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Changes in Community Behavioral Healthcare Organizations Subsequent to theImplementation of Medicaid Managed Care

Anna Marie Williams
Indiana University of Pennsylvania

CHANGES IN COMMUNITY BEHAVIORAL HEALTHCARE ORGANIZATIONS SUBSEQUENT TO THE IMPLEMENTATION OF MEDICAID MANAGED CARE

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Anna Marie Williams

Indiana University of Pennsylvania

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The School of Graduate Studies and Research
Department of Sociology

We hereby approve the dissertation of

Anna Marie Williams

Candidate for the degree of Doctor of Philosophy

_____ _____
Dr. Susan Boser, Ph.D., Chair ,
Professor of Sociology, Committee Chair

_____ _____
Dr. Alex Heckert, Ph.D.
Professor of Sociology

_____ _____
Dr. Thomas Nowak, Ph.D.
Professor of Sociology

ACCEPTED

_____
Timothy P. Mack, Ph.D.
Dean
The School of Graduate Studies and Research

Title: Changes in Community Behavioral Healthcare Organizations Subsequent to the Implementation of Medicaid Managed Care

Author: Ann Williams

Dissertation Chair: Dr. Susan Boser

Dissertation Committee Members: Dr. Alex Heckert
Dr. Thomas Nowak

The purpose of this study is to gather information about the organizational impact of Medicaid managed care on Community Behavioral Health Organizations (CBHOs). In particular, the study seeks to identify specific survival strategies utilized by CBHOs in light of the implementation of Medicaid managed care. It also seeks to determine if survival strategies have a positive effect on CBHO survival.

The implementation of Medicaid managed care programs for mental health services is a relatively recent phenomenon, expanding into most states only in the late 1990s. However, the transition has been relatively rapid and 47 states had Medicaid managed care plans by 1998. Despite this dynamic change, there is very little comprehensive research about organizational behaviors in community behavioral healthcare organizations (CBHOs) since the implementation of Medicaid managed care, despite the fact that these organizations treat the vast majority of Medicaid mental health consumers, and rely on Medicaid reimbursement to survive. In addition, there are no organizational studies that link strategic changes to financial success.

This research used financial data available from Guidestar and completed surveys from respondents in community behavioral healthcare organizations across the United States to analyze organizational changes. I used ordinary least squares multiple regression to estimate the impact of Medicaid managed care and other predictor variables on the

implementation of survival strategies. I also used multiple regressions to determine the effect of survival strategies on gross revenue, the changes in gross revenue since 1998, net revenue, and the change in net revenue since 1998.

The results of the research did not support the hypothesis in one case, in that Medicaid Managed Care did not appear to have a significant relationship to the use of survival strategies. However, I identified other predictor factors that had a weak to moderate effect on survival strategies. In addition, specific survival strategies had a positive effect on financial results.

Further research should examine the reactions of community behavioral healthcare organizations to continued dynamic environmental change and the long-term effect of organizational change on financial success.

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INTRODUCTION AND STATEMENT OF PROBLEM

Introduction

This research examines the effect of the implementation of Medicaid managed care for mental health on organizational change in community behavioral health organizations in the United States. My dissertation explores whether such organizations were motivated to make major organizational changes in response to the change in Medicaid funding and regulations associated with managed care. I am also interested in the type of organizational changes that are most common across community behavioral health organizations (CBHO).

To orient the reader to this study, I begin with a brief background summary of the events leading to the implementation of managed care and a definition of the major players to orient the reader to this study. I will follow this with a discussion of the research problem and a summary of the structure of this study.

Background

Initially, state-funded institutions were the primary providers of mental health treatment (Stroup & Dorwart, 1997). Then the Community Mental Health Center (CMHC) Act of 1963 established funding for the construction of community behavioral health organizations, and the CMHC Act of 1965 provided additional funding for staffing of the centers (Gronfein, 1985; Minkoff, 1997; Stroup & Dorwart, 1997). The intention for creating these agencies was to deinstitutionalize mental health consumers and provide treatment in the community.

While not all states took advantage of this seed money to establish "federally qualified" CMHCs, most developed some form of community behavioral health organization

(CBHO) with a similar structure and mission. For purposes of this study, the term CBHO includes both federally qualified community mental health centers (CMHCs) and state-licensed community behavioral health organizations that have similar structures.

Thus CBHOs have been the primary providers of mental health services under Medicaid in most states since the 1960s (Feldman, 2003; Kiesler, 2000). CBHOs are mental health outpatient clinics offering a wide range of mental health services, primarily for individuals with public insurance or no insurance, within a "catchment" area. A catchment area is a designated geographic location, usually comprised of one or more counties.

States greatly expanded Medicaid payments for mental health services throughout the 1970s and 1980s, primarily to maximize the federal funding match and to reduce state funding (Stroup & Dorwart, 1997). Title XIX of the Social Security Act constructed Medicaid as a joint federal-state program (Rowland, Garfield, & Elias, 2003). The federal government is required to match state funds under the state's federally approved plan (GAO, 2007). Therefore, the states benefit by changing their healthcare plans to meet federal guidelines and moving their health spending dollars to the federally approved plan. States then receive a match from the federal government. With the match, states can spend less of their own money on healthcare and free up funding for other budget items.

The federal government anticipated savings from the deinstitutionalization of mental health patients to community services. However, such savings did not generally materialize. Most states had fixed investments in large inpatient institutions and continued to maintain them as well as community services. When the savings did occur, the states generally diverted the funds to other non-mental health programs (Gronfein, 1985).

By the 1990s, states began to see double-digit inflation for health care expenses and sharp increases in the costs of Medicaid. The recession of 1991 and 1992 sent more individuals onto the Medicaid rolls. The Reagan presidency brought cuts to the Medicaid budget for three consecutive years and cuts in funding for community mental health programs. As a result, the state budgets for Medicaid continued to grow.

By 1996, the expenditures for public mental health care exceeded private spending, despite the fact that the privately insured population was three times larger than the public sector (Ridgely, et al, 2002). The construction of the Medicaid program failed to consider such issues as cost containment and the lack of a shared mission between the federal and state governments (Smith & Moore, 2008), and, as a result, states had few options to contain escalating costs.

This dire situation changed in the late 1990s. The Balanced Budget Act of 1997 permitted states to require Medicaid beneficiaries to enroll in involuntary managed care plans (Kiesler & Moore, 2008). This waiver appeared to be a viable option to control costs while maintaining mental health services overall.

As a result, states began to make a relatively rapid transition to managed care as a means of controlling costs. States contracted with for-profit managed care organizations (MCOs) to control costs, while still ensuring access to services via various administrative and finance mechanisms. By 1998, there were 97 Medicaid managed care programs operating in 47 states (Donohue & Frank, 2000).

By 2000, Medicaid represented the primary source of public funds and funding overall for CBHOs (Mechanic, 1998). When states implemented managed care plans for Medicaid behavioral health, it had a significant impact on CBHOs.

For CBHOs, it meant a change or reduction in funding streams, an increase in administrative regulations, and/or a reduction in service utilization. Most CBHOs had to decide whether to make major changes to organizational processes to meet new guidelines and to ensure their survival in the new environment. They also needed to determine which changes would contribute to their financial viability.

