional risk of a caseload comprised of even a relatively small number of managed care clients. Increased levels of depersonalization and decreased feelings of personal accomplishment also were positively associated with higher managed care caseloads.

Plante et al. (1998) found that 94% of the 400 Clinical Diplomates of the American Board of Professional Psychology they surveyed reported a negative impact of managed care, including the cost-containment procedures used. In their survey of APA’s Division 42 membership, Murphy et al. (1998) found that 91% of respondents reported that managed care has affected their practice. Some researchers have convincingly demonstrated that the savings resulting from the introduction of managed care financing strategies in the public sector are due in large part to a reduction in fees paid to providers (Rothbard, Kuno, Hadley, & Dogin, 2003). Analogous to Phelps, Eisman and Kohout (1998), Rothbard et al. found that 70% of their sample perceived a generally negative
impact of managed care. Among the problems cited were reimbursement for marital/family counseling, significant investment of non-reimbursable time with utilization review and paperwork activities, ethical dilemmas leading to inappropriate treatment of clients, income reductions, and difficulties with reimbursement for psychological testing.

**Ethical Considerations**

The appearance of managed care has had distinct ethical ramifications. Several authors (Bilynsky & Vernaglia, 1998; Davidson & Davidson, 1996; Hanson & Sheridan, 1997; Jones, 2003) have drawn attention to the serious ethical dilemmas incumbent in working within the parameters of a managed care entity. Of the 25 cases opened by the APA Ethics Committee in 2003, 32% were reported to involve “insurance/fee problems” (American Psychological Association Ethics Committee, 2004, p. 438). Managed care-related ethical dilemmas have been addressed by a number of authors, and continue to be a topic of lively discussion among practitioners (Goold & Klipp, 2002; Lazarus & Sharfstein, 2002).

La Roche and Turner (2002) have detailed the process whereby economic pressures contributed to the development of managed care strategies, which (ideally) then serve as the impetus for making compensatory changes in APA’s ethical code. Some authors, however, are concerned with APA’s failure to provide adequate ethical guidance directly addressing managed care-related issues. Hadjistavropoulos, Malloy, Sharpe, Green and Fuchs-Lacelle (2002) have suggested adopting the strategy that the Canadian Psychological Association (CPA) uses in its guidelines. The CPA ranks its ethical principals in order of importance. Ranking APA’s ethical principles in order of
importance could serve to assist psychologists with determining a prudent course of action in the complex ethical scenarios that arise as a result of interaction with MCOs.

Many of these issues were indirectly addressed throughout the 1992 Code of Conduct (Acuff et al., 1999; Daniels, 2001). Murphy et al. (1998), in their large-scale survey of the membership of Division 42, found that 58% of responding psychologists had encountered ethical dilemmas related to managed care which were not addressed in the Ethical Principles. Although documentation of practitioners' ethical concerns is mounting, an additional dilemma has emerged, in that the codes of professional ethics which govern practitioners frequently fail to address these concerns in specific and useful ways (Tjeltveit, 2000). Other authors have pointed out that these ethical issues existed prior to the advent of managed care, and that only in the wake of managed care, are they beginning to generate scrutiny sufficient to allow them to be more adequately addressed (Belar, 2000). Fortunately, the publication of the 2002 Ethics Code has allayed some of the above-mentioned concerns. The Introduction and Applicability section of the 2002 Ethics Code, for example, added language which specifies payors for health services as bodies that may sanction psychologists based on confirmed violations of the 2002 Ethics Code.

*Integrity.* One of the core tenets discussed in the 2002 Ethics Code (Principle C) is the establishment and maintenance of integrity. Fraud, subterfuge and intentional misrepresentation of fact are specifically mentioned as activities in which psychologists may not ethically engage. Therapeutic integrity, as defined by Stern (1993) is "the establishment and maintenance by a competent therapist of the conditions necessary for successful therapeutic work" (p. 163). He contended that by mandating brief therapy
(through session limits, annual dollar caps, and utilization review), MCOs frequently contribute to ethical dilemmas which may lead psychologists to violate this fundamental principle. Stern outlined several ways that therapeutic integrity is threatened by managed care policies. First, MBHO reviewers often pressure therapists to quickly formulate treatment plans and to begin immediate, aggressive intervention. This can prove less than helpful if a client's presenting problems are complex and multi-faceted, and if the client is wavering on the decision to fully engage in the therapeutic process. Quick intervention, necessitated by utilization of brief treatment models, during the early stages can lead to premature termination (Keefe & Hall, 1999). As a result, clients may be less likely to receive the clinical services they need.

**Honesty.** The virtue of honesty with clients and with managed care companies is subsumed under APA's Ethical Principle C: Integrity, which was addressed above. Pipal (1995) drew our attention to the "skill" of finding the correct, reimbursable diagnosis for patients' "subjective distress" (p. 325). In this case, "correct" is defined as reimbursable. Clinical accuracy does not necessarily enter into this equation. Pipal asserted that psychotherapists consistently over-diagnose patients (i.e., upcoding), presumably in an effort to receive reimbursement from managed care companies. She cited a study by the National Institute of Mental Health Epidemiologic Catchment Area Program (Narrow, Reiger, Rae, Manderscheid, & Locke, 1993) in which the authors found that nearly half of adult outpatients lacked a DSM diagnosable disorder. Pipal expressed concern with this practice, given that a documented history of mental problems can create future obstacles to obtaining health, life, and disability insurance; securing suitable employment; and holding political office. Standard 6.01 (Documentation of Professional
and Scientific Work and Maintenance of Records) now specifically charges psychologists with the responsibility of maintaining records for the purpose of ensuring accuracy of billing and payments. In addition, Standard 6.06 requires diagnostic accuracy in reports to payors and funding sources.

Most therapists consider an atmosphere of safety to be pivotal to the therapeutic process (Stern, 1993). An atmosphere of safety, however, can be difficult to attain when the therapist is frequently required to justify further sessions to a third party, particularly when there is no guarantee that continued sessions will be authorized. In an effort to preserve the safety of the therapeutic relationship, some therapists may engage in upcoding. The practice of upcoding or diagnosis inflation has been documented by a number of researchers (Cooper & Gottlieb, 2000; Cummings, 1998; Daniels, 2001; Keefe & Hall, 1999). Upcoding typically involves assigning an inaccurate, more severe diagnosis or Global Assessment of Functioning score to a client for the purpose of assuring reimbursement for services (Grubbs, 2001). Gibelman and Mason (2002) found that method of payment (i.e., managed care or private pay/fee-for-service) significantly impacts case assessment and treatment planning. Health care providers in disciplines other than psychology (e.g., nurse practitioners) have felt compelled to include upcoding among their advocacy strategies (Ulrich, Soeken, & Miller, 2003). Psychologists, psychiatrists, social workers, and professional counselors have reported engaging in upcoding and similar fraudulent billing practices to varying degrees (Manchikanti, 2000; Strayhorn, 2003). Wolff and Schlesinger (2002) described this situation as one of covert advocacy, in which practitioners who are more concerned about being removed from provider panels are also more likely to alter case descriptions to reviewers in such a way
that will maximize the likelihood of reimbursement. Kremer and Gesten (2003) encouraged psychologists to carefully consider the perspective of the client in their advocacy efforts. Messina-Connolly (2002) described the upcoding process as a means for circumventing managed care regulations on behalf of clients whom the practitioner assessed to be in genuine need of clinical services. In addition to purposeful diagnosis alteration being a clear violation of Ethical Principal C, upcoding constitutes insurance fraud, an illegal activity for which a practitioner can be prosecuted.

In their survey of Division 42 psychologists, Murphy et al. (1998) found that 9% of psychologists would choose the option of changing a diagnosis in order to secure additional needed sessions. These authors reported that, of the psychologists they surveyed, 63% rated the following item at least a 7 on a 9-point scale, with 9 being "a great deal": "To what extent do you believe psychologists make alterations to a patient's DSM diagnosis or CPT code to protect patient confidentiality, future employment, or future medical insurance?" (p. 46). In effect, this means that the surveyed psychologists tended to believe that psychologists, in general, falsify patients' diagnoses. Other authors have suggested that psychotherapy practitioners may regularly inflate or exaggerate patients presenting problems and/or diagnoses in order to be reimbursed for services (Buckloh & Roberts, 2001; Danzinger & Welfel, 2001; Ford, 2000; Pipal, 1995). Not surprisingly, in a surveyed sample of allied mental health professionals, endorsement of diagnosis alteration for reimbursement purposes has been associated with negative attitudes toward managed care (Kane, Hamlin, & Hawkins, 2003a). Cohen, Marecek, and Gilham (2006) suggested that diagnosis alteration for the purpose of managed care reimbursement has become a given, and that the issue has now become a matter of
identifying the point at which this mode of client advocacy is no longer ethically acceptable.

In addition to the practice of providing inaccurate (but more readily reimbursable) diagnostic codes to managed care companies, some psychologists appear to be inaccurately reporting the identity of the provider of services. This issue also has become problematic during the internship phase of training, whereby practitioners who are not yet professionally licensed are working at sites with heavy managed care penetration (Constantine & Gloria, 1998; Spruill & Pruitt, 2000). Despite language in the 2002 Ethics Code specifically requiring accuracy in this area (Standard 6.06: Accuracy in Reports to Payors and Funding Sources), Kanauss, Schatz, & Puente (2005) found in a survey of 328 neuropsychologists that nearly half of respondents indicated they had reported submitting requests for reimbursement for services they did not provide. In other words, to insure reimbursement for services rendered, some psychologists reportedly allow employees (e.g., master’s level therapists or psychometricians) to provide services, and bill the managed care company as if the psychologist him or herself had conducted the session or other service.

Informed consent. Miller expounded on the importance of ensuring that patients are truly giving informed consent for therapy. This includes educating the patient on what Miller (1996b) calls “invisible rationing”: a term he coined and defined as "a treatment allocation process that reduces mental health services without informing the client of the reduction" (p. 583). Managed care companies, for example, frequently advertise that they provide up to 20 sessions of psychotherapy on a yearly basis (Howard, 1998; Stern, 1993). The "invisible" aspect of this benefit is that those sessions are not merely given at
the request of the insured. Rather, they are secured by clinicians who may spend many additional, non-reimbursable hours pre-authorizing treatment, completing necessary paperwork, conducting concurrent reviews, and maintaining compliance with credentialing policies, in order for the patients (or the purchasers of the policy) to receive the full measure of benefits they purchased in good faith. Purchasers of insurance may tend to value affordable premiums over enhanced benefits (Brown, , 2002). The tendency for clients to place more trust in individual providers than in larger organizations and to be ill-equipped to make well informed insurance-related decisions (Goold & Klipp, 2002) further broadens psychologists’ responsibility to include ensuring their clients are fully cognizant of the potential consequences of choosing one health care plan over another.

Cummings, Budman and Thomas (1998), conversely, disputed both the assertion that the current system of managed care constitutes "invisible rationing" as well as assertions that short-term therapy values are neither valid nor viable in contemporary practice. They described health care rationing as ubiquitous in modern society and they submitted that it is impossible to fully meet every health care demand of every member of a given society. These authors also contended that all health care rationing can be considered "disguised" (p. 460), and that it is unreasonable to single out mental health services as significantly more invisibly rationed than other forms of health care. It is important to note, however, that regardless of the existence of invisible rationing in areas outside the purview of mental health, failure to ensure clients’ understanding of its potential impact may preclude clients from giving informed consent to treatment.

A significant barrier to assuring informed consent is the use of non-disclosure or non-disparagement clauses (Higuchi & Coscia, 1995). These clauses are portions of the
managed care/clinician contractual agreement that can preclude therapists from presenting the health care plan in an unfavorable light, informing clients of other health care plan options, and advising clients of alternative, potentially useful forms of treatment which either are more expensive to the managed care company or are not covered by the clients' behavioral health care plan (Cohen, Marecek, & Gillham, 2006; Galambos, 1999). The Ethics Code Standard 10.01b requires psychologists to inform clients of alternative treatment options in some situations. The Health Care Financing Administration initiated protection of its more than 6 million MBHO-covered beneficiaries via legislation prohibiting the inclusion of the above-described gag clauses in MBHO contracts with Medicare and Medicaid providers (Centers for Medicare & Medicaid Services, 1998).

Confidentiality. Utilization reviews that occur between providers and gatekeepers (e.g., MBHOs) to secure preauthorization or re-authorization of services (Danzinger & Welfel, 2001) are a primary contributor to potential ethical problems involving confidentiality. These pre-authorization and re-authorization reviews often require practitioners to provide detailed information about clients' histories, treatment goals, and presenting problems, as well as therapists' treatment plans (Alleman, 2001; Bilynsky & Vernaglia, 1998). Retrospective reviews, a related cost-containment measure, are sometimes used by MBHOs and may result in denial of payment for services previously authorized and rendered. Reviews are often quite detailed and rigorous, and carry similar risks to confidentiality. There is evidence to suggest that psychologists may judge managed care-related confidentiality violations among professionals less harshly than
similar violations which involve the revelation of privileged information to another client (Goesling, Potts, & Handelsman, 2000).