I believe the advent of Medicaid managed care has led CBHOs to think differently about survival strategies and the legitimacy of their organizations. I believe this has led to significant organizational changes in terms of structure, role, finances, programming, and, possibly, to mission. My research explores the impact of Medicaid managed care at the organizational level. I am interested in the correlation between the implementation of Medicaid managed care and organizational changes in CBHOs and the types of changes that are most prevalent.

Statement of Problem

Most studies concerning managed care focus on either the system level or the individual level, rather than on the organizations. System level research primarily discusses the changes in public policy and the implementation of statewide programs (ACHMA Workgroup, 2003; Ridgely, 1999; Wyant, 1999). This information adds to our understanding regarding the structure of Medicaid managed care, but it does not help us understand the overall effects of implementation. Individual research tends to center on the direct effect of managed care initiatives on the consumers (Foos, 1991; Kiesler, 2000; Priebe, 2000; Smith, 1999). Yet, Medicaid managed care imposes new regulatory requirements and significant changes in funding mechanisms on CBHOs, not on the individual consumer. Despite this,

there are few comprehensive studies on the effects on managed care at the organizational level.

Organizational change literature relative to health care includes studies on the effects of government policy on hospitals (Alexander, D'Aunno, Succi, 1996; Flood, Fennel, 1995). One policy in particular, the implementation of the Medicare prospective payment system (PPS) in the 1980s was a jolt to the entire industry. This policy changed the funding and regulatory requirements across the physical health care industry, which relies heavily on Medicare funding. It resulted in three major trends in health care organizational change: 1) diversification of organizational types and services; 2) changes in ownership and management configurations; and 3) development of new inter-organizational arrangements (Fennell & Alexander, 1993).

Most CBHOs rely heavily on Medicaid for reimbursement and are the primary providers of mental health services to disadvantaged populations. In comparison, the change to the prospective payment system by Medicare had a significant impact on hospitals in the 1980s because most hospitals relied heavily on Medicare for funding. Thus, I propose that the impact of managed care on CBHOs is no less dramatic than the effect of PPS on hospitals. Yet, there are no studies designed to address the dynamic environmental changes affecting CBHOs, as there were with hospitals in the 1980s. In fact, Mechanic (1998) notes that, although medical sociology has had its deepest roots in mental health, there are few studies about how managed behavioral health has transformed the mental health sector.

Organizational change literature proposes numerous approaches that CBHOs should implement in the face of Medicaid managed care. In most publications, the focus is on specific areas such as utilization management, measures of quality outcomes, mental health

and primary care integration, advocacy, consumer-centered practices, and development of networks encompassing multiple services (Callahan & Merrick, 1997; Drolen, 1990; Kiesler, 2000; Lyons, 1997; Priebe, 2000). However, most of these publications were completed in the 1990s before Medicaid managed care was as prevalent as it is today. In particular, Mordock (1989) found successful non-profit organizations made similar changes when confronted with major external environmental factors that affected their resources and/or survival. Mordock classified these organizational changes into six "survival strategies": financial strategies, program resource changes, role changes, organizational structure, results orientation, and political strategies. In 1996, Mordock updated these changes to reflect the proposed impact of managed care and speculated that the original survival strategies would remain consistent in relation to managed care.

However, there are no actual research studies since the implementation of managed care to support this literature. In particular, there has been little, if any, subsequent research concerning community behavioral health organizations and the changes surviving agencies have chosen to implement. The intention of this dissertation is to determine the actual changes made by CBHOs considering the conceptual models proposed in the literature. In this study, I use the survival strategies developed by Mordock (1989; 1996) to develop my questions regarding organizational change in CBHOs.

Lastly, the organizational change literature focuses solely on the types of change implemented, but there are rarely studies that analyze whether such change is successful. In my dissertation, I determine if there is commonality in the organizational changes made across CBHOs. I also try to analyze whether common changes have any positive effect on the financial success of these organizations.

The purpose of my study is to develop descriptive information that may begin to address these missing components of organizational research. I want to identify the actual changes made by CBHOs since the implementation of Medicaid managed care and if such changes have an effect on organizational success. My research is a quantitative study of CBHOs across the United States regarding organizational changes implemented in the last 10 years. I include CBHOs that do not operate in a managed care environment in the study for comparative purposes. My primary research questions are:

1. Did CBHOs actively make organizational changes, similar to Mordock's survival strategies, since the implementation of Medicaid managed care?
2. What other factors predict the use of survival strategies by CBHOs?
3. What survival strategies are most common among successful CBHOs since the implementation of Medicaid managed care?
4. Does the use of survival strategies positively affect the financial results of CBHOs?

For purposes of this study, I define success in terms of both survival and financial profitability. It is my assumption that, given the impact of Medicaid managed care, CBHOs are motivated to make organizational changes necessary to obtain resources to survive. I believe that such changes are not solely the result of regulatory requirements, but that other factors affect organizational change. I would not expect to find such organizational changes in CBHOs that are not in a Medicaid managed care environment or in CBHOs that have entered the environment within the last one or two years. In fact, I would expect to find such organizations to be primarily resistant to change. I also believe that over a longer term, defined as 10 years or more, surviving CBHOs will employ similar changes. I also surmise that these organizational changes will lead to financial success for the CBHO. This research

will also begin to provide strategic information across CBHOs for use in an industry where little comparative data or benchmarks currently exist.

My research adds to the body of literature concerning institutional reactions to dynamic change. In particular, this study expands on early literature that predicted appropriate organizational strategies in the mental health field. In Chapter Two, I present an environmental overview of the history and current state of CBHOs, Medicaid, and the managed care program. I also present a summary and discussion of the current organizational change literature and theory relevant to this study. I use this information to develop the basis for my research study and my hypotheses.

In Chapter Three, I develop the methodology for my dissertation, identifying the population and survey data. I describe my method of data collection to gather demographic information and strategic changes used by CBHOs. In addition, in this section I include definitions of the terms and variables used throughout the dissertation. I also test these strategies and their impact on financial results.

Chapter Four presents my findings from the survey and resulting analysis. The information discussed in this chapter includes the demographic information that results in a detailed description of the CBHO population. Finally, I summarize the results of my analysis in comparison to my hypotheses.

Chapter Five continues with this analysis by discussing the overall results indicated by this study. I review these results in light of the limitations of the study. Lastly, I present the impact of this study on future research and implications for further research studies regarding CBHOs.

CHAPTER II

LITERATURE REVIEW

Overview

In order to understand the research problem addressed by this study, it is important to understand the principal actors, their history, and the current environment. In this chapter, I present an overview of Medicaid in relation to mental health care and the implementation of managed care. I also present an overview of the history and purpose of CBHOs, leading to a description of the current behavioral health care environment and the perceived effect of Medicaid managed care on CBHOs. Following the presentation of the context, I develop a theoretical framework for my hypotheses via an overview of organizational change literature, focusing on its application to mental health care. In order to develop an understanding of the components of my study, I include a discussion of Mordock's (1989; 1996) common survival strategies for nonprofit organizations. I also include industry literature in this discussion to explain how CBHOs may interpret survival strategies in the current environment.

Medicaid and Mental Health Care

Medicaid was part of a three-tiered bill enacted in 1965 as Title XIX of the Social Security Act and included Medicare and supplementary medical insurance for physician services, now known as Part B Medicare (Rowland, Garfield, & Elias, 2003). Unlike Medicare, which is wholly a federal responsibility, the legislators constructed Medicaid as a joint federal-state program (Rowland, Garfield, & Elias, 2003). Participation in the program was voluntary and states primarily determined eligibility and benefits. Once the states elected participation, they were required to make Medicaid available in relatively equal measure to all categories of aid (Smith & Moore, 2008). Generally, there are several categories of aid

and, each category has different eligibility criteria in addition to income level, such as age, disability, and citizenship. These categories determine the level of Medicaid benefits and the length of these benefits (temporary or permanent).

The government constructed Medicaid as an open-ended federal entitlement program, which means that the federal government is required to match state funds under the state's federally approved plan (GAO, 2007). Medicaid allowed for both federally required services and optional state-determined care. The required services were inpatient hospitalization, excluding mental health and tuberculosis for individuals under age 65, outpatient hospitalization, laboratory, x-ray, skilled nursing homes for adults over age 21, and physicians' services. Mental health was not included as a required service.

Although Medicaid has now become the major purchaser of mental health services, the federal government did not initially construct it as a mental health program (Rowland, Garfield, & Elias, 2003). Most states had large public institutions for care of the mentally ill and were anxious to have federal financial support, but Congress felt institutions should remain the state's responsibility. However, states were encouraged to develop alternative plans of care to institutionalization, including a comprehensive mental health plan and creation of community mental health services (Smith & Moore). Under the provision for state optional services, states were able to develop programs to partially support the community initiative, such as prescription drug programs and transportation benefits (Rowland, Garfield, & Elias; Smith & Moore). Therefore, Medicaid did not cover treatment for institutionalized individuals, but did cover outpatient medical and therapeutic treatment and limited supports.

As noted, the Social Security Act (SSA) of 1972 specifically eliminated institutions for mental disease (IMD) from the federal requirements and from the federal matching.

However, IMDs were not well defined. States moved individuals from large institutions to small homes that met the presumed requirements for matching under SSA (Levine, 1981; Smith & Moore). SSA not only provided some relief for the states in providing housing for the mentally ill, but also increased the number of small residential institutions such as group and personal care homes in the community. These individuals with mental illness placed in the community now required greater community supports and outpatient mental health care.

The Community Mental Health Centers Acts of 1963 and 1965, enacted during the same period, had no relationship to Medicaid, but also encouraged the treatment of mentally ill persons in the community rather than large institutions (Gronfein, 1985; Minkoff, 1997; Stroup & Dorwart, 1997). These Acts developed CBHOs, which could support the need for community mental health care for newly de-institutionalized patients. CBHOs became the primary providers of such care.

One other notable action that would have ramifications for the future was the HMO Act of 1973 (the Act). The Nixon Administration was supportive of the introduction of HMOs as an alternative to Medicaid, an effort at cost containment, a means to eliminate cost reimbursement, and a partial answer to the national health insurance question. However, changes to the Act prior to passage rendered it largely ineffective and appeared to discourage its use. During this period, there was no link between the Act and Medicaid, but it did introduce the idea of managed care as a means of providing care at a reduced cost (Smith & Moore).

Significant changes for mental health under Medicaid did not occur again until the Reagan administration with the Omnibus Budget Reconciliation Act in 1981 (OBRA, 1981) (Smith & Moore, 2008). Reagan proposed significant changes that would reduce the federal

match for Medicaid and increase financial and programmatic control for the states. Although Reagan only realized some of these goals, the changes had major repercussions for the programs and the states. First, OBRA, 1981 resulted in three consecutive years of mandatory budget reductions for Medicaid. This was primarily significant because, during this period, the Chairman of the Federal Reserve had little faith in Reagan's supply side economic theory and implemented an extremely tight monetary policy, which effectively plunged the country into a recession. Thus, Medicaid funding decreased at the same time that the population relying on Medicaid grew. Secondly, OBRA led to a 25% cut in block grants. One grant covered both substance abuse and mental health, ostensibly allowing the states more freedom. Yet, the reductions effectively weakened the safety nets relied on by indigent populations and community health centers, including mental health. Third, the Reagan administration cut funding for CBHOs while simultaneously reducing disability rolls. Effectively, this removed mentally ill individuals from disability rolls and released them from the mental health institutions. In fact, Gronfein (1985) believes that changes in Medicaid policies had a greater tangential effect on deinstitutionalization than did the mental health center movement. OBRA reduced funding for the CBHOs, yet few alternative services exist for these individuals in the community (Smith & Moore, 2008). In summary, the 1980s was a time of increased reliance on Medicaid, increased numbers of deinstitutionalized mentally ill individuals without community supports, and decreased budgets.

OBRA, 1981 also included two notable waiver provisions; one was section 1915(b), which was a managed care provision. This section allowed the states to limit Medicaid beneficiaries' choice of providers in exchange for certain benefits and protections. Under traditional Medicaid regulations, beneficiaries could choose any provider in any location.

With the waiver, states and counties could mandate inclusion of consumers in a specific managed care program and select providers for inclusion based on utilization, quality, and payment standards. This effectively established the groundwork for managed care initiatives in the 1990s (Smith & Moore, 2008).

The second waiver, Section 1915(c), permitted the provision of home and community based services to individuals who would otherwise qualify for institutional care (Rowland, Garfield, & Elias, 2003; Smith & Moore, 2008). This waiver permitted a broad spectrum of optional services, such as case management and personal care services, which Medicaid did not normally reimburse. States also had the authority to target certain populations, such as individuals with mental illness. States largely directed use of the waiver toward services for the developmentally disabled and only three states chose to target the mentally ill: Colorado, Kentucky, and Vermont (Rowland, Garfield, & Elias).

However, other than these waivers, the Reagan administration largely ignored mental health and had no specific program related to this population. During this period, states concentrated on trying to repeal the IMD exclusion to Medicare in order to attain extra funding for state institutions, with limited efforts toward other initiatives.

Finally, the Balanced Budget Act of 1997 (the BBA) established the State Children's Health Insurance Program (SCHIP) allowing states to cover uninsured children in families with incomes below 200% of Federal Poverty Level (FPL) who were otherwise ineligible for Medicaid. In addition, the BBA permitted states to require Medicaid beneficiaries to enroll in managed care plans without obtaining a section 1915(b) waiver (Smith & Moore, 2008). During this same period, state Medicaid expenditures accounted for 20% of state budgets, a larger proportion than higher education (Ridgely, Guard, & Shern, 1999). As a result, states

grasped the opportunity provided by the BBA and began to make a relatively rapid transition to managed care as a means of controlling costs (Stroup & Dorwart, 1997).

Although Medicaid did not directly consider mental health issues in general or the community mental health movement specifically, all of these changes had a direct impact on the development and funding of CBHOs.

Community Behavioral Healthcare Organizations

Although the federal government did not construct Medicaid with mental health services in mind, the Kennedy and Johnson administrations were both concerned with deinstitutionalization and the community health center movement. The Community Mental Health Center (CMHC) Act of 1963 established funding for the construction of CBHOs, and the CMHC Act of 1965 provided funding for staffing the centers (Gronfein, 1985; Minkoff, 1997; Stroup & Dorwart, 1997). These Acts funded CBHO services through provision of a fixed budget that remained flat regardless of the volume or cost of services. The government considered it seed money for the new agencies, not long term funding. These Acts were not part of the Medicaid program and the states were to provide subsequent funding. The belief was that funding from decreased institutional care would divert to community-based services (Levine, 1981). Eventually, CBHOs would become self-supporting through efficient resource utilization and development of multiple funding sources (Minkoff, 1997).