Confidentiality represents a foundational ethical principal on which trust in the therapeutic relationship is built. The client-therapist relationship is, in large part, based on this important premise. The Health Insurance Portability and Accountability Act (HIPAA) includes privacy and security rules which mandate that psychologists exercise great caution with clients’ protected health information when electronically storing, transmitting, or otherwise utilizing clients’ protected health information (PHI) (Appelbaum, 2002). PHI includes data regarding diagnoses, treatment, payment records, process notes and other pieces of individually identifiable health information (Clemens, 2003). Psychotherapy process notes, fortunately, still enjoy a highly protected status, including regulations which specify that patient or psychologist refusal to disclose them can not legally be made a condition of access to health care (Clemens, 2004b). However, unless process notes are maintained separately from the remainder of clients’ medical records, they may not be afforded this critical protection (Appelbaum, 2002). HIPAA compliance requires psychologists to adhere to both its privacy (e.g., development and implementation of policies and procedures to protect PHI) and security (e.g., controls on physical access to PHI) rules (American Psychological Association Practice Organization & American Psychological Association Insurance Trust, 2002). Failure to comply with HIPAA regulations can result in stiff fines and/or imprisonment. In addition to psychologists, MCOs also are considered to be covered entities (persons and organizations to which the regulations apply). Theoretically, MBHO overt denial of
services due to refusal of psychologists or patients to reveal process notes should steeply decline as compliance with HIPAA privacy laws becomes more universally applied.

Despite HIPPA guidelines, some managed care policies may seriously impinge on confidentiality, one of the most basic of patient/client rights, through several mechanisms. The use of largely unregulated information systems, for example, presents special risks (Davidson & Davidson, 1996). Detailed client histories, progress, goals, and diagnoses are often easily accessible to managed care personnel who were not originally intended to peruse them (Cooper & Gottlieb, 2000). In addition, the relatively insecure nature of electronically transferred information (e.g., treatment plans, progress reports, requests for additional sessions) also can become problematic. Daniels (2001) specifically recommended that clinicians, under no circumstances, transmit confidential client data in an electronic format due to the ease with which this information can be accessed by unintended recipients.

Many psychologists have found themselves in confidentiality-related ethical binds. They are responsible for maintaining client confidentiality by refusing to provide any information about the client-therapist relationship to unauthorized parties, and to safeguard that same information once it has left the therapist's office and gone to a potentially unsecured database at the patient's managed care company (Murphy, DeBernardo, & Shoemaker, 1998). In Standard 6.01 (Documentation of Professional and Scientific Work and Maintenance of Records), the 2002 Ethics Code includes the following language which presumably speaks to this situation “psychologists create...and to the extent the records are under their control, maintain, disseminate, store, retain, and dispose of records an data relating to their professional and scientific work” (italics
added). Bilinsky & Vernaglia (1998) suggested that therapists question managed care companies about their confidentiality policies before joining their provider panels. Hanson & Sheridan (1997) also pointed out that case reviewers are frequently unlicensed, unregulated, and not bound to the same standards of confidentiality as are psychologists. Unfortunately, the bottom line is that there is very little a psychologist can do to safeguard and control dissemination of the information once it has left his or her office.

Legislation has been drafted to curtail managed care (and other health-related) organizations from selling patients'/subscribers' Social Security numbers and health data for profit (Deborah Peel, M.D., President of the National Coalition for Mental Health, June, 2001, personal communication). HIPAA has regulated and partially curtailed this practice, but myriad loopholes are still actively exploited by some marketing organizations to circumvent the spirit of the law (Rafalski & Mullner, 2003).

Multiple relationships. Multiple relationships are addressed in Standard 3.05 of the 2002 Ethical Code. It is generally recognized that some multiple relationships are unavoidable. This is the case for many providers in a variety of disciplines who are working within a managed care setting. Nurse practitioners, for example, have voiced concerns regarding the triangulation of the provider-patient relationship, as have physicians and other health care providers (Ulrich, Soeken, & Miller, 2003). Psychologists experience the same dilemma, in that they are bound to refrain from entering relationships which could result in impairment of objectivity, negatively impact effectiveness, or cause harm to the client, and are also bound to their contract with the managed care organization to minimize costs. An addition to the 2002 Ethical Code,
Standard 3.06 (Conflict of Interest) cautions psychologists to consider financial interests as potential sources of ethical dilemmas which could impair objectivity.

Therapists on various managed care provider panels have existing relationships with said organization(s), and are thus well advised to heed the mandates of APA’s Ethical Standards. When a third party, such as an MBHO, is introduced into the client-therapist dyad, a potentially harmful, therapeutically triangulated relationship is formed (Pipal, 1995). To whom does the therapist owe his or her primary allegiance: the client or the MCO? Vernick (2004) asserted that the confidence, clarity, and consistency with which a practitioner answers that question may be a significant determinant of his or her job satisfaction. Specifically, Vernick’s results suggest that employees of an organization in which goals, rules, and rewards furnished by management are clear and consistent will be more satisfied than employees who experience more ambiguous or capricious managerial guidance. The competing loyalties generated therapists’ dual relationships both with clients themselves and with the MBHOs of those clients; therefore, may help explain a significant proportion of variance in experienced levels of job satisfaction.

Galambos (1999) offered practitioners some guidance in balancing the fiduciary relationship with clients and the fiduciary relationship with clients’ MBHOs. Fiduciary relationships, by definition, involve mutual confidence that one party acts in the best interest of the other, and imply that one party retains more influence over the other. For psychologists, this can result in pitting one’s obligation to the MBHO to provide cost efficient, accurately reported psychological services, against one’s obligation to provide the client with the services that the psychologist believes to be most appropriate and helpful. These dual fiduciary relationships can become problematic if clients’
expectations of psychologists’ behavior conflict with the contractual requirements of the MBHO.

This issue becomes even more complex when one considers the financial risk-sharing agreements in which some therapists are engaging, whereby the therapist is paid a salary by the MCO to service a given population (Hanson & Sheridan, 1997). It is possible that therapists in this situation could become financially motivated to keep treatment as brief as possible, although this might not be in the best interest of the client.

In a related APA Standard (3.07), third party requests for services are addressed. Psychologists must attempt to clarify the nature of their relationships with all individuals and organizations at the outset of services. This includes disclosure of potential role conflicts (e.g., the above mentioned risk sharing agreement) and identification of the client (e.g., the MBHO, the patient). Many researchers have strongly encouraged careful consideration of the full array of stakeholders who will be affected by managed care implementation, particularly in the increasingly complex public sector (Rothbard et al., 2002; Sullivan et al., 2001).

Clinical Autonomy and Job Satisfaction

The encroachment of managed care on clinicians’ application of professional codes of ethics can represent a significant threat to the autonomous decision-making of psychologists. Ethical dilemmas spawned by conflicting interests of stakeholders can create a working atmosphere that some psychologists may experience as fundamentally impervious to their efforts and unresponsive to their goals and ideas. Qualitative research with both physicians (Tieaskie, 2000) and psychologists (Phipps, 2000) has revealed that threats to clinical autonomy via the intrusion of managed care are grave concerns. More
than two thirds of surveyed practitioners spontaneously voiced concern that managed care had resulted in significant erosion of autonomous control over treatment decisions, particularly regarding termination issues, and that this intrusion represented a serious impediment to treatment success (Cohen, Marecek, & Gillham, 2006).

Loss of autonomy has been identified by a number of researchers as an important area of concern (Cohen, Marecek, & Gillham, 2006; Stevanovic & Rupert, 2004; Tompkins & Perloff, 2004). In fact, psychologists’ perceived loss of control over decision-making was identified as one of the top four areas of concern by Rothstein, Haller, & Bernstein (2000). Furthermore, in their study of Norwegian psychologists, Ostlyngen, Storjord, Stellander, & Martinussen (2003) found autonomy to be one of the top four predictors of job satisfaction. Managed care-related loss of control over clinical decisions was identified as one of the five issues of greatest concern by 156 clinicians who were members of the Christian Association for Psychological Studies (CAPS) (Greggo, 2001).

Levels of career satisfaction of mental health professionals have begun to receive more empirical investigation in recent years (Boothby & Clements, 2002; Dupree & Day, 1995; Gibelman & Mason, 2002; Greggo, 2001; Kalman & Goldstein, 1998; Vanvoorhis & Levinson, 2006). In the past 5 years, internship training site staff, psychologists, psychiatrists, professional counselors, substance abuse counselors, and rehabilitation counselors have been the subject of job satisfaction or staff morale studies (Constantine & Gloria, 1998; Garske, 2000).

Vyhmeister (2001) identified specific perceptions related to managed care that have negatively impacted psychologists’ job satisfaction. Weitz and Shapiro (2000)
found that the results of their studies pointed specifically to the socioeconomic impact of managed care as a primary contributor to general sense of dissatisfaction among psychologists. Rupert and Baird (2004) identified rates of reimbursement as a significant source of stress among psychologists. These consequences of decreased job satisfaction have the capacity to deeply and profoundly impact not only the practitioners themselves, but also the clients whom they serve.

A growing body of empirical research has emerged linking higher levels of involvement with managed care with both decreased career satisfaction and increased risk for burnout (Rupert & Morgan, 2005; Russell et al., 2000). In her investigation of 442 clinical social workers, Riffe (1999) found a statistically significant, negative correlation between job satisfaction and amount of practice reimbursed through managed care.

Links among job satisfaction, burnout, clinical autonomy, the experience of ethical dilemmas, salary and managed care-like administrative structures are complex, and have been observed across practitioner types, treatment settings, and continents. Results of au courant studies (Jenaro, Flores, & Arias, 2007; Rupert & Kent, 2007; Stevanovic & Rupert, 2004) suggest that psychologists’ engagement in certain career sustaining behaviors (e.g., maintaining balanced personal and professional lives, maintaining a sense of humor) can prevent burnout, garrison against a sense of decreased professional autonomy, and enhance overall job satisfaction.

In their recent study of 571 psychologists, Rupert and Morgan (2005) reported that several managed care related factors (i.e., seeing more managed care clients, seeing fewer direct pay clients, spending more time on administrative tasks and paperwork, and
experiencing less control over work activities) were significantly related to levels of emotional exhaustion among respondents. Interestingly, results of this study suggest that psychologists who are working in agency settings report significantly greater levels of emotional exhaustion than their counterparts working in solo or group independent practice. In addition, those working in the agency setting were significantly younger and less experienced than those in independent practice. This finding is particularly applicable to the proposed study, in that predoctoral interns are typically both young and inexperienced. Therefore, it may be important to take active measures to prevent burnout in this population.

Wittenberg and Norcross (2001) found that that perfectionism and tolerance of ambiguity are additional individual characteristics that can affect job satisfaction for psychologists. For school psychologists, burnout, perceived effectiveness, and job satisfaction were found to vary systematically with employment setting (Proctor & Steadman, 2003). A recent, empirical study of correctional psychologists employed by prisons revealed significant correlations among job satisfaction and autonomy (Boothby & Clements, 2002). Mounting evidence suggests that levels of clinical autonomy may be directly related to organizational commitment and turnover intention among mental health professionals (Knudsen, Johnson, & Roman, 2003). Within one year of the installation of managed care for Medicaid recipients in Iowa, psychologists and other mental health care providers reported both decreased levels of job autonomy and job satisfaction (Russell et al., 2000; Trudeau, Russell, de la Mora, & Schmitz, 2001).

Training
In light of the significant changes in the mental health care marketplace, it seems prudent to consider modification of training programs to prepare students for the demands they will face outside the classroom. In fact, equipping students with the tools that are necessary for optimal job performance may be a significant factor in their future job satisfaction. Examination of results of a study of psychologists employed in a variety of settings revealed that job satisfaction is significantly related to possessing the appropriate skills, training, and experience with which to do their jobs (Forte, 2002). Fagan, Ax, Liss, Resnick and Moody (2007) reported that a substantial majority (i.e., 68%) of the 497 interns, residents, and psychologists they surveyed desired additional training in career and workplace issues (including managed care). Unfortunately, many training programs have not yet integrated adequate managed care-related training into their curricula (Daniels, Alva, & Olivares, 2002).

Health care providers in other fields appear to be cognizant of the necessity of preparing students for the realities of working in a managed care setting. For example, social workers who contract with MBHOs and who are relatively new to clinical practice frequently emerge from training programs which tended to emphasize competence in brief therapy models (Wineburgh, 2001).