In addition, the federal government provided separate funding to multiple local municipalities for mental health services, resulting in a confusion of responsibilities, services, and funding streams between the state and the municipalities. Thus through the CMHC Acts, the federal government designed and created a mental health system, something that was previously the exclusive purview of the states, albeit a convoluted system of care.

Although community mental health centers differed in concept from county to county, they were primarily non-profit agencies whose primary purposes were to:

1. provide for the mental health needs of the whole community, which was defined as a geographic catchment area,
2. provide services to all, regardless of ability to pay,
3. provide organized systems responsive to the community,
4. promote crisis intervention and reliance on natural support systems, and;
5. promote diversion from institutional care (Minkoff, 1997).

The intention was for CBHOs eventually to replace state institutions, but the Acts created no link between the institutions and the CBHOs (Grob & Goldman, 2006). States did not close the institutions and due to the high overhead of these entities, expected savings did not materialize (Grob & Goldman; Levine, 1981). Additionally, local supports were slow to develop. Therefore, Congress continued funding of CBHOs through the CMHC Acts through 1970 at varying levels.

Because of these funding limitations, CBHOs changed their services to take advantage of third party payments, particularly Medicaid, effectively changing the original intent of CBHOs. Public payments did not reimburse services such as hospital diversions, education, rehabilitation, and case management, which were necessary to the original CBHO principles. Therefore, CBHOS lessened the provision of these services and concentrated on providing services that Medicaid did reimburse, such as physician encounters and therapy visits.

Three major problems arose out of this revised CBHO system that lead, in part, to the development of public sector managed care: costs, coordination, and service integration.

Initially, the federal mental health block grant was the largest public funding source for CBHOs and, as it was a fixed budget, it automatically constrained costs (Mechanic, 1998). However, not only did states try to maximize federal matches through the Medicaid program, CBHOs changed their systems and services to take advantage of Medicaid fee for service payments. Therefore, as Medicaid grew, CBHOs reduced their reliance on block grants. By 1997, funding from the block grant was less than Medicaid funding. By 2000, Medicaid represented the primary source of public funds, and funding overall, for CBHOs, with most receiving little or no additional funding from grants (Mechanic, 1998). This resulted in a sizable growth in Medicaid expenditures. It also provided CBHOs with an ever-growing revenue source, which encouraged increased use with virtually no impetus to control costs. In addition, waves of deinstitutionalized consumers with on-going service needs coupled with a lack of defined utilization review or outcomes measurement systems added to a lack of incentives for cost control.

The CBHOs' focus on public sector clients led to an inability for CBHOs to treat other populations, thereby not fulfilling the original purpose of CBHOs to provide services to the whole community. A lack of service coordination between CBHOs and private health facilities led to many individuals falling through the service gaps (Minkoff, 1997). Barriers to access left a large number of consumers untreated and languishing on waiting lists.

Last, as CBHOs increased reimbursable Medicaid services, they reduced non-reimbursable services that were part of their original purpose. Service integration required CBHOs to provide or coordinate support services such as case management, rehabilitation, housing, transportation, and the building of natural supports. These services were necessary to newly deinstitutionalized consumers to access traditional mental health care and maintain

in the community. In effect, these services were either not available or were provided by numerous individual agencies throughout the community, leading to a fragmented system of care.

Based on my experience as a chief executive officer for the Community Guidance Center (the Center), a rural CBHO, this accurately describes the situation that I encountered when I was hired one year before the implementation of Medicaid managed care. Ninety-three individuals had occupied a space on our waiting list for nearly six months. The Center triaged consumers upon admission to determine their need and newly deinstitutionalized clients claiming first priority for services. There was little attempt at rehabilitation and most clients were never discharged from services. Frequently, the Center did not discharge consumers because other, less intensive services were not available. There were no goals establishing natural community-based resources because the Center was fulfilling all the social and medical needs of its seriously and persistently mentally ill (SPMI) population. Diversion from inpatient hospitalization was largely successful because there was no local psychiatric inpatient facility. There were also no cash reserves, no investments in infrastructure or technology, no treatment planning, discharge planning, or outcomes measurement. If the community knew us at all, it was as a clinic for the poor or as a safety net provider. This was the status of most CBHOs as they entered the age of public sector managed care (Mechanic, 1998).

The Impact of Medicaid Managed Care

Introduction

The previous sections described the status of Medicaid as it related to the delivery of mental health services by CBHOs prior to Medicaid managed care. The changes in federal regulations, the states' use of Medicaid to increase federal matching dollars, and the CBHOs' increasing reliance on Medicaid as a funding source all combined to set the stage for the implementation of managed care. In this section, I will summarize the states' choices with regard to establishing managed care programs and the impact on CBHOs.

By 1996, the expenditures for public mental health care exceeded private spending, despite the fact that the privately insured population was three times larger than the public sector (Ridgely, et al, 2002). States began to see a sharp increase in the costs of Medicaid and health care expenditures accounted for a large portion of state budgets (Ridgely, Guard, & Shern, 1999). Further, under the Medicaid program, states had few options to contain escalating costs. Mental health services were not a federal requirement for participation in the program, but most states faced serious political opposition to denial of such coverage (Blouke, 1997). Thus, moving to managed care appeared to be a viable option for maintaining mental health coverage while controlling costs. By limiting the consumer's choice of providers, states facilitated the conversion of Medicaid programs into managed systems of care (Stroup & Dorwart, 1997).

The States and Managed Care Programs

From the state's perspective, there are several advantages to a managed care system. First, by contracting with a third party such as a managed care organization (M CO), the state has a single point of accountability for the entire service area, as opposed to

separately contracting with multiple for-profit and non-profit providers. These programs are largely involuntary in order to control the system over the entire population or geographic area selected. Involuntary means that the MCO manages services for all Medicaid consumers, with limited exceptions.

Secondly, by capitating services, the state has limited its liability and costs for the provision of mental health services (Blouke, 1997; Iglehart, 1999). Capitation is a flat per member per month fee that is independent of actual services used by the consumer. The MCO has an incentive to control costs and utilization by providing services in the least restrictive setting, diverting inpatient care to community settings, providing early intervention programs, and coordinating services across providers (Blouke). Early studies have shown that public sector managed care has been effective in attaining its cost reduction goal largely through reductions in inpatient stays and increases in less costly outpatient treatments (Donohue & Frank, 2000).

It is difficult to categorize Medicaid managed care at the state level because there are essentially over 50 different programs. Theoretically, states and counties could operate managed care systems in the public venue, but few choose to do so and contract with MCOs instead (Callahan & Merrick, 1997). There are two primary ways to establish behavioral health managed care contracts: mainstreaming programs or carve-out programs. Mainstreaming programs integrate behavioral health care and physical health care into one system, with primary care physicians (PCPs) acting as the gatekeepers. Mainstreaming promotes coordination of care, but there are risks of inadequate mental health assessment by PCPs, delays for specialty referrals, and the diversion of funding designated for mental health into physical health services (Callahan & Merrick). Behavioral health carve-outs place

mental health in a separate program from other health care services (Mechanic, 1998). Carve-outs allow for increased access to services and the maintenance of mental health funding. However, coordination with physical health care providers can suffer and cost-savings may be limited (Stroup & Dorwart, 1997). In general, carve-outs appear to be the most common form of public sector managed care.