For future physicians (including psychiatrists), managed care-related training is considered essential (Hojat, Gonnella, Erdmann, Veloski, & Louis, 2000; Yedidia, Gillespie, & Moore, 2000), and a managed care curriculum component is required by programs accredited by the Association of American Medical Colleges and the Accreditation Council for Graduate Medical Education (Cook et al., 2004). Panzarino (2000) strongly encouraged the provision of targeted training for psychiatry residents to
properly prepare them for the challenges that managed care will present in the future. Hall et al. (2004) described the incorporation of "standardized patients" (p. 28) as a means for enhancing the managed care competencies of psychiatry students.

Interestingly, despite the mandate for the provision of managed care training in medical school curricula, a survey of the trainees themselves revealed that the majority felt inadequately prepared in this area (Mazor et al., 2002). Unfortunately, a survey of clerkship directors (a position which parallels that of training directors of psychology internship sites) revealed that the majority of respondents believed that medical students did not have a sufficient understanding of managed care (Brodkey, Sierles, Spertus, Weiner, & McCurdy, 2002). Perhaps a thorough investigation of the managed care training of other healthcare practitioners (i.e., predoctoral interns in psychology) would analogously yield a more comprehensive and useful understanding of the effectiveness of trainee preparation in this vital area.

A study by Daniels, Alva, & Olivares (2002) revealed that nearly 60% of counseling psychology, clinical psychology, and social work training director respondents reported that their respective programs now provide some type of managed care-related training. Just 4 years prior to the publication of the Daniels et al. study, Carleton (1998) found that approximately 40% of APA-approved programs in clinical, counseling, and school psychology had reported implementing curriculum changes related to managed care. Predictably, a survey of predoctoral internship training directors revealed that 66% of respondents believed that Ph.D. and Psy.D. interns never or rarely received managed care related training in their respective academic programs (Mooney, 2005).
A survey of APA’s Clinical Psychology and Psychotherapy divisions revealed that approximately half of respondents who conduct brief therapy reported having no training in these techniques (Levenson & Davidovitz, 2000). Some psychologists have expressed concern that the failure of graduate training programs to address changes in the contemporary marketplace may contribute to a future lack of professional viability (Neill, 2001). A survey of training directors of APA-approved doctoral programs in clinical psychology revealed that only 29% of their programs have been significantly impacted by managed care (Belter & Piotrowski, 2001). This trend of limited inclusion of managed care concepts into the curriculum appears to extend to master’s level counselor preparation programs, as well (Johnson, 2001). Some benefits to reversing this trend may include better preparation of emerging practitioners for placement in alternative employment settings (Boothby & Clements, 2002), increases in preventive services for some clients (Klein et al., 2003), and an enhanced ability to address issues of adverse impact for marginalized groups (La Roche & Turner, 2002). In addition, results of a longitudinal study of clinical psychology graduates both early and later in their careers suggest that training can be a vital piece of the career satisfaction puzzle for psychologists (Walfish, Moritz, & Stenmark, 1991).

**Definition of Terms**

Conflict surrounding managed care-related issues coupled with the now generally negative connotations implicit in the use of the term (i.e., managed care) has lead to professional dialogue exploring the possibility of abandoning the use of the term altogether. Alternatives such as “ethical mental health care,” for example, offer the distinct advantage of being non-offensive to various stakeholders who most frequently
use the term. In addition, the term “ethical mental health care” also lends credence to the commitment of mental health care providers to alleviate both internal (often non-quantifiable but vital to the well being of the care recipient) and external (typically assessed with behaviorally based indicators) suffering of their clients (Moffic, 2003).

Common use of the term “ethical mental health care,” however, has not yet come to pass. Therefore, in the interest of simplicity, brevity, and clarity, this document will refer to this method of service delivery simply as “managed care.”

Managed care. “A range of strategies for ensuring that services are carefully structured and scrutinized to assure both fiscal responsibility and acceptable quality of care” (Strom-Gottfried, 1998, p. 393).

Managed behavioral healthcare organization (MBHO). An organization or entity with a primary function of fiscally managing the distribution and certification of reimbursable mental health and substance abuse/chemical dependency benefits.

Capitation. “A prepaid plan based on a set number of covered lives under a defined benefits package. Payments are made to the provider in monthly advances, rather than as fees for services provided” (Tuttle & Woods, 1997, p. 125).

Fee-for-service. The third-party reimbursement system that allows practitioners to be paid for the provision of virtually any treatment they deem appropriate (Durham, 2001).

Medical necessity. For a given service to be deemed medically necessary, the following qualifications must be met: “For the treatment of sickness or injury, consistent with generally accepted medical practice, efficient, in the sense that a less expensive
treatment works as well as a more expensive treatment, and not for the patient's or provider's convenience” (Ford, 2000, p. 183).

Utilization Review (UR). The process by which MCOs evaluate requests for treatment on a case-by-case basis, and determine whether the requested treatment will be certified as clinically appropriate and medically necessary (Wickizer & Lessler, 1998).

Rationale and Description of Current Study

Although some of the implications of managed care for licensed psychologists have been examined, there is a significant gap in the literature at the critical juncture between the graduate school training and formal launch of psychologists into the working world. For practitioners at the stage-setting internship phase of vocational development, empirical examination of these issues is relatively scant (Constantine & Gloria, 1998). Although the internship year represents the capstone of training for future psychologists, and is frequently an inaugural professional working experience for these trainees, important correlates of attitudes toward managed care for predoctoral interns has received very little attention in the literature. Despite the prevalence of managed care in the contemporary marketplace, some training programs have largely failed to provide emerging practitioners with the documentation skills and general knowledge that will be required when they begin encountering managed care-related ethical dilemmas (Kane, 2001). The current study was in part designed to provide more recent data regarding the extent of future psychologists’ managed care related graduate level coursework.

Researchers in this area have suggested that more comprehensive, predoctoral managed care training could yield a number of vital advantages for future psychologists (Daniels, Alva, & Olivares, 2002; Spruill & Pruitt, 2000). Some have advocated for
incorporation of training that would equip interns to respond to the demands of managed care and to utilize manualized forms of ESTs while being mindful of other vital factors these manuals may not include (Hays et al., 2002). Successful practice in the increasingly complex service delivery environment in the United States (and many other countries) requires competencies which include a general understanding of managed care as well as specific skills in documentation, risk management, and appropriate handling of common managed care-related ethical scenarios (Kane, Hamlin, & Hawkins, 2003b).

Daniels et al. (2002) suggested that the field of psychology would benefit from empirical research on the managed care training experiences of trainees themselves.

Humphreys (2000) pointed out that the internship phase of training presents a unique opportunity to influence practitioners who may be eager to embrace unconventional forms of applying their education, skills, training, and experience to the betterment of public welfare. Some of these unconventional forms of psychological service provision would ideally lie in areas outside the sphere of influence of managed care. Despite the call for development of training opportunities for future psychologists which are in areas unaffected by managed care, the vast majority of internships remain focused on assessment and provision of psychotherapy.

A timely examination of the effect of predoctoral interns’ attitudes toward managed care and perceptions of preparedness to operate in the current service delivery environment represents an area for fruitful study. The proposed study involves electronically gathering data from predoctoral interns regarding their attitudes toward and perceived preparedness for operating in a managed care environment. Data obtained from the proposed study may provide useful information for planning and decision-making in
graduate school training programs (e.g., modifications of curricula), internship training programs (e.g., inclusions or exclusions of training foci, expansion of training settings), predoctoral practitioners (e.g., choice of internship setting), MBHOs (e.g., choice of appropriately trained practitioners), and ultimately, the consumers of psychological services.

Objectives

Because the influence of managed care on mental health services is projected to continue (Gibelman & Whiting, 1999; Miller, 1996b; Rosenberg, 2000; Strom-Gottfried, 1998), it is incumbent upon the profession to engage in continued examination of its impact on both the consumers and providers of mental health services (Stevanovic & Rupert, 2004). The proposed study is designed to illuminate some of the factors related to attitudes toward managed mental health care which are particularly relevant for future psychologists. Organizations providing training for these individuals shoulder the responsibility of ensuring that their trainees are properly equipped to practice successfully and ethically within the contemporary healthcare service delivery environment of the United States. The goal of the proposed study is to provide baseline data which may contribute to an enhanced understanding of predoctoral interns’ perceptions of managed care preparedness and attitudes toward current service delivery environments, ultimately leading to enhanced job satisfaction for these future psychologists, and in turn, increased quality of psychological health care services for consumers.

Research Questions
1. Are predoctoral interns’ attitudes toward managed care significantly related to their perceived knowledge of general reimbursement, knowledge of risk management, and awareness/endorsement of misdiagnosis?

2. Do months of managed care-related work experience, graduate program type (i.e., Ph.D. vs. Psy.D.), and number of graduate courses with managed care content significantly predict predoctoral interns’ attitudes toward managed care and their perceived knowledge of general reimbursement, knowledge of risk management, and awareness/endorsement of misdiagnosis?

3. Does internship site (i.e., Counseling Center vs. Hospital/Medical Center) significantly predict respondents’ attitudes toward managed care and their knowledge of general reimbursement, knowledge of risk management, and awareness/endorsement of misdiagnosis?

Summary

The entwining of managed care into the fabric of the therapeutic relationship has been met with considerable concern by mental health professionals. Variables of concern include decreased income, extensive paperwork requirements, loss of professional autonomy, limits on treatment modality (i.e., individual or group treatment vs. family or marital therapy) and restriction of treatment duration. Ethical dilemmas engendered by the use of managed care include compromised integrity and honesty, compulsory participation in ethically questionable multiple relationships, and problematic provision of adequate informed consent. Possibly as a result of changes in professional autonomy and independent decision-making, the job satisfaction of psychologists has been
negatively affected. Further research is needed in this area as the scope and influence of managed care on clinical practice continue to expand.

The proposed study will explore factors which may be related to attitudes toward managed care and perceived preparedness of future psychologists to navigate successfully in the current service delivery environment. Factors to be examined include attitudes toward managed care, prior training and experience in managed care, perceived managed care preparedness (i.e., knowledge of general reimbursement, knowledge of risk management, awareness/endorsement of upcoding), internship setting type and training program type.
CHAPTER II

METHOD

Participants

The proposed study was conducted in two phases. The first (pilot) phase included 8 predoctoral students in clinical, counseling, and school psychology from a small university in the southeastern United States. Participants ranged in age from 23 to 29 years ($M = 25.75$, $SD = 1.98$). The gender distribution of the sample was as follows: female = 1 (12.5%), male = 6 (75%), and unspecified gender = 1 (12.5%).

Of the 340 individuals who submitted electronic surveys during the main phase of the study, 309 (91%) provided responses to every item on all of the requested instruments. Thirty-one (9%) of the surveys were incomplete due to technical difficulties. Of the 309 respondents who submitted complete surveys, 223 (72%) were predoctoral interns, 5 (2%) were post-doctoral interns, and 79 (25%) were graduate students. Two participants did not indicate their professional status.

Ninety-five (43%) of the 223 predoctoral intern respondents were from site types other than those included in the research hypothesis for this study (i.e., armed forces medical centers, community mental health centers, consortia, correctional facilities, private outpatient offices, psychology departments, school districts, Veteran’s Affairs centers, other). The average ages of the entire sample, all predoctoral intern, and predoctoral interns meeting study criteria were 30.53 ($SD = 6.08$), 30.64 ($SD = 5.92$), and 30.66 ($SD = 5.73$), respectively.

Of the 223 predoctoral intern respondents, 119 (53%) met the study criteria and were used in the analysis of the research hypotheses. Only complete submissions from
predoctoral psychology interns in university counseling centers and hospital-like settings (i.e., private hospitals, public hospitals, medical schools, child/adolescent facilities) were used in the analysis of the research hypotheses. Sixty-one (51%) of the participants meeting study criteria were completing their internships in university counseling centers, and 58 (49%) were completing their internships in hospital-like settings. These site types were selected because it was anticipated that they would represent different levels of penetration of managed care.

Demographic data for respondents meeting the study criteria (i.e., predoctoral interns from university counseling centers and hospital-like settings) are found in Table 1. For comparison purposes, available APPIC data reflecting parallel demographic variables for interns from the 2007-2008 period are also provided in Table 1. Table 2 summarizes participants’ preferred and most frequently used theoretical orientation.

Procedures

The study began with a pilot phase which targeted predoctoral students in counseling, clinical, and school psychology. Training directors were contacted by email with a request to invite their students to consider participating by completing a short series of questionnaires found on the study’s website (i.e., http://www.researchdome.com). The purpose of the pilot phase was two-fold. First, it afforded the researcher the opportunity to rectify any unanticipated technical difficulties with the data gathering website. Second, the pilot study provided psychometric data from a sample of participants similar to that of the study population of interest (i.e., predoctoral interns in psychology).
### Table 1

**Frequencies (Percentages) for Participants' Demographic Characteristics (N = 119).**

<table>
<thead>
<tr>
<th>Demographic Variables</th>
<th>UCC&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Hospital&lt;sup&gt;b&lt;/sup&gt;</th>
<th>APPIC Data&lt;sup&gt;c&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(n = 61)</td>
<td>(n = 58)</td>
<td>(N = 2656)</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>45 (74)</td>
<td>51 (88)</td>
<td>78%</td>
</tr>
<tr>
<td>Male</td>
<td>16 (26)</td>
<td>7 (12)</td>
<td>22%</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African-American</td>
<td>4 (7)</td>
<td>3 (5)</td>
<td>7%</td>
</tr>
<tr>
<td>Asian</td>
<td>4 (7)</td>
<td>4 (7)</td>
<td>7%</td>
</tr>
<tr>
<td>Caucasian</td>
<td>46 (75)</td>
<td>49 (85)</td>
<td>78%</td>
</tr>
<tr>
<td>Latino/Latina</td>
<td>3 (5)</td>
<td>1 (2)</td>
<td>7%</td>
</tr>
<tr>
<td>Mixed/Other</td>
<td>1 (2)</td>
<td>1 (2)</td>
<td>4%</td>
</tr>
<tr>
<td>Native Am/AK Native</td>
<td>2 (3)</td>
<td>-</td>
<td>1%</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>1 (2)</td>
<td>-</td>
<td>n/a</td>
</tr>
<tr>
<td><strong>Degree Type Sought</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Counseling Psychology</td>
<td>35 (57)</td>
<td>4 (7)</td>
<td>13%</td>
</tr>
<tr>
<td>Clinical Psychology</td>
<td>26 (43)</td>
<td>52 (90)</td>
<td>79%</td>
</tr>
<tr>
<td>School Psychology</td>
<td>n/a</td>
<td>1 (2)</td>
<td>5%</td>
</tr>
<tr>
<td>Other</td>
<td>n/a</td>
<td>1 (2)</td>
<td>1%</td>
</tr>
</tbody>
</table>
Table 1 (continued).

<table>
<thead>
<tr>
<th>Demographic Variables UCC</th>
<th>Hospital</th>
<th>APPIC Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate Program Type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ph.D.</td>
<td>42 (69)</td>
<td>32 (55)</td>
</tr>
<tr>
<td>Psy.D.</td>
<td>19 (31)</td>
<td>26 (45)</td>
</tr>
</tbody>
</table>

Note. Total percentages by category may not equal 100 due to rounding.

aUniversity counseling center. bHospital like settings (i.e., private hospitals, public hospitals, medical schools, child/adolescent facilities).

c[http://www.appic.org/match/5_2_2_4_9a_match_about_statistics_surveys_2007a.htm.](http://www.appic.org/match/5_2_2_4_9a_match_about_statistics_surveys_2007a.htm)

Reliability data for the instruments to be used in the main phase of the study (i.e., the Practitioners’ Appraisal of Service Delivery Environments, Practitioners’ Perception of Work Setting) were statistically evaluated.

Participants for the main phase of the study were recruited by means of emailed requests to training directors of internship sites listed on the APPIC website ([http://www.appic.org](http://www.appic.org)), as well as direct invitations to predoctoral interns themselves. Training directors were asked to forward the electronic invitation for participation to the interns in their respective programs. Current email addresses of interns were also obtained from agency websites, APPIC listservs, personnel directories, and other public sources of information.
Data for this study was gathered electronically, via a specially designed website (i.e., http://www.reserachdome.com) and emailed invitations to participate. As early as 1986, electronic data collection was heralded in the professional literature as a uniquely and highly valuable research tool (Joinson, 1999). Use of the World Wide Web has been described as the tool of choice for the collection of questionnaire-based data (Hecht, "University counseling center. Hospital like settings (i.e., private hospitals, public hospitals, medical schools, child/adolescent facilities)."

Table 2

*Frequencies (Percentages) for Respondents’ Preferred and Most Used Theoretical Orientation (N = 119).*

<table>
<thead>
<tr>
<th>Theoretical Orientation</th>
<th>UCC&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Hospital&lt;sup&gt;b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Preferred</td>
<td>Most Used</td>
</tr>
<tr>
<td>Behavioral</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Brief Term</td>
<td>2 (3)</td>
<td>7 (12)</td>
</tr>
<tr>
<td>Cognitive-Behavioral</td>
<td>12 (20)</td>
<td>17 (28)</td>
</tr>
<tr>
<td>Eclectic</td>
<td>19 (31)</td>
<td>10 (16)</td>
</tr>
<tr>
<td>Existential/Humanistic</td>
<td>8 (13)</td>
<td>15 (25)</td>
</tr>
<tr>
<td>Family Systems</td>
<td>1 (2)</td>
<td>-</td>
</tr>
<tr>
<td>Gestalt</td>
<td>1 (2)</td>
<td>1 (2)</td>
</tr>
<tr>
<td>Psychodynamic</td>
<td>18 (30)</td>
<td>11 (18)</td>
</tr>
</tbody>
</table>

*Note.* Total percentages by category may not equal 100 due to rounding.

<sup>a</sup>University counseling center. <sup>b</sup>Hospital like settings (i.e., private hospitals, public hospitals, medical schools, child/adolescent facilities).
Oesker, Kaiser, Civelek, & Stecker, 1999). Helgeson and Ursic (1989) concluded that electronic collection provided data which exhibited more stability across different levels of the variable in question. They also observed that paper-and-pencil and electronic versions of the survey used in their study approached unqualified interchangeability, particularly in terms of the decision-making process employed by the respondents. Interestingly, the managed care industry itself has begun to move into the virtual data collection domain (Oss, 2005). In addition, in their training satisfaction survey of predoctoral interns in psychology, Fagan, Ax, Resnick and Moody (2007) specifically suggested that survey distribution via the internet may enhance response rates in future research with this population.

The practical, financial and environmental advantages of data collection via the internet have been described by authors in a variety of fields of scientific endeavor. Practical advantages include reduction in the number of hours invested and speed of data collection (Sheenan & McMillan, 1999), elimination of human error for data entry and dramatic reduction of instances of datasets with missing fields (Stanton, 1998), access to participants who are likely unreachable by traditional means (Gosling, Vazire, Srivastava, & John, 2004), expanded possibilities for conducting longitudinal research (Kraut et al., 2004), and access to larger and more diverse/representative samples (Barry, 2001; Pasveer & Ellard, 1998; Swoboda, Muehlberger, Weitkunat, & Schneeweiss, 1997). Financial advantages range from the elimination of postage and printing costs to the reduction in necessary budgetary allowances for payment of test proctors and administrative staff (Epstein, Klinkenberg, Wiley, & McKinley, 2001; Kraut et al., 2004). Sheenan and McMillan (1999) reported that response rate represents a particularly
important advantage of electronic data collection. Typical response rates have varied from 41% to 76% (Anderson & Gansneder, 1995).

To garner the scientific and practical benefits summarized above, the current study utilized an electronic form of data collection using both e-mail and a dedicated website (i.e., http://www.researchdome.com). Requests for participation were emailed to predoctoral interns both directly and indirectly. Predoctoral interns whose email addresses were publicly available were emailed directly. The principal investigator contacted current APPIC-listed predoctoral internship training directors with a request to distribute emailed invitations to predoctoral interns whose email addresses are not already publicly available. In the invitation, potential participants found the specific Universal Resource Locator (URL) for the website created for data collection for the present study (i.e., http://www.researchdome.com). The invitation e-mail also included a brief description of the study (i.e., purpose, anticipated completion time, brief instructions, etc.), as well as an announcement of the availability of an incentive for participating. By either clicking on the URL in the invitation e-mail or inserting the URL into the web browser of their choice, interns were presented with an informed consent statement (see Appendix A) on the opening page of the URL (i.e., http://www.researchdome.com). After reading the consent statement, they chose whether or not to participate in the study by clicking “I agree” or “I disagree”. Those who read the informed consent statement and chose not to participate were taken directly to a page containing a statement which thanked them for their consideration. Respondents who agreed to participate were taken to a page containing instructions for completing the online questionnaires.
Following submission of the measures, participants had the opportunity to provide contact information in the form of an e-mail address, for the purpose of receiving the results of the study and entering the drawing for the survey participation incentive, a $100 Amazon.com gift certificate. To further insulate confidentiality, participants were encouraged (but not required) to utilize free, anonymous email clients such as Hotmail (http://www.hotmail.com) or Yahoo (http://mail.yahoo.com), rather than email addresses which may provide more readily identifiable, personal information (e.g., an email address provided by the internship site at which they are currently employed). To ensure confidentiality of participants’ responses, at no time were they asked for their name or physical address. To register for the drawing, a participant entered an email address to which he or she would like the online gift certificate sent. The principal investigator randomly drew one name from the pool of participants. The winner was notified by email using the interface provided by Amazon (http://www.Amazon.com) for sending gift certificates via email.

Although it was not possible to guarantee that a given participant completed one and only one survey (as is also true of traditional, pencil-and-paper measures), the principal investigator used multiple strategies to maximize the likelihood that multiple submissions by a single participant were eliminated prior to data analysis. Examination of participants’ internet protocol (IP) addresses, a unique number used by machines which access the internet (e.g., internet fax machines, routers, computers) can provide evidence that more than one survey had been completed via the same computer. In cases involving multiple submissions on the same computer (as indicated by identical IP addresses), respondents’ answers to the first survey were used for the purpose of analysis. If more
than one submission was received from participants with identical email addresses, only the first was analyzed. In addition, this study employed the use of “session IDs” to help ensure data integrity. Session IDs are unique, numerical identifiers that are assigned to participants when they provide informed consent for participation. This number “followed” the participant through each instrument, and prevented mixing of data among participants.

**Instruments**

Instruments used in this study included the Practitioners’ Appraisal of Service Delivery Environment (PASDE) (see Appendix B), Practitioners’ Perception of Work Setting (PPOWS) (see Appendix C), and a Demographic and Practice Information Form (DAPIF) (see Appendix D). The PASDE and PPOWS were used with the express permission of their developers, and were slightly modified (including re-titling and the addition of experimental items) for the purpose of this study.

*Practitioners’ Appraisal of Service Delivery Environment*

Attitudes toward managed care was assessed using an instrument developed by Kane, Hamlin and Hawkins (2003a). The original items for this untitled measure were evaluated by a panel of utilization reviewers, faculty members, and mental health professionals for face validity prior to administration to a sample of 260 licensed social workers. A principal components analysis of Likert-like scale responses (1 = Strongly disagree, 4 = Strongly agree) revealed that six of the items formed a single factor (i.e., Factor 1) believed to tap attitudes toward managed care. With one exception, items are reverse scored. Higher scores on this factor are thought to indicate more favorable attitudes toward managed care (range = 6 - 24). Using summed scores on this factor as
the dependent variable, the researchers’ final regression model, which accounted for more than one quarter of the variance, included the following significantly predictive variables: use of brief/solution-focused therapeutic approaches (Beta = .12, p = .029), perception of classroom preparation for a “real world” career (Beta = .17, p = .003), familiarity with practice strategies preferred by third party payors (Beta = .25, p = .000), belief that service delivery has changed dramatically in the last 10 years (Beta = -.12, p = .034), endorsement of importance of documentation for reimbursement (Beta = -.14, p = .013), endorsement of the need for client advocacy skills in a managed care environment (Beta = -.20, p = .002) and mis-diagnosis (Beta = -.28, p = .000). A pilot study conducted by Blood and Wagner (2007) yielded a Cronbach’s alpha coefficient of .83 for the 6-item PASDE Factor 1. All 13 items were administered to participants in the present study, but only Factor 1 scores (i.e., items 1, 3, 5, 7, 9, 11) were used in the evaluation of research hypotheses 1, 2, and 3.

Practitioners’ Perception of Work Setting

Kane, Hamlin and Hawkins (2003b) designed a promising, new instrument for measuring perceptions of preparedness to function in current service delivery environments. Items for this untitled instrument were constructed based on a thorough review of the literature, and were evaluated by a panel which included seasoned utilization reviewers in the managed care industry as well as direct-care mental health professionals in for-profit and not-for-profit settings. Principle component analysis of the Likert-type items (1=Strongly disagree, 4=Strongly agree) on this instrument revealed a 4-factor solution: perceived knowledge of general reimbursement, perceived knowledge of risk management, perceived knowledge of mis-diagnosis and perceived knowledge of
documentation. These factors accounted for more than 2/3 of the cumulative variance and include: perceived knowledge of general reimbursement (alpha coefficient = .87, 7 items, higher scores thought to indicate perceptions of greater need for knowledge in this area, range = 7 - 28), perceived knowledge of risk management (alpha coefficient = .70, 3 items, higher scores thought to indicate perceptions of greater need for knowledge in this area, range = 3 - 12), perceived awareness of mis-diagnosis (alpha coefficient = .85, 2 items, higher scores thought to indicate awareness/endorsement of mis-diagnosis/"upcoding", range = 2 - 8) and perceived knowledge of documentation (alpha coefficient = .77, 2 items, higher scores thought to indicate perception of greater need for knowledge in this area, range = 2 - 8). The original instrument included 36 items and was pilot tested with 258 licensed clinical social workers in Florida.