States varied the managed care system further by contracting for managed care programs for different populations in different stages (Mechanic, 1998; Stroup & Dorwart, 1997). For example, Oregon implemented both mainstream and carve-out programs across the state (Ross & McFarland, 2000). North Carolina initially implemented a carve-out plan solely for youths under 18 years of age and recognized the local mental health agencies as the managed care organization (Stroup & Dorwart). Oregon and Pennsylvania adopted their statewide plans in stages whereas Massachusetts and Tennessee implemented plans for the whole state at one time. Iowa used a single, private MCO for the entire state for all Medicaid–eligible populations; Oregon contracted with multiple regional MCOs (Ross & MacFarland, 2000; Stroup & Dorwart, 1997).

States also developed varying contract requirements that affected providers and consumers (Mechanic, 1998; Stroup & Dorwart, 1997). For example, Oregon developed a prioritized list of conditions to avoid treating diagnoses without proven positive outcomes (Stroup & Dorwart; Ross & McFarland). Massachusetts detailed requirements for access to care, service expenditures, and consumer compliance (Donohue & Frank, 2000).

The MCOs are responsible for implementing the state's program design and regulations, in addition to implementing restrictions of their own. The next section discusses the structure of MCOs in relation to Medicaid managed care programs.

Managed Care Organizations

The decision to contract with an MCO, rather than managing care within the public system, has implications for both the local authorities and providers. Public entities are accountable to the public and political interests and this causes them to devise structures that insulate them from controversy. This leads to the perpetuation of existing systems, increased regulation, process review, and continued justification of ineffective operations (Smith, 1996). Contracting with an MCO provides a layer of insulation between the consumer and the government, somewhat safeguarding the states against varying political interests (Callahan & Merrick, 1997). The CBHOs, in turn, find that the MCOs operate under fewer constraints and are impervious to political pressures, making negotiations more difficult. In addition, MCOs are familiar with managing large populations, though they initially had limited experience with managing seriously mentally ill populations. CBHOs then had difficulty defending services in concurrent reviews by MCOs (Lewin & Baxter, 2007). On the other hand, MCOs also can be more flexible and customer-focused than entrenched public bureaucracies such as the states, particularly in the design of new treatment approaches (Callahan & Merrick; Smith).

Most MCOs are large for-profit organizations that operate across geographic areas (Mechanic, 1998). Regardless of their organizational structure, MCOs either offer their services on an administrative or on a risk basis (Mechanic, 1998). In an administrative contract, the MCO will receive a fee to manage claims for another entity, such as a provider group (Stroup & Dorwart, 1997). The capitated payment and the associated financial risk flow to the providers, not the MCO.

In a risk-based contract, which is currently the most common, the MCO accepts a capitated payment and risk from the state for providing all mental health services for a designated population in a specified catchment area (Mechanic, 1998). The MCO can then provide services via a staff model, where providers are employees of the MCO, or by contracting with individual providers. The staff model, commonly called an HMO or Health Maintenance Organization, is rare in behavioral health managed care.

Typically, the MCO works with independent providers by paying discounted fee for service reimbursement for pre-authorized behavioral services. The MCO may choose instead to pass the capitated rate to the provider, but this is less common (Mechanic, 1998). Lastly, providers may be sub-capitated and receive payment via bonuses and/or pay for performance schemes, or conversely, payments may be limited or withheld for failure to meet MCO standards (Mechanic, 1998).

The states also delegate the responsibility for monitoring, oversight, and administration of the program to the MCO or jointly to the MCO and local authorities (Donohue & Frank, 2000). Thus, MCOs credential providers, meaning that MCOs essentially have the right to limit the number of providers based on MCO-established criteria.

MCOs also control usage by establishing pre-authorization requirements for consumer services, limiting the number or length of services provided, or denying services for specified diagnoses. MCOs may also set quality standards, outcomes measurements, or documentation requirements and use the lack of such items as a basis to deny payment or discontinue services. In order to maintain adequate reimbursement and services, CBHOs are then required to change operations to comply with these restrictions.

Impact of Medicaid Managed Care on CBHOs

Because of the MCO structure, CBHOs have tended to meet the idea of managed care, particularly public sector managed care provided by for-profit MCOs, with trepidation and suspicion about the motives of the MCOs. However, due to a lack of adequate utilization and measurement systems, CBHOs use anecdotal data to provide examples of the harmful effects of managed care and then generalize it to the entire industry (Mechanic, 1998). This does not provide an accurate picture of the system or the industry. This behavior then leads to a continued hostile relationship between the entities and does nothing to improve the system overall.

In fact, prior to managed care, mental health services were often poorly organized, fragmented, and unresponsive to consumer needs and cost concerns (Mechanic, 1998). The traditional view of CBHOs included long waiting lists for new consumers and a lack of discharge planning for existing consumers. As discussed earlier, CBHOs provided little rehabilitation or coordination to other support services. CBHOs treated consumers for decades with no change in service utilization and no documented improvement. Treatment frequently meant "maintaining" the consumer or helping them to avoid re-institutionalization.

A lack of clear standards of care, practice guidelines, or focused treatment plans also characterizes the mental health profession (Manderscheid, 1998). States have had little ability or inclination to monitor services, and community health care organizations had little accountability (Mechanic, 1998). As such, pre-managed care states concentrated on statistics regarding the numbers and types of patients served, rather than the efficacy of care or consumer outcomes (Smith, 1996). Correspondingly, CBHOs did not have the technology or

knowledge base necessary to meet new MCO guidelines regarding outcomes or service utilization. CBHOs also did not have results information necessary for contract negotiations or evidence to support their beliefs regarding the quality of care. Therefore, it was easy for the states and MCOs to disregard the opinions of the CBHOs in the managed care process.

Initially, CBHOs were also disinterested in being involved in the managed care process, and even today, are largely unprepared to accept risk (Kiesler, 2000). Managed care is changing the behavioral health care world, including provider autonomy, opportunities, and reimbursement levels. MCOs place pressure on providers to change traditional practices and treatment settings. Such changes are not purely financially driven nor are they necessarily detrimental to the quality of care, but CBHOs, like most traditional institutions, do not easily accept or implement change.

CBHOs also have had to react to cost containment and access requirements. In the 1980s and early 1990s, CBHOs received little or no growth in state and county cost-based reimbursements (Lloyd, 2002). Therefore, CBHOs had almost no incentive or resources to improve services, reduce costs, or increase access. There simply was inadequate funding to improve operations or services. In most cases, providing services to more consumers would have resulted in unfunded losses since the states fixed budgets at a flat total amount and did not base them on volume (Lloyd, 2002; Manderscheid & Hutchings, 2004). This system resulted in stagnation, fragmentation, and a resistance to change (Manderscheid & Hutchings).

However, in the managed care environment, requirements quickly changed. MCOs expected adequate justification and outcomes measurements for continued services. Funding was mainly fee for service and based on volume. CBHOs that are unable to meet MCO

access standards did not receive new referrals. As a result, CBHOs faced significant financial losses and/or an inability to meet access standards. Unfortunately, as Medicaid is the primary payor for most CBHOs, this situation affected the CBHOs' survival.