As is true of the PASDE, although analysis revealed no significant correlation with years of professional experience and attitudes toward managed care, none of the participants in the original study had less than 2 years of professional experience. It is possible that participants who are more likely to have had only minimal professional experience outside of a classroom or practicum setting (e.g., predoctoral interns) may provide important, additional data. In deference to the developers’ recommendation to administer the instrument to a more geographically diverse sample, the proposed study recruited participants throughout North America.

The instrument was titled “Practitioners’ Perceptions of Work Setting” (PPOWS). To bolster internal consistency of factors 2 and 3 (which originally contained 3 and 2 items, respectively), Blood and Wagner (2007) added experimental items to each of these factors (see Appendix C). In their pilot study, they reported Cronbach’s alpha coefficients
of .84, .82, and .88 for the PPOWS subscales of perceived knowledge of general reimbursement, perceived knowledge of risk management, and perceived awareness of mis-diagnosis, respectively. Scores on factor 1 (i.e., perceived knowledge of general reimbursement), the expanded subscale 2 (i.e., perceived knowledge of risk management) and the expanded subscale 3 (i.e., perceived knowledge of mis-diagnosis) will be used in the evaluation of research hypotheses 1, 2, and 3.

For both the PASDE and the PPOWS, terminology specific to the allied mental health discipline of social work was replaced with nonspecific language more applicable to the participants for the proposed study. To tailor this instrument to the population of interest for the current study, items containing terms specific to social work (e.g., “social worker,” “social work educators,” “social work position”) will be replaced with terms more applicable to predoctoral interns in psychology (e.g., “practitioner,” “psychology educators,” “professional psychology position”).

Demographic and Practice Information Form (DAPIF)

This 13-item instrument (see Appendix D) was developed specifically for this study. The DAPIF contains items pertaining to respondents’ years of experience, preferred theoretical orientation, graduate training program, internship setting type, and extent of exposure to managed care. Evidence is mixed regarding the influence of years of experience on psychologists' attitudes towards managed care. This study may offer unique insights on this matter, as general levels of experience with managed care may be lower in this population (i.e., predoctoral interns) than in studies which are limited to licensed professionals currently in practice. In turn, internship site type may also influence this variable, as predoctoral interns in university counseling centers are less
likely to be currently working in a setting as heavily penetrated by managed care as those who are working in hospital settings. Although there is some evidence to suggest that Psy.D. and Ph.D. predoctoral interns may not differ in their overall satisfaction with training in professional issues including managed care (Fagan, Ax, Liss, Resnick, & Moody, 2007), there has been scant empirical research investigating the possibility that graduates from these two types of training programs may differ significantly in their attitudes towards managed care. These authors also suggest that predoctoral training in managed care related (and other professional issues) may be a particularly important variable in understanding job satisfaction: a variable often associated with extent of on-the-job exposure to managed care. The DAPIF, therefore, was developed to gather these data (i.e., months of managed care work experience, managed care training/coursework, training program type) from future psychologists.

Because two of the instruments used in this study (i.e., PASDE, PPOWS) are revisions of the original measures, the internal consistency of scores on all subscales was examined prior to the formal analysis of the study hypotheses. Though none of the internal consistency estimates for subscales used in this study fell below this level, they would have been dropped from the analysis if the Cronbach's alpha coefficient for subscale scores was less than .70.

Planned Analyses

Cronbach's alpha coefficients were computed to determine the internal consistency of total scores on PASDE Factor 1 (attitudes toward managed care); PPOWS Factors 1 (perceived knowledge of general reimbursement), expanded subscale 2 (perceived knowledge of risk management), and expanded subscale 3 (perceived
knowledge of mis-diagnosis). No scales with Cronbach's alpha coefficients below .70 were identified; therefore, none were deleted from subsequent analyses. Individual, experimental items added to the PPOWS (see Appendix C) which did not bolster the statistical reliability of the PPOWS would have been removed from further analyses.

Multiple linear regression was used in the evaluation of research hypothesis 1. An alpha level of .05 was used to determine statistical significance. Four individual multiple linear regression analyses were performed to evaluate hypothesis 2. Bonferroni's procedure was used to adjust the alpha level for hypothesis 2 (i.e., .013). A multivariate analysis of variance (MANOVA) was used in the evaluation of hypothesis 3. An alpha level of .05 was used to determine overall statistical significance (i.e., Wilks’ Lambda).

Research Hypotheses

1. Respondents' attitudes toward managed care, as measured by Factor 1 of the PASDE, will be significantly and negatively correlated with their ratings of the importance of perceived knowledge of general reimbursement, perceived knowledge of risk management, and perceived awareness/endorsement of misdiagnosis, as measured by scores on PPOWS Factor 1, PPOWS expanded subscale 2, and PPOWS expanded subscale 3.

2. Months of managed care-related work experience, graduate program type (i.e., Ph.D. vs. Psy.D.), and number of graduate courses with managed care content will significantly predict attitudes toward managed care, as measured by Factor 1 of the PASDE, and ratings of the importance of perceived knowledge of general reimbursement, perceived knowledge of risk management, and perceived
awareness/endorsement of misdiagnosis, as measured by scores on PPOWS Factor 1, PPOWS expanded subscale 2, and PPOWS expanded subscale 3.

3. When compared to Counseling Center interns, respondents from Hospitals/Medical Centers will report significantly more negative attitudes toward managed care, as measured by Factor 1 of the PASDE, and significantly higher ratings of the importance of knowledge of general reimbursement, perceived knowledge of risk management, and perceived awareness/endorsement of misdiagnosis, as measured by scores on PPOWS Factor 1, PPOWS expanded subscale 2, and PPOWS expanded subscale 3.
CHAPTER III

RESULTS

Descriptive Analyses

Prior to evaluating the research hypotheses, Cronbach's alpha coefficients were computed to determine the internal consistency of scores for Factor 1 on the PASDE and the three subscales of the PPOWS. Means and standard deviations of scores on the PASDE, PPOWS subscale 1, PPOWS expanded subscale 2, and PPOWS expanded subscale 3 are found in Table 3 for the university counseling center and hospital setting participants.

Results revealed that the reliability of scores on the 6-item PASDE Factor 1 (measuring participants' attitudes toward managed care) was unacceptable (Cronbach's alpha = .50). On further investigation, however, it was noted if item 9 were removed, the reliability of scores on the factor increased significantly (Cronbach's alpha = .81). For the purposes of the current study, item 9 was dropped from Factor 1 of the PASDE prior to its use in the analysis of the research hypotheses. The problematic nature of item 9 may be related to wording and tone of the item. Item 9 was the only item in the factor which was not reverse-scored, and represented the sole item for which agreement indicated a more positive attitude towards managed care.

Reliability of scores on PPOWS subscale 1 (i.e., General Reimbursement) was adequate (Cronbach's alpha = .84). Kane's (2003b) original Factor 2 (i.e., Risk Management) of the PPOWS contained 3 items. In the interest of bolstering reliability, 6 additional items were developed for use on this subscale. Cronbach's alphas for the
original scale and the expanded scale (includes both the original items and the 6 experimental items developed for this study) are presented in Table 4.

Table 3

*Means (Standard Deviations) for Participants' Scores on the Measures (N = 119).*

<table>
<thead>
<tr>
<th>Measure</th>
<th>UCC&lt;sup&gt;a&lt;/sup&gt; (n = 61)</th>
<th>Hospitals (n = 58)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PASDE Factor 1 (excluding item #9)</td>
<td>7.48 (2.01)</td>
<td>7.91 (2.68)</td>
</tr>
<tr>
<td>PPOWS Subscale 1: General Reimbursement</td>
<td>24.95 (2.45)</td>
<td>24.26 (3.09)</td>
</tr>
<tr>
<td>PPOWS Subscale 2: Risk Management</td>
<td>30.77 (3.15)</td>
<td>29.64 (4.02)</td>
</tr>
<tr>
<td>PPOWS Subscale 3: Mis-Diagnosis</td>
<td>19.62 (3.98)</td>
<td>17.93 (3.60)</td>
</tr>
</tbody>
</table>

<sup>a</sup>University counseling center. <sup>b</sup>Hospital like settings (i.e., private hospitals, public hospitals, medical schools, child/adolescent facilities).

Because the experimental items resulted in increased internal consistency for scores on the scale, all items were retained and used in the analysis of the research hypotheses.

Kane's (2003b) original Factor 3 (i.e., Mis-Diagnosis) of the PPOWS contained only 2 items. As with Factor 2, in the interest of bolstering reliability, 6 additional items were developed for use on this subscale. Cronbach's alphas for scores on both the original and expanded subscales are presented in Table 3. Because the experimental items resulted in increased internal consistency, all items were retained and used in the analysis of the research hypotheses.
Table 4

*Internal Consistency of Scores for PPOWS Subscales 2 and 3 (N = 119).*

<table>
<thead>
<tr>
<th>PPOWS Subscales</th>
<th>Original Scale</th>
<th>Expanded Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subscale 2: Risk Management</td>
<td>.56</td>
<td>.81</td>
</tr>
<tr>
<td>Subscale 3: Mis-diagnosis</td>
<td>.63</td>
<td>.82</td>
</tr>
</tbody>
</table>

**Planned Analyses**

The results of the planned analyses for the study hypotheses are as follows.

Hypothesis 1: Respondents' attitudes toward managed care will be significantly and negatively correlated with their ratings of the importance of perceived knowledge of general reimbursement, perceived knowledge of risk management, and perceived awareness/endorsement of misdiagnosis.

The results of a multiple linear regression analysis provided support for this hypothesis. The three PPOWS subscales yielded an $R^2$ of .16 for the prediction of attitudes toward managed care, $F(3, 115) = 7.26, p < .000$. Approximately 16% of the variance in managed care attitude, as measured by PASDE Factor 1, was explained by the variability in PPOWS scores. More specifically, scores on PPOWS expanded subscale 2 (i.e., Risk Management) and PPOWS expanded subscale 3 (i.e., Mis-diagnosis) contributed significantly to the model, whereas PPOWS subscale 1 scores (i.e., General
Reimbursement) did not. Table 5 summarizes the statistical results relevant to the analysis of this hypothesis.

Hypothesis 2: Months of managed care-related work experience, graduate program type, and number of graduate courses with managed care content will significantly predict attitudes toward managed care, perceived importance of knowledge of general reimbursement, perceived importance of knowledge of risk management, and perceived importance of knowledge of mis-diagnosis. Total months of managed care experience (including experience obtained prior to and during predoctoral internship) were used in the analysis of this hypothesis.

Table 5

*Multiple Linear Regression Analysis for General Reimbursement, Risk Management, and Mis-Diagnosis in Relation to Participants' Attitudes Toward Managed Care (N= 119).*

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SEB</th>
<th>β</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Reimbursement</td>
<td>.04</td>
<td>.09</td>
<td>.04</td>
<td>.41</td>
<td>.686</td>
</tr>
<tr>
<td>Risk Management</td>
<td>-.14</td>
<td>.07</td>
<td>-.22</td>
<td>-2.02</td>
<td>.046*</td>
</tr>
<tr>
<td>Mis-Diagnosis</td>
<td>-.19</td>
<td>.05</td>
<td>-.32</td>
<td>-3.65</td>
<td>.000**</td>
</tr>
</tbody>
</table>

Multiple linear regression analyses were conducted for each of the four dependent variables (i.e., scores on PASDE Factor 1, PPOWS subscale 1, PPOWS expanded subscale 2, PPOWS expanded subscale 3) in this hypothesis. The results of these analyses did not support this hypothesis.
First, the effect of months of managed care experience, graduate program type, and number of graduate courses with managed care content on managed care attitude, as measured by scores on the PASDE, was analyzed. These predictor variables yielded an $R^2$ of .02 for the prediction of attitudes toward managed care, $F(3, 115) = .76$, $p = .519$. Results did not support this portion of the hypothesis. Table 6 summarizes the statistical analysis for this portion of hypothesis 2.

Next, the dependent variable of perceived importance of knowledge of general reimbursement (i.e., scores on PPOWS subscale 1) was analyzed with respect to the independent variables of hypothesis 2 (i.e., managed care experience, graduate program type, managed care coursework). The predictor variables yielded an $R^2$ of .03 for the prediction of knowledge of general reimbursement, $F(3, 115) = 1.15$, $p = .331$. Table 7 summarizes the statistical findings for this hypothesis.

Table 6

*Multiple Linear Regression Analysis for Managed Care Experience, Graduate Program Type, and Managed Care Coursework in Relation to Participants’ Managed Care Attitudes (N= 119).*

<table>
<thead>
<tr>
<th>Variable</th>
<th>$B$</th>
<th>$SEB$</th>
<th>$\beta$</th>
<th>$t$</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managed Care Experience</td>
<td>.00</td>
<td>.01</td>
<td>.04</td>
<td>.39</td>
<td>.697</td>
</tr>
<tr>
<td>Graduate Program Type</td>
<td>- .53</td>
<td>.47</td>
<td>-.11</td>
<td>-1.13</td>
<td>.261</td>
</tr>
<tr>
<td>Managed Care Coursework</td>
<td>.23</td>
<td>.23</td>
<td>.09</td>
<td>1.00</td>
<td>.320</td>
</tr>
</tbody>
</table>
After that, managed care experience, degree type, and graduate courses with managed care content were statistically examined to determine their utility as predictors of scores on PPOWS subscale 2 (i.e., perceived importance of knowledge of risk management). These predictor variables yielded an $R^2$ of .05 for the prediction of perception of risk management; $F(3, 115) = 1.91, \ p = .132$. Again, the results did not support this hypothesis. Table 8 summarizes the statistical data relevant to the analysis of this hypothesis.

Table 7

*Multiple Linear Regression Analysis for Managed Care Experience, Graduate Program Type, and Managed Care Coursework in Relation to Participants' Perceptions of General Reimbursement Knowledge (N = 119).*

<table>
<thead>
<tr>
<th>Variable</th>
<th>$B$</th>
<th>$SEB$</th>
<th>$\beta$</th>
<th>$t$</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managed Care Experience</td>
<td>.01</td>
<td>.01</td>
<td>.06</td>
<td>.62</td>
<td>.536</td>
</tr>
<tr>
<td>Graduate Program Type</td>
<td>-1.02</td>
<td>.55</td>
<td>-.18</td>
<td>-1.84</td>
<td>.068</td>
</tr>
<tr>
<td>Managed Care Coursework</td>
<td>-.07</td>
<td>.27</td>
<td>-.02</td>
<td>-.27</td>
<td>.792</td>
</tr>
</tbody>
</table>

Finally, the last dependent variable for hypothesis 2 (i.e., perceived importance of knowledge of mis-diagnosis) was examined. The predictor variables yielded an $R^2$ of .06 for the prediction of mis-diagnosis, $F(3, 115) = 2.48, \ p = .065$. The results did not support this hypothesis. It is worth noting, however, that months of managed care related
work experience was significantly related to respondents' scores on PPOWS subscale 3 ($t = -2.69, p = .008$). Table 9 summarizes the findings for this hypothesis.

Table 8

*Multiple Linear Regression Analysis for Managed Care Experience, Graduate Program Type, and Managed Care Coursework in Relation to Participants' Perceptions of Risk Management Knowledge ($N = 119$).*

<table>
<thead>
<tr>
<th>Variable</th>
<th>$B$</th>
<th>$SEB$</th>
<th>$\beta$</th>
<th>$t$</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managed Care Experience</td>
<td>.01</td>
<td>.01</td>
<td>.10</td>
<td>1.05</td>
<td>.296</td>
</tr>
<tr>
<td>Graduate Program Type</td>
<td>-1.20</td>
<td>.71</td>
<td>-.16</td>
<td>-1.68</td>
<td>.095</td>
</tr>
<tr>
<td>Managed Care Coursework</td>
<td>-.57</td>
<td>.35</td>
<td>-.15</td>
<td>-1.64</td>
<td>.105</td>
</tr>
</tbody>
</table>

Hypothesis 3: When compared to counseling center interns, respondents from hospitals/medical centers will report significantly more negative attitudes toward managed care, as measured by Factor 1 of the PASDE, and significantly higher ratings of the importance of knowledge of general reimbursement, perceived knowledge of risk management, and perceived awareness/endorsement of misdiagnosis, as measured by scores on PPOWS Factor 1, PPOWS expanded subscale 2, and PPOWS expanded subscale 3.

The results of a multivariate analysis of variance did not support this hypothesis, Wilks' Lambda = .93, $F(4, 114) = 2.01$, $p = .098$. 
Table 9

*Multiple Linear Regression Analysis for Managed Care Experience, Graduate Program Type, and Managed Care Coursework in Relation to Participants’ Perceptions of Knowledge of Mis-Diagnosis (N = 119).*

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SEB</th>
<th>β</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managed Care Experience</td>
<td>-.04</td>
<td>.01</td>
<td>-.26</td>
<td>-2.69</td>
<td>.008**</td>
</tr>
<tr>
<td>Graduate Program Type</td>
<td>.44</td>
<td>.75</td>
<td>.06</td>
<td>.58</td>
<td>.564</td>
</tr>
<tr>
<td>Managed Care Coursework</td>
<td>-.07</td>
<td>.37</td>
<td>-.02</td>
<td>-.19</td>
<td>.847</td>
</tr>
</tbody>
</table>

**p < .01.

Additional Analyses

Because many researchers in the field (Cooper & Gottlieb, 2000; Messina-Connolly, 2002; Pipal, 1995) have expressed concern with managed care related ethical decision making, participants’ responses to individual items on PPOWS subscale 3 (i.e., Mis-Diagnosis) were examined. Table 10 contains a summary of affirmative responses (i.e., agree and strongly agree) to each of these items.

Because managed care related variables were a primary focus of this study, additional analyses were performed to evaluate potential group (i.e., university counseling center vs. hospital internship setting types) differences. These data are summarized in Table 11. Significant differences were found in the number of graduate
courses with managed care content as well as managed care related work experience prior to internship.

Table 10

*Frequencies (Percentages) of Participants Affirmatively Endorsing PPOWS Subscale 3 Items (N = 119).*

<table>
<thead>
<tr>
<th>Item</th>
<th>Frequency (Percentage) Endorsing</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. When requesting additional treatment sessions from a managed care company, practitioners should avoid discussing clients' progress toward treatment goals</td>
<td>31 (26)</td>
</tr>
<tr>
<td>6. For the purpose of securing authorization for necessary treatment from a managed care company, practitioners sometimes need to exaggerate the severity of clients' symptoms</td>
<td>75 (63)</td>
</tr>
<tr>
<td>12. To secure authorization for sessions I believe are vital for my client, I would exaggerate the severity of his or her symptoms to a managed care case reviewer</td>
<td>47 (40)</td>
</tr>
<tr>
<td>14. To secure authorization for sessions I believe are vital for my client, I would avoid discussing information regarding my client’s progress</td>
<td>39 (33)</td>
</tr>
<tr>
<td>16. When interacting with managed care case reviewers, emphasizing clients’ progress will result in denial of authorization for continued sessions</td>
<td>51 (43)</td>
</tr>
<tr>
<td>21. When reimbursed by managed care companies, you have to “stretch the truth” when you document to ensure payment for services</td>
<td>37 (31)</td>
</tr>
<tr>
<td>23. When I document, I occasionally “stretch the truth” to get the best services for my clients</td>
<td>17 (14)</td>
</tr>
</tbody>
</table>
Table 10 (continued).

<table>
<thead>
<tr>
<th>Item</th>
<th>Frequency (Percentage) Endorsing</th>
</tr>
</thead>
<tbody>
<tr>
<td>24. Providing an accurate diagnosis to a managed care company</td>
<td>82 (69)</td>
</tr>
</tbody>
</table>

is not necessarily in the best interest of your client

Note: Affirmative endorsement includes responses of “Agree” and “Strongly agree”.

Items 21 and 23 were included on Kane’s (2003b) original subscale. Items, 2, 6, 12, 14, 16, and 24 were experimental items developed for this study.

For both groups, the modal number of graduate courses with managed care content was 0. Among all respondents, 80 (67%) reported receiving no exposure to managed care related coursework during their graduate training, and 102 (95%) reported 2 or fewer courses in which managed care content was presented. Among university counseling center respondents, 55 (90%) reported 2 or fewer courses with managed care content; among hospital respondents, 58 (100%) reported 2 or fewer courses with managed care content.

Respondents’ average months of managed care experience prior to internship, months of managed care experience during internship, and total months of managed care experience, were 14.97, 4.80, and 19.76, respectively. For university counseling center interns, average months of managed care experience prior to internship, months of managed care experience during internship, and total months of managed care experience, were 10.23, 1.02, and 11.25, respectively. For predoctoral interns in hospital settings, average months of managed care experience prior to internship, months of managed care experience during internship, and total months of managed care experience, were 14.97, 4.80, and 19.76, respectively.
experience, were 19.95, 8.78, and 28.72, respectively. Respondents' modal number of months of managed care experience prior to internship was 0. A total of 62 (52%) respondents reported no managed care related work experience prior to internship.

Thirty-four (56%) of university counseling center respondents and 28 (48%) of hospital-based predoctoral interns reported having no managed care experience prior to internship.

Table 11

Means (Standard Deviations) for Managed Care Coursework and Months of Managed Care Experience for Interns in University Counseling Centers and Hospitals (N = 119).

<table>
<thead>
<tr>
<th>Measure</th>
<th>UCC(^a) (n = 61)</th>
<th>Hospitals(^b) (n = 58)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managed Care Coursework</td>
<td>0.72 (1.20)</td>
<td>0.33 (0.54)*</td>
</tr>
<tr>
<td>Managed Care Experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Before Internship</td>
<td>10.23 (16.57)</td>
<td>19.95 (32.08)*</td>
</tr>
<tr>
<td>During Internship</td>
<td>1.02 (4.72)</td>
<td>8.78 (12.12)**</td>
</tr>
<tr>
<td>Total</td>
<td>11.25 (16.94)</td>
<td>28.72 (33.64)**</td>
</tr>
</tbody>
</table>

Note. The above results must be interpreted with extreme caution because the assumption of homogeneity of variance was violated.

\(^a\)University counseling center. \(^b\)Hospital like settings (i.e., private hospitals, public hospitals, medical schools, child/adolescent facilities).

\(^*p < .05. \text{ \ } **p < .01\)
Finally, an additional focus of attention in this study involved managed care related training and preparation. For that reason, responses to selected items on the PASDE and the PPOWS were examined. Descriptive data for these selected items are found in Table 12.

Table 12

*Frequency (Percent) Endorsing Selected PPOWS and PASDE Items (N = 119).*

<table>
<thead>
<tr>
<th>Item</th>
<th>Frequency (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PASDE</strong></td>
<td></td>
</tr>
<tr>
<td>10. The knowledge and skills taught by psychology classroom educators prepare future practitioners for a career in the real world</td>
<td>49 (41)</td>
</tr>
<tr>
<td>12. Practitioners need familiarity with practice strategies that are recommended by HMOs, insurance companies and other funding sources</td>
<td>111 (93)</td>
</tr>
<tr>
<td>13. Practitioners need the skills to advocate for their clients in a managed care setting.</td>
<td>116 (98)</td>
</tr>
</tbody>
</table>
Tabe 12 (continued).

<table>
<thead>
<tr>
<th>Item</th>
<th>Frequency (Percent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPOWS</td>
<td></td>
</tr>
<tr>
<td>1. Practitioners need a general understanding of managed care</td>
<td>116 (98)</td>
</tr>
<tr>
<td>19. Practitioners need to understand the business side of the</td>
<td>116 (98)</td>
</tr>
<tr>
<td>provision of health and mental health services</td>
<td></td>
</tr>
</tbody>
</table>
CHAPTER IV
DISCUSSION

Summary

This study was designed to examine future psychologists’ perceptions of managed care, as well as their managed care related training and work experience. More specifically, the focus of attention was predoctoral interns’ attitudes towards managed care and their perceptions of the importance of knowledge in three critical domains relevant to service provision in the contemporary marketplace (i.e., general reimbursement, risk management, misdiagnosis). Although similar studies have examined other groups (e.g., seasoned psychologists, physicians, social workers), factors related to emerging practitioners’ attitudes have remained largely unexamined.

The results of the current study suggested that predoctoral interns’ knowledge of both risk management and misdiagnosis were significant predictors of their attitudes toward managed care, while their knowledge of general reimbursement was not. With one important exception, neither managed care experience, graduate program type (i.e., Ph.D. vs. Psy.D.), nor managed care related coursework was significantly predictive of knowledge in the three domains related to contemporary service provision. Managed care related work experience, however, was significantly related to knowledge/endorsement of mis-diagnosis. Respondents’ scores measuring attitudes toward managed care, knowledge of general reimbursement, and knowledge of risk management did not differ by internship setting type (i.e., university counseling center vs. hospital-like setting).
Discussion of Findings

Instruments used in this study included the DAPIF, the PASDE, and the PPOWS. The DAPIF was developed specifically for this study, and the PASDE and PPOWS were adapted from existing measures. The DAPIF was developed for the purpose of gathering demographic data as well as specific information regarding managed care related training and work experience. Options for the measurement of managed care attitudes were extremely limited, as were available measures regarding perceived knowledge of general reimbursement, perceived knowledge of risk management, and perceived knowledge/endorsement of misdiagnosis.