In order to survive, CBHOs in a managed care environment need to determine if organizational changes are necessary to address costs and access, such as the implementation of accountability measures and performance standards (Lloyd, 2002). In addition, CBHOs may need to look at additional sources of revenue, both to achieve appropriate capitalization to manage capitation and to lessen their reliance on Medicaid funding. For example, Dorin & Waizer (2006) state that only large CBHOs, defined as those with capitalization over $50 million, or CBHOs that become part of an integrated network will have a chance for long-term survival in the managed care environment. A larger funding base allows CBHOs to accept capitation and risk, and weather temporary declines in revenue. Integration could also help these issues, and provide better coordination of care and support services. In fact, the newly enacted Patient Protection & Affordable Care Act of 2010 actively promotes integration between physical and mental health (Bozzo, 2010; Mauer, 2010).

There is no doubt that all of these issues will shape the future structure of CBHOs. The behavioral health environment changed significantly with the introduction of managed care programs, and change continues to affect CBHOs. The question is how CBHOs will react to this dynamic environment. In the next section, I review organizational change theories to assist in analyzing CBHO reactions.

Theoretical Framework

Introduction

Various theoretical constructs are applicable to the analysis of the reactions of CBHOs after the implementation of Medicaid managed care. I review three major organizational change theories in relation to changes in CBHOs: resource dependency, population ecology, and institutionalism. I believe that each of these theoretical perspectives provide some insight for my research.

Resource Dependency Theory

Resource dependency theory proposes that the external environment is an important factor in shaping the organization. In addition, the level of influence the environment has on the organization correlates positively to the organization's level of dependence on resources provided by these external agents (Hasenfeld, 1992; Scott, 2003). The resource dependency framework assumes the organization has an active role in relation to its environment, but focuses primarily on linkages to obtain needed resources (Fennell & Alexander, 1993; Flood & Fennell, 1995; Pfeffer & Salancik, 2003; Wischnevsky, 2004). Therefore, organizations will concentrate on organizational changes that increase resources.

Resource dependency also focuses on management capabilities. It assumes that managers actively attempt to influence the environment to reduce dependencies and secure additional resources (Guo, 2006). Organizations continually change at varying levels to improve the availability of these resources. However, political and social factors outside of the organization's control influence its ability to acquire resources and funding (Scheid & Greenley, 1997). For example, the stronger the reliance on one revenue source, the more

difficult it is to influence the funding levels from that source. As such, organizations may also seek to reduce their dependency on one payor through diversification.

Resource dependency theory expects that organizations will also focus on developing needed linkages to obtain resources (Fennell & Alexander, 1993; Flood & Fennell, 1995; Pfeffer & Salancik, 2003; Wischnevsky, 2004). Therefore, this theory is helpful in explaining the formation of group coalitions based on resource dependence and strategies for integration (Fennell & Alexander, 1993; Flood & Fennell, 1995; Hatch, 1997).

In the case of CBHOs, the organizations are traditionally the primary providers of Medicaid mental health services and a significant portion of their financial resources are dependent on Medicaid dollars. As CBHOs are reliant on Medicaid dollars to provide services, changes in Medicaid policy, such as the implementation of managed care programs, would have a significant impact on the organizations. In addition, as CBHOs are more reliant on one source for critical and scarce resources, tactics to control these resources may be difficult (Pfeffer & Salancik, 2003). Therefore, in accordance with resource dependency theory, CBHOs will primarily concentrate on organizational changes that increase available resources or reduce their dependency on one payor, Medicaid. It is difficult, if not impossible, for CBHOs to negotiate increased reimbursement rates from MCOs or the state. Strategies such as attracting other payor sources, increasing services, and broadening the consumer base may be more feasible for the CBHOs. Organizations can also reduce costs as a means of increasing the availability of resources. Lower costs allow organizations more freedom of choice in the use of current resources, effectively, increasing availability. Therefore, it appears that, given resource dependency theory, I would propose that CBHOs would concentrate on these types of changes in reacting to the managed care environment.

For CBHOs, there is also significant pressure in the mental health field to form integrated networks with other services, particularly physical healthcare (Dangerfield & Van Camp, 2006; Jarvis, 2006). The Patient Protection & Affordable Care Act of 2010 includes a push for integration with the concept of a medical home. A medical home assumes the integration of mental healthcare and physical healthcare, with the primary care physician acting as the gatekeeper (Bozzo, 2010; Mauer, 2010). This is consistent with resource dependency theory that linkages may be a primary means to obtain resources. Linkages allow organizations to expand their services and their consumer base. Reductions in cost are also possible with effective linkages due to economies of scale. Last, the larger size of the organization may translate to a larger power base from which to conduct negotiations with a primary resource source. Therefore, CBHOS may consider integration as an acceptable organizational change to meet its needs in a changing environment.

Resource dependency theory also argues that organizations make changes for their adaptive value and such strategies lead to an improved ability to function in a dynamic environment (Kiesler, 2004; Wischnevsky, 2004). Expanding on this theory, CBHOs that react to dynamic change with adaptive strategies will be more successful than those that resist change. The next section examines a particular model proposed by Mordock (1989, 1996) that not only reflects resource dependency theory, but also may be helpful in examining the changes made by CBHOs in a managed care environment. Mordock labels his adaptive changes as survival strategies.

Survival Strategies

Mordock (1989) developed a model for adaptive strategies used by nonprofit organization in a changing environment that appears to relate directly to resource dependency theory. He then updated his original model to reflect changes in a managed care environment (Mordock, 1996). Although he does not directly reference resource dependency theory, there are many similarities in his model. First, like resource dependency, his models addresses organizational adaptation to external environmental pressures.

Mordock (1989, 1996) proposes that organizations can actively influence their environment, even to the point of determining their survival in a dynamic industry through organizational changes. He believes that organizations first look to short-term internal solutions to obtain needed resources, including seeking additional funds that reduce their reliance on a primary payor source. When internal changes such as cost-saving measures or increased billings are not adequate to obtain necessary resources, Mordock suggests that organizations will make more risky organizational changes that affect the structure and/or role of the organization in the community.

Mordock (1996) includes linkages and integration as a viable solution to obtaining resources. Resource dependency theory also notes that organizations will alter their structure and purpose to attain resources or to gain greater power to attain resources (Pfeffer & Salancik, 2003). Organizations that seek integration or other coalitions look to diversify their services, consumer base, geographic location, or size in the hope that it will also expand the availability of resources. Organizations will even reinvent themselves, removing some parts and adding others to reflect environmental changes. If necessary, organizations will develop

activities that differ completely from their original purpose. Another goal of integration is to seek greater legitimacy and power for the organization.

Mordock (1989; 1996) also enhances resource dependency theory to include organizational changes that seek to establish legitimacy for the organization. His results orientation strategy demonstrates the organization's effectiveness and continuing viability for funders and policy makers. In 1996, he expanded this search for legitimacy by organizations to include direct political activity and advocacy. Resource dependency theory recognizes that that varying external agents are constantly assessing organizations on the usefulness of their output and this, in turn, influences the level of resources given to these organizations (Pfeffer & Salancik, 2003). Resource dependency theory also heavily advocates the value of marketing tactics for for-profit businesses to obtain visibility and additional resources. Direct political tactics and results orientation provides this same visibility for nonprofit organizations.

Together, Mordock (1989; 1996) labels these organizational adaptive changes in times of environmental change as survival strategies. These survival strategies are: financial strategies, program resource changes, role changes, structural redesign, results orientation, and political strategies (Mordock, 1989, 1996).