For the data to be useful and meaningful, it was vital that the scores on the chosen instruments were reliable for the group under examination (i.e., predoctoral interns in professional psychology). Consequently, analyses of the internal consistency of scores on the chosen instruments were conducted in both the pilot and main phases of the study.

Originally developed by Kane (2003a), the PASDE was chosen to measure attitudes toward managed care. Information about the reliability of scores on this instrument was not available prior to this study because the author of the PASDE reported that his original data were lost in Hurricane Wilma (M. Kane, personal communication, February 28, 2006).

Although the reliability of PASDE scores was found to be acceptable during the pilot phase of the present investigation, data collected during the main phase of the study revealed problems with item #9 (i.e., “Managed care companies have generally improved the quality of health and mental health care services for people”). Fortunately, the removal of this item resulted in adequate internal consistency for the PASDE scores. It is
worth noting that item #9 was the only item on the instrument to which an affirmative response indicated a more positive attitude toward managed care. Consequently, it is possible that participants’ responses to this item reflected a response set bias. Researchers who use this instrument in the future may want to consider either re-wording this item to more closely parallel those of the PASDE as a whole or eliminating this item at the outset.

Also originally developed by Kane (2003b), the PPOWS was chosen to measure respondents’ perceptions of the importance of knowledge of general reimbursement, risk management, and misdiagnosis. Two of the three study-relevant factors on this instrument contained three or fewer items. To bolster reliability, supplemental items were developed for each of these factors, and were included in the instrument. The data suggest that these additional items did, indeed, bolster the reliability of scores on the factors of interest on this instrument. Future studies making use of the PPOWS may also want to consider including these experimental items.

The first hypothesis postulated that attitudes toward managed care would be significantly and negatively correlated with perceived preparedness for current service delivery environments, as measured by perceived knowledge of general reimbursement, risk management, and misdiagnosis. The data gathered from the predoctoral interns in this study supported this contention. Those who reported more negative attitudes towards managed care tended to agree that knowledge in the areas of risk management and misdiagnosis was important.

The second hypothesis predicted that managed care-related work experience, graduate program type (i.e., Ph.D., Psy.D.), and number of graduate courses with
managed care content would significantly predict attitudes towards managed care, and perceived importance of knowledge of general reimbursement, risk management, and misdiagnosis. The data did not support this hypothesis.

If neither the amount of managed care experience nor managed care related coursework impacts managed care attitude, it seems reasonable to postulate that managed care attitudes may be a function of other variables. For example, it is possible that respondents’ specific experiences in a managed care environment (rather than merely a measure of time invested), whether positive or negative, are an important factor in determining their overall attitude towards managed care. Future researchers may be well served to tap this variable (i.e., extent of particularly salient negative and positive experiences with managed care) when evaluating factors which may affect attitudes toward managed care.

Further, it is important to note that the extent of managed care related coursework did not affect attitudes toward managed care, nor did it affect respondents’ perceptions of preparedness for current delivery environments, as measured by knowledge in the three critical domains (i.e., general reimbursement, risk management, and misdiagnosis). This may highlight an important shortcoming in graduate level managed care education. It is important to note that the modal response, in terms of total courses with specific managed care related content, was zero for all respondents. Not only did this severely limit variability in the sample, it also begs the question: Are students at the predoctoral internship training level adequately prepared to function in a managed care environment?

When taken together, managed care experience, graduate program type, and managed care coursework were not significantly predictive of scores on PPOWS
expanded subscale 3 (i.e., perceived awareness/endorsement of mis-diagnosis). But when evaluated separately, managed care experience was significantly predictive of these scores ($B = -0.036$, $t = -2.69$, $p<0.008$). This suggests that predoctoral interns with less experience in managed care settings may be at a higher risk for making ethically questionable managed care-related decisions than those with more experience. Managed care related experience, however, explained only about 6% of the variance in scores on this variable. There obviously are other important, yet-to-be-identified variables which could better explain the variance in scores on this important variable (i.e., intentional misdiagnosis).

The final hypothesis predicted that predoctoral interns from hospital-like settings would report significantly more negative attitudes toward managed care and significantly higher ratings of importance of knowledge of general reimbursement, risk management, and misdiagnosis than interns completing their training in university counseling centers. Analysis of this hypothesis using a MANOVA procedure failed to reach significance. These results suggest that predoctoral interns’ attitudes toward managed care as well as their perceived importance of knowledge in the domains identified as critical in contemporary service delivery environments are similar in these practice settings.

Additional statistical analyses revealed a number of interesting differences between the two study groups (i.e., UCC and hospital-based predoctoral interns) with respect to managed care-related variables. These differences, however, should be interpreted with extreme caution, because the assumption of homogeneity of variance was violated. Although predoctoral interns in university counseling centers reported having completed significantly more managed care related preparatory coursework, their
hospital-based colleagues reported significantly more managed care experience (both prior to and during internship).

This raises the question of whether selection committees in hospital-based internships view actual managed care experience as more necessary and more valuable than classroom preparation on the topic. Of course, it is possible that the applicants selected for internships in hospitals were chosen because of their prior work experience in these settings, which coincidentally might be more likely to offer experience in navigating the policies and procedures of managed health care companies. Still, applicants for predoctoral internship may want to consider acquiring managed care related work experience prior to applying for positions in hospital settings.

Limitations and Delimitations

As is true of other studies in which participation is entirely voluntary, the present investigation may be limited by self-selection. It is important to note that the study was conducted via the internet. Many respondents received invitations to participate from the training directors of their respective internship sites, rather than a direct invitation from the principal investigator.

The measures used here appear to be face valid, and several items directly inquire about respondents’ current level of involvement with managed care, as well as their opinions regarding issues closely and clearly yoked to managed care. It is possible that interns who had a particular interest in managed care may have been more motivated to complete the measures that those who did not share this interest.

Due to the data gathering method, it is difficult to calculate an accurate response rate. Training directors who received the request to forward the participation invitation to
their respective interns may or may not have chosen to act. It is likely that some intended recipients either did not actually receive the participation invitation email, or did not open it. Some training directors spontaneously contacted the researcher to indicate that they had forwarded the participation invitation. Most, however, did not.

Although the interchangeability of paper-and-pencil and electronic versions for survey research has been established by a number of researchers (Epstein, Klinkenberg, Wiley, & McKinley, 2001), electronic data gathering is in its infancy, and is not without its associated developmental challenges. Unanticipated technical difficulties in this study, for example, rendered slightly less than 10% of participants’ entries incomplete. Although it seems unlikely, the responses of this group of participants’ whose entries were truncated due to technical difficulties in the submission process could have differed systematically from those of the study sample.

In addition, it is possible that participants’ responses were influenced by a social desirability bias. Interns at some sites, for example, may be working in an occupational setting where the social climate generally frowns upon managed care or one in which managed care is viewed quite favorably. Predoctoral intern participants may have felt pressured to respond in a way that reflected attitudes similar to those of their senior colleagues. The anonymity of an online measure, however, may help to guard against this type of bias (Joinson, 1999). Internet surveys (as opposed to more conventional means of data gathering) may be particularly well received by predoctoral interns due to their relatively young age and occupation as health care professionals (Lusk, Delclos, Burao, Drawhorn, & Aday, 2007).
Implications

Both the significant and the non-significant results of the present study carry implications for a variety of stakeholders. Perhaps the most intriguing results were not directly related to the research hypotheses themselves. It is important for prospective intern applicants, psychologists in the crucial position of providing predoctoral training, and future employers in the managed care industry to consider carefully different aspects of this study.

The current results suggest that prospective predoctoral intern applicants with prior experience in managed care settings may have a competitive advantage over their less experienced peers, when applying to hospital-like internship settings. Predoctoral interns from hospitals reported significantly more managed care related experience prior to internship than did interns from university counseling centers. University counseling center respondents, on the other hand, reported significantly more exposure to managed care related course work. Whether managed care related course work is considered less important in hospital based internships than is actual work experience remains an open question. Internship setting types which provide services which are largely reimbursed by managed care may prefer that incoming employees (e.g., predoctoral interns) are as well-versed as possible in navigating work-related managed care issues. Faculty members may want to make incoming students aware, as early as possible in their training, that if they aspire to complete their predoctoral internships in hospital settings, they would be well advised to acquire managed care experience (e.g., during master's-level internships) before applying for predoctoral internship.
Psychologists and other educators in graduate training programs should be aware that there may be significant gaps in the curriculum with respect to managed care. In their 2004 survey which included 217 psychology interns, Fagan, Ax, Liss, Resnick, and Moody (2007) found that more than 46% of respondents expressed a desire for more training in workplace issues (including managed care). In the current study, only 49 (41%) of respondents agreed or strongly agreed that “the knowledge and skills taught by psychology classroom educators prepare future practitioners for a career in the real world.” On the other hand, 116 (98%) respondents either agreed or strongly agreed with the following statements: “Practitioners need to understand the business side of the provision of health and mental health services”, “Practitioners need the skills to advocate for their clients in a managed care setting,” and “Practitioners need a general understanding of managed care.”

Although the majority of respondents indicated that they felt inadequately prepared by their education for a real world career, the overwhelming majority agreed that it is necessary for practitioners to understand the “real world” business side of the practice of psychology. The majority of survey respondents (i.e., 67%) reported having had no exposure to managed care related content during their graduate coursework. Ninety-five percent reported having been exposed to two or fewer courses containing any managed care related content by the time they reached the predoctoral internship training phase.

The consequences of this gap may be particularly pronounced in terms of its impact on managed care related ethical decision-making. In response to item #12 on the PPOWS, nearly 40% of predoctoral interns in the present study (many of whom are
currently employed in heavily managed care penetrated settings) affirmed that they would exaggerate clients' symptoms to a managed care case reviewer in order to secure authorization for services. Although the motivation for such an action may be noble, it is also unethical and punishable by law.

Training directors of predoctoral internship sites with heavy managed care penetration should be aware of these potential training gaps and proactively address them. Failure to do so could put the intern, his/her immediate supervisor and the institution itself (via vicarious liability) at considerable risk. Issues regarding vicarious liability in supervision relationships have been addressed by other authors (Robb, 2004; Watkins, 1997). The current study highlights the importance of enacting preventive measures to ensure that relatively inexperienced practitioners (e.g., predoctoral interns) in work environments (e.g. hospitals) that are heavily penetrated by managed care are adequately prepared to appropriately navigate ethical dilemmas (e.g., mis-diagnosis for the purpose of securing reimbursement) associated with managed care. Purposeful falsification of medical records (whether through omission or commission), even when well-intentioned (e.g., for the purpose of securing authorization for sessions the provider believes to be necessary), can constitute insurance fraud. Supervisors of predoctoral interns who interact regularly with managed care case reviewers may want to consider developing a training component which specifically addresses appropriate resolution of managed care related ethical dilemmas.

Directions for Future Research

The use of the internet to gather survey-based data electronically provides many advantages which are difficult to secure using more conventional means. The use of mass
mailings and pencil-and-paper based instruments for survey research is beginning to fade in its prominence. Electronic data gathering is rapidly replacing more conventional means, and is becoming the method of choice for many reasons (Epstein, Klinkenberg, Wiley, & McKinley, 2001; Stanton, 1998). Future researchers considering survey-based projects with similar populations may find that internet based data collection provides a quicker, more efficient, and less costly means of data gathering which can result in higher quality data with fewer missing data points.

The data gathered for this study was collected in the month of November. In most cases, the predoctoral interns surveyed had likely been working in their respective internship sites for approximately 3 months (given an early September start date). In addition, the range of months of work experience in a managed care setting was quite restricted. In fact, for the predoctoral interns in this study, the modal number of months of managed care experience prior to internship was zero. For many respondents, it appears that occupational exposure to managed care was limited to the few months they had worked at their respective internship sites. It is possible that interns' attitudes toward managed care at the end of their internship training may differ from the attitudes they espoused earlier in this phase of training. An important intervening variable in this regard would be interns' actual involvement in managed care activities. In the future, researchers should conduct longitudinal studies to examine the relationship between managed care attitudes and work experiences at the beginning and the end of the internship period.

Although this study did identify some variables that were significantly correlated with managed care attitudes, much of the variance in this regard remains unexplained. Additional research is needed to explore other factors that predict interns' attitudes.
toward managed care. Based on the results of these studies, investigators might discover multivariate effects in which attitudes are related to the interaction of salient experiences with managed care and interns’ length of experience in a managed care setting. For example, particularly memorable experiences with managed care that were markedly negative or positive could interact with the timing of these experiences over the course of the internship period.

Continued refinement of the PPOWS represents another possibility for future research in this area. Although many PPOWS items, especially those in subscale 1, appear to measure perceptions or attitudes (e.g., "Practitioners need a general understanding of managed care"), others such as items in subscale 3 appear to measure behaviors (e.g., "When I document, I occasionally stretch the truth to get the best services for my clients"). One might question the validity of scores on an instrument that appears to be measuring multiple domains (i.e., attitudes/perceptions vs. behaviors). In the future, researchers should continue the evaluation of PPOWS scores, including results based on the original instrument and those computed using the expanded subscales developed for the present study.