These strategies mirror many of my expectations about the organizational changes that CBHOs will implement in a managed care environment. Therefore, I use these strategies to form the basis for my survey questions and dependent variables in my analysis. In this section, I provide more definition of the particular strategies and their application to CBHOs.

Financial Strategies

In Mordock's (1989) model, financial strategies refer to adaptations that improve the efficiency and overall funding levels of the organizations. Financial strategies include tightening controls, seeking new funds, and seeking supplemental funds. There are numerous examples that show how Medicaid managed care has affected the funding levels of CBHOs through various policies and control mechanisms. CBHOs generally react first to these environmental changes using financial strategies.

Medicaid cost containment is the primary reason that states entered into managed care plans for Medicaid. Initially, the industry achieved these goals through reductions in inpatient stays (Donohue & Frank, 2000). For continued cost savings, MCOs must turn to limits on outpatient services, particularly more expensive services. These limits inevitably lead to reduced reimbursement for CBHOs.

Attempts to increase access, a second goal of managed care, also increase competition and reduce funding, and CBHOs are frequently in competition with private clinics and other agencies (Mordock, 1996). Because of these environmental factors, CBHOs must learn to control costs and operate efficiently to conserve funding. One of the financial strategies CBHOs implement is the use of productivity benchmarks.

Mordock notes that, in the pre-managed care environment, most CBHOs were billing significantly less than the 28 hours per week expected by MCOs. This is due to a large array of non-reimbursable services, high no-show and cancellation rates, administrative paperwork hours, and unlimited session times. These practices were typical in a non-managed care environment.

In my agency, prior to managed care, outpatient therapists billed an average of only 12 hours per week, supplemented by county cost-based funding. However, cost-based funding largely ended with managed care and, given the limitations imposed by MCOs, these billing patterns were insufficient to meet the financial needs of the organizations. Therefore, one of the organizational changes used by CBHOs to address costs and access is the implementation of staff accountability measures and productivity benchmarks (Lloyd, 2002). CBHOs then frequently tie benchmarks to staff salaries via pay for performance mechanisms to ensure adequate levels of performance. The proposed benefit of these financial strategies, besides increased revenue and reduced costs, is an improvement to access. Existing staff are able to treat more consumers as productivity per staff member becomes higher.

Another financial issue that also affects access is the expense of no-shows, defined as clients that do not regularly attend scheduled appointments. CBHOs implement various schemes to improve attendance by consumers, including no-show fees, double-booking, etc. (Lloyd, 2006). This not only increases staff productivity and the organization's revenue, but also indirectly affects both treatment and access. Consumers that receive regular treatment generally experience less episodic crises. Also, by limiting or eliminating no-shows, providers can better manage their schedules and treat more consumers.

Financial strategies are common organizational changes among non-profit agencies. CBHOs can easily implement such strategies for immediate results, and these changes rarely result in a risk to the organization's purpose or mission. Although, in the extreme, such changes can result in a change to the organization's culture, data collection methods, and philosophies of care (Lloyd, 2002). However, subsequent survival strategies discussed in this

section may have more effect on the organization's traditional identity and require more effort to implement.

Program Resource Changes

Program resource changes refer to an organization's decisions related to acquiring and allocating its primary resources: personnel, funds, and tangible assets. Mordock's (1989; 1996) program resource survival strategies include changes to service mix, staff mix, and even case mix, or types of consumers served (Mordock, 1989). Although such strategies appear relatively easy to implement, they have an impact on the organization's purpose as they changes may affect traditional services and long-term staff.

When an organization experiences funding pressures, it is typical to re-allocate resources and reduce costs, frequently through across-the-board employee lay-offs. However, in a service business such as CBHOs, such action can have the unintended effect of reducing access and revenue; fewer employees may mean less reimbursement. Managed care, in fact, calls for increased access and a greater array of services, not less. Therefore, CBHOs may look at non-reimbursable community services for reduction while simultaneously increasing newer, lower cost programs. Although this may lower costs and improve reimbursement, it also may eliminate traditional services that have come to define the CBHO in the community.

Service mix and staff mix are also two major targets of change (Mordock, 1996). Service mix would include varying the types and delivery of services, and potentially, patient mix. In conjunction with the need for increased access, such strategies may include defined clinical pathways or limited treatment protocols, immediate access to services, and lessening reliance on Medicaid funding by attracting new funding streams.

By designing practices and hiring staff that mirrors the competition, CBHOs may attract commercial insurance patients and establish private employee assistance programs (EAPs) and other contracts with private businesses. Staff mix changes are complementary, as most commercial insurers require licensed staff and most CBHOs did not previously staff at this level. Staff must also be trained in managed care and provide services efficiently in accordance with reimbursement principles (Mordock). However, as the CBHO changes its service structure through program resource changes, it may find that it is changing its traditional role in the community.

Role Changes

Mordock (1989; 1996) characterizes role changes as those strategies that change significant staff positions, standardize disciplines, or actually change the overall purpose of the agency in the community. Resource dependency theory expects that organizations will either change roles to fit the environment or implement changes to alter the environment and gain more control (Pfeffer & Salancik, 2003). Role changes are a means to both ends. For example, CBHOs can change services and positions based on the current needs of the environment. Alternatively, CBHOs can alter their environment by deciding which segments of the community they will serve and which elements they will eliminate.

Traditionally, CBHOs rarely hired licensed employees and position functions tended to overlap. Psychiatrists provided therapy, as did bachelor's level therapists. Nurses spent a great deal of their time fulfilling case management needs. In the managed care environment, the need to increase billable hours and to attract other payors, via the strategies discussed previously, leads to new licensed positions and a more defined structure of responsibilities. Now, psychiatrists may be used solely for evaluation and direct treatment of complex cases,

medication management is delegated to physician extenders, and lower-reimbursed therapy solely provided by psychologists and other licensed clinicians. These changes relegate the role of bachelor's level therapists, if any, to case management and similar support functions.

Prior to managed care, clinical managers led most CBHOs and financial considerations were secondary considerations. In a managed care environment, strong executive leaders with a business orientation, or strong financial departments, are necessary to ensure maximization of revenue. Specialized roles maximize both time and revenue, and develop new disciplines that, in turn affect the environment.

The role of the consumer is also changing. CBHOs, in dealing with public-sector clients in a non-managed care environment, frequently developed an all-encompassing approach to consumer care (Lloyd, 2002). This practice established a power relationship where the provider served as the primary resource for the consumer, directing their goals and life domains, as well as providing treatment for the presenting problem (Kiesler, 2000). On the other hand, the preferred consumer-centered or recovery approach in managed care actively seeks the consumer's perspective in treatment approach, goal setting, and outcome measurement (McCabe & Priebe, 2002). This shift can prove challenging to organizations that are steeped in professional dominancy. Other CBHOs may find it beneficial because it develops new partners to advocate for the CBHOs.

As the role of the consumer changes, so does the agency's choice in the delivery of services. New treatment options and new types of services are necessary in a changing environment. Historically, CBHOs are used to providing internal comprehensive services to "their" consumers. Adapting to a changing role may result in agencies contracting or subcontracting services from other providers to enhance or replace internally delivered

services (Mordock, 1989; 1996). CBHOs may no longer deliver some traditional services at all.

The type of services offered within the agency may change to include more outreach, increased use of employed consumers, and alternative therapies, which do not align well with initial core services. In addition, social enterprise operations may result as the role of the agency changes to include services to other agencies (training, consulting, etc.) rather than solely offering direct services to consumers. These types of role changes can be so significant that they may change the identity the organization has in the community and internally.