Finally, an additional and potentially fruitful avenue for research in this area involves the issue of purposeful mis-diagnosis in managed care settings. For many mental health professionals practicing in managed care settings, purposeful misdiagnosis for securing reimbursement for services has become the norm rather than the exception (Cohen, Marecek, & Gillham, 2006). Some clinicians see purposeful mis-diagnosis for the purpose of securing reimbursement for necessary sessions as a form of client advocacy. Though noble in its intent, this form of client advocacy is also illegal. It is
incumbent on psychologists to develop alternative avenues of client advocacy which are more reflective of the ethical commitments of the profession. In the future, development and evaluation of training modules or other educational interventions specifically designed to address the appropriate navigation of managed care related ethical dilemmas could be very beneficial.
APPENDIX A

INFORMED CONSENT

Informed Consent for Participation in Research on Characteristics of the Practice and Practitioners of Psychology

My name is Michele Boyer-Blood. I am a doctoral student in Counseling Psychology at The University of Southern Mississippi. You have been asked to participate in this study because you are a predoctoral psychology intern. If you choose to participate, you will be asked to complete a demographic and practice-related survey followed by 2 questionnaires related to experiences at your work setting. The combined time required for the completion of the study is estimated to be less than 15 minutes.

Before choosing to participate, it is important that you read and understand the following statements:

• Taking part in this research is voluntary. The surveys are designed so that none of your responses are submitted until the surveys are complete and you choose to send your responses.

• You may withdraw from the research project at any time without penalty by exiting the surveys.

• No personally identifying information is required to participate in this research. Your name will not appear on any of the surveys, data, final report, or any publications or presentations based on this research. The information that you provide will be analyzed in aggregate form only. Please note, however, that absolute confidentiality cannot be wholly guaranteed due to the limited protections of internet use.

• Participation in a drawing for a $100 Amazon gift certificate is also voluntary. If you elect to participate in the drawing, an email address will be requested for the purpose of awarding this incentive. For the purpose of further insulating confidentiality, you are encouraged to utilize free, anonymous email providers such as Yahoo (http://mail.yahoo.com) or Hotmail (http://www.hotmail.com).

• Although there are no direct benefits to you as a result of your participation, the information gained may be used to enhance the work experience of practitioners of psychology. There are no known risks to this study.

• If you do not properly exit or close your internet browser when you are finished with your surveys it is possible that an outside party could view your answers. Be sure to close your browser after you have submitted your responses or if you choose to discontinue participation.
This project was reviewed and approved by the Institutional Review Board at The University of Southern Mississippi on [insert date]. It will expire on [insert date]. If you have any questions about the research, please contact Michele Boyer at Michele@ResearchDome.com. You also may contact the faculty adviser in charge of this project, William Wagner, Ph.D., via telephone (601) 266-4544, email (William.wagner@usm.edu) or posted mail at Department of Psychology, University of Southern Mississippi, 118 College Dr. #5025, Hattiesburg, MS 39406-5025. If you have any questions concerning your rights as a participant, please contact Betty Ann Morgan by phone: (601)266-6820, mail: Administrator, Institutional Review Board, Human Subjects Protection Review Committee, 118 College Drive #5147, Hattiesburg, MS 39406-5147, or email: betty.morgan@usm.edu.

Please print a copy of this informed consent form for your records.

By clicking on the "I Agree" link below you are giving your consent to participate in the research project.
APPENDIX B

PRACTITIONERS’ APPRAISAL OF SERVICE DELIVERY ENVIRONMENT

Practitioners’ Appraisal of Service Delivery Environments
Below are items which describe characteristics of some service delivery environments and the practitioners who operate within them. Using the scales provided below, please rate the extent to which you agree or disagree with each item by clicking the corresponding circle.

1. Managed care has lowered the quality of health and mental health care services *

2. Mis-diagnosis ("upcoding") may be necessary to obtain needed services for clients.

3. Managed care restricts services that might benefit clients. *

4. I use brief/solution focused therapies.

5. Managed care organizations are more interested in finances than clients. *

6. Service delivery has changed dramatically in the last 10 years.

7. Managed care organizations are most concerned about the cost of services. *

8. Documentation ensures payment for services.

9. Managed care companies have generally improved the quality of health and mental health care services for people.

10. The knowledge and skills taught by psychology classroom educators prepare future practitioners for a career in the real world

11. Managed care organizations dictate the types of services that clients can receive. *

12. Practitioners need familiarity with practice strategies that are recommended by HMOs, insurance companies and other funding sources.

13. Practitioners need the skills to advocate for their clients in a managed care setting.

* Factor 1 item
APPENDIX C

PRACTITIONERS’ PERCEPTION OF WORK SETTING

Practitioners’ Perceptions of Work Setting

Directions: Please consider each item and indicate the extent to which you agree or disagree with the statement by clicking the corresponding circle.

1. Practitioners need a general understanding of managed care.

2. When requesting additional treatment sessions from a managed care company, practitioners should avoid discussing clients’ progress toward treatment goals. ***

3. Practitioners need a general understanding of case management strategies.

4. “Good intentions” are rarely sufficient protection against lawsuits. **

5. Practitioners need a general understanding of entitlement programs.

6. For the purpose of securing authorization for necessary treatment from a managed care company, practitioners sometimes need to exaggerate the severity of clients’ symptoms. ***

7. Practitioners need a working knowledge of health insurance coverage.

8. In the advent of managed care, enacting appropriate risk management strategies has become more important than ever. **

9. Practitioners need a working knowledge of insurance and entitlement programs.

10. Practitioners have to know risk management strategies to protect themselves from lawsuits. **

11. Psychology educators need to ensure that students have an adequate understanding of documentation.

12. To secure authorization for sessions I believe are vital for my client, I would exaggerate the severity of his or her symptoms to a managed care case reviewer. ***

13. Documentation is a critically important skill for any position in professional psychology.

14. To secure authorization for sessions I believe are vital for my client, I would avoid discussing information regarding my client’s progress. ***
15. Practitioners need familiarity with practice strategies that are recommended by HMOs, insurance companies and funding sources.

16. When interacting with managed care case reviewers, emphasizing clients’ progress will result in denial of authorization for continued sessions. ***

17. Practitioners need a basic understanding of Medicare and Medicaid.

18. Failure to enact aggressive risk management strategies puts practitioners at risk of being sued for malpractice. **

19. Practitioners need to understand the business side of the provision of health and mental health services.

20. Pro-active application of risk management strategies is vital in today’s litigious society. **

21. When reimbursed by managed care companies, you have to “stretch the truth” when you document to ensure payment for services.

22. To avoid a lawsuit, prudent practitioners need to stay abreast of new developments in risk management strategy. **

23. When I document, I occasionally “stretch the truth” to get the best services for my clients.

24. Providing an accurate diagnosis to a managed care company is not necessarily in the best interest of your client. ***

25. Practitioners need special skills to protect themselves from lawsuits.

26. Practitioners need documentation skills to protect themselves from lawsuits.

Thank you for your participation

** Factor 2 experimental item
*** Factor 3 experimental item
APPENDIX D

DEMOGRAPHIC AND PRACTICE INFORMATION FORM

Demographic and Practice Information Form

1. Gender
   ____ female
   ____ male

2. ____ Age

3. Ethnicity
   ____ African-American
   ____ Asian
   ____ Caucasian
   ____ Latino/Latina
   ____ Mixed
   ____ Native American/Alaska Native
   ____ Pacific Islander

4. Degree type:
   ____ Ph.D.
   ____ Psy.D.
   ____ Ed.D.
   ____ Other

5. Doctoral program type:
   ____ Counseling Psychology
   ____ Clinical Psychology
   ____ School Psychology
   ____ Other

5. Professional status:
   ____ Predoctoral intern/resident/fellow
   ____ Postdoctoral intern/resident/fellow
   ____ Predoctoral student in psychology (non intern)
   ____ Internship training director
   ____ Graduate school training director
   ____ Licensed psychologist
   ____ None of the above

6. ____ Years in practice (not including graduate school; not including internships)

7. History of employment in setting where services were reimbursed via managed care
   ____ Never worked in managed care setting
Months worked in managed care setting prior to predoctoral internship

Months worked in a managed care setting during predoctoral internship

8. Preferred theoretical orientation
   - Behavioral
   - Brief therapies (e.g., solution-focused)
   - Cognitive-Behavioral
   - Eclectic
   - Existential/Humanistic
   - Family Systems
   - Gestalt
   - Psychodynamic

9. Most frequently implemented theoretical orientation
   - Behavioral
   - Brief therapies (e.g., solution-focused)
   - Cognitive-Behavioral
   - Eclectic
   - Existential/Humanistic
   - Family Systems
   - Gestalt
   - Psychodynamic

10. Predoctoral internship setting type
    - Armed Forces Medical Center
    - Child/adolescent psychiatric or pediatric
    - Community mental health center
    - Consortium
    - Medical School
    - Prison or correctional facility
    - Private general hospital
    - Private outpatient clinic
    - Psychology department
    - School district
    - State/county/other public hospital
    - University counseling center
    - Veteran’s Affairs Medical Center

11. Number of graduate school courses in which material related to managed care procedures (e.g., pre-authorization, credentialing, appealing treatment denials) was presented.
12. ____ Average percentage of my weekly client contact hours reimbursed via managed care sources (e.g., Magellan, ValueOptions, United Behavioral Health)

13. ____ Typical number of weekly work hours invested in non-reimbursable, managed care-related tasks (e.g., pre-authorizations, re-authorizations, appealing treatment denials, interacting with case reviewers)

Thank you for your participation.
To: InternshipTrainingDirector@internshipsite.com

Subject: Special research opportunity for your predoctoral interns

From: M. Blood, M.S.

Date: October 31, 2006

Dear ____________________,

Good afternoon!

Please allow me to introduce myself. My name is Michele Blood. I am a graduate student in Counseling Psychology at the University of Southern Mississippi. My doctoral research involves an examination of variables related to predoctoral interns' attitudes toward current avenues of service delivery as well as their preparation for functioning in the contemporary marketplace.

Data for the current study will be gathered electronically at the following website: 

Would you be so kind as to request that the interns in your predoctoral internship program visit the above website and consider completing the survey instruments online? Time estimated to complete the surveys is approximately 10 to 15 minutes. After they have completed the survey, interns will receive the opportunity to participate in a drawing for a $100 Amazon gift certificate. At no time will interns be asked to provide personally or institutionally identifying information.
Thank you in advance for your consideration of this important request. It is my hope that the data gathered in this research project will benefit both future psychologists as well as those in the crucial position of providing their training.

Appreciatively,

Michele R. Blood, M.S.

p.s. For your convenience, I have attached a printable "sign" announcing this research opportunity which may be placed in a location readily accessible to interns (e.g., breakrooms, conference rooms, mailboxes).
APPENDIX F

Printable Participation Invitation Poster

Your participation in a nationwide survey of predoctoral interns is requested. You will be eligible to participate in a drawing for one, $100 Amazon gift certificate following completion of the survey*. Estimated time of completion is 10-15 minutes. Please direct your web browser to:

*Exact odds of winning the drawing dependent upon total number of respondents.
APPENDIX G

IRB APPROVAL DOCUMENTS

The project has been reviewed by The University of Mississippi Human Subjects Protection Review Committee in accordance with Federal Regulations (45 CFR 46.101 et seq.) and University guidelines to ensure adherence to the following criteria:

1. The risks to subjects are minimized.
2. The risks to subjects are reasonable in relation to anticipated benefits.
3. The selection of subjects is equitable.
4. Informed consent is adequately and appropriately documented.
5. Appropriate additional safeguards have been included to protect vulnerable populations.
6. Any unanticipated, serious, or continuing problems encountered must be reported immediately, but not later than 10 days following the event, to the IRB Office via the "Adverse Effect Report Form". If approved, the maximum period of approval is limited to twelve months. Projects that exceed this period must submit an application for renewal in accordance with the procedures outlined in the protocol number.

PROTOCOL NUMBER: 27022701
PROJECT TITLE: Future Psychologist Perceptions of Managed Care
PROJECT TYPE: Dissertation
PRINCIPAL INVESTIGATOR: Michelle Boyer-Metcalfe
DEPARTMENT/DEPARTMENT: College of Education & Psychology
FUNDING AGENCY: N/A
COMMITTEE ACTION: Expedited Review Approval
PERIOD OF APPROVAL: 03/29/07 to 03/28/08
REFERENCES


Mooney, A. N. (2005). *Training directors' perceptions of psychology doctoral student training, knowledge and understanding of managed care environments*. ProQuest Information & Learning, US.


Orr, T. J. (2000). *Psychologist perceptions of managed mental health care practice: Implications for burnout.* U Iowa, US.