Role changes carry inherent risks including a change in mission, culture, and the overall perception of the agency and its purpose. The CBHO must balance these risks in choosing any strategy, but such risks are greater in the adoption of role changes. Another area of significant risk that changes the purpose or mission of the agency is structural redesign.

Structural Redesign

Structural redesign refers to changing an organization's size, geographic distribution, and/or overall focus (Mordock 1989; 1996). Resource dependency theory assumes that organizations will form coalitions to obtain influence and control of its environment. Reductions in cost through economies of scale and greater availability of resources due to changes in size or geographic dispersion may also result from structural redesign.

Changing the structural dimensions of an organization spans the integration spectrum from simple collaboration through a full merger among agencies. Structural changes may coordinate care among similar populations or expand the scope of services to include unrelated services.

In relation to CBHOs, research indicates that a lack of coordination of care between physical and mental health providers can be problematic (Kiesler, 2000). There is some evidence that this lack of coordination leads not only to increased ineffectiveness of treatment but also increased costs (Dorin & Waizer, 2006; Kiesler, 2000). Physical health providers may not easily recognize the psychological impact of physical illness. Similarly, mental health providers need to be more aware of physical problems that are common among seriously mentally ill consumers. Further, even such strongly correlated issues as substance abuse and mental health are rarely treated simultaneously (Kiesler). Traditionally, CBHOs deal solely with mental health issues. Drug and alcohol providers treat substance abuse. These agencies often report to and receive revenue from different state and local authorities. This situation results in a fragmented delivery system and poor coordination of care.

Increasingly, MCOs and the states recognize that such fragmented treatment is less effective for dually diagnosed consumers than coordinated care. Therefore, there is a nationwide movement for CBHOs to address coordination of care issues. The new Patient Protection & Affordable Care Act of 2010 plans for healthcare reform includes integration of healthcare services, including mental health (Bozzo, 2010; Mauer, 2010). Further, agencies may use multiple approaches for improving coordination, such as: joint ventures, mergers and integrated networks, coordination agreements, and crossover services (Dorin & Waizer).

However, the reasons for mergers extend beyond the need for coordination of care into the need for diversification of funding streams (Dangerfield & Van Camp, 2006; Dorin & Waizer, 2006). As MCOs increase administrative demands and restrict services, CBHOs experience decreased revenue, insufficient personnel resources, and limited power to negotiate contracts. Coalitions or other integration strategies should provide the organization

with more resources and depth in providing services. Outpatient CBHOs have filled gaps in treatment by venturing into nontraditional services such as residential housing, rehabilitation, and vocational training (Dangerfield & Van Camp). The integrated network may also alter the size or service area of the CBHO.

The larger and more geographically dispersed the organization, the more power it has to affect policy: locally, at the state level, and in negotiations with MCOs (Dangerfield & Van Camp; Jarvis, 2006). CBHOs that band together may have similar missions and services, but their coalition also increases their size and service area. Thus, this newly formed organization may also have more power to negotiate rates and administrative issues with the MCO. CBHOs that merge with similar organizations that are not CBHOs, such as drug and alcohol providers, add expertise and/or services that complement traditional services. All of these integrative strategies provide an opportunity to reallocate resources and redesign the traditional structure to fit the environment.

In addition to integration, CBHOs may alter their structure through internal diversification. As CBHOs develop processes and expertise for their own use in a managed care environment, they may create for-profit ventures to sell these same services to other organizations. There is substantiation for diversifying into profitable ventures as a means to develop new sources of funding. Profits from for-profit enterprises can support unreimbursed, nonprofit mental health services. The nonprofit organization can benefit operationally from the business perspective it gains from the venture. However, it can also present some risks as the organization spreads its resources over two distinct operations.

If done correctly, structural redesign can be an effective tool to diversify revenue, expand delivery systems, and increase overall power and legitimacy in the community.

However, as for-profit and other unrelated ventures occupy more of the agency's time and provide more of the its funding, it may bring into question the agency's true purpose and mission. The CBHO may not have the expertise necessary to run a for-profit enterprise effectively. The true purpose of the CBHO may also be lost in a large integrated network or the coalition may not have compatible missions.

The next two strategies discussed relate less to changing the structure and role of the organization. These strategies speak to attaining necessary resources by establishing legitimacy and improving awareness of the organization in the community.

Results Orientation

In the resource dependency model, legitimacy is important to analyze the relationship of an organization to its environment (Pfeffer & Salancik, 2003). As nonprofit organizations consume community resources, the community and payor sources are responsible for assessing the effectiveness of the organizations' outputs. In other words, organizations must prove that they are using resources in the best possible way and achieving the intended outcomes through their efforts. Mordock (1989; 1996) categorizes these efforts to measure outcomes as results orientation.

Financial strategies are primarily concerned with efficiency; results orientation is primarily concerned with efficacy. Efficiency relates to the internal processes of an organization, while effectiveness involves balancing of scarce resources with the quality of the outputs or results (Davis & Pett, 2002; Mordock 1989; 1996). For CBHOs in a managed care environment, this requires an evaluation of the agency's programs and services and the measurement of the relative benefits received by the consumer.

Prior to managed care, the inability of states to monitor systems combined with their need to be publicly accountable led states to implement draconian process measurements for CBHOs, rather than true measures of effectiveness (Smith, 1996). The managed care industry, on the other hand, seeks to develop measures that evaluate efficacy and performance (Mechanic, 1998). At the present time, there are no widely accepted measurement instruments in the behavioral health care arena, but there are some performance indicators being developed as measures of effectiveness, including consumer satisfaction (Manderscheid & Hutchings, 2004, Ridgely, et al, 2002).

Consumer satisfaction surveys seek consumer input on their progress on goals or improvement to life domains. Despite disagreement about the value of subjective assessments, recent studies support the predictive validity of consumers' assessments of outcomes (McCabe & Priebe, 2002). Therefore, these quality of life factors are achieving increasing importance.

Evidence-based practices (EBPs) are another means to achieve appropriate, standardized care with measurable outcomes. EBPs are treatment interventions tested through research studies to provide consistent results or outcomes for specific mental health populations. The U.S. Substance Abuse and Mental Health Services Administration (SAMSHA) has developed the most widely-used model for evidence-based practices, but it currently does not cover all diagnoses (Jarvis, 2006). Still, EBPs are gaining wide popularity as a means to measure an organization's effectiveness in treatment.

Unfortunately, most CBHOs currently do not have the data systems to provide adequate monitoring of outcomes regardless of their level of importance (Kiesler, 2000). EBPS, in particular, require extensive, and often expensive, staff training and measured

fidelity to the models. However, with a national focus on outcomes, CBHOs will be required to build the infrastructure and processes necessary to utilize these measurement tools. Payors will use measures of efficacy in treatment to subsequently measure the effectiveness of the organization and determine allocation of future resources. CBHOs that wish to establish their legitimacy to the community will need to adopt and provide successful outcomes measures. Another means for CBHOs to obtain legitimacy is through political strategies.

Political Strategies

In resource dependency theory, a political strategy refers to both direct political intervention and overall marketing and advocacy efforts (Mordock, 1996; Pfeffer & Salancik, 2003). For-profit corporations use marketing techniques to inform customers about their products or services and increase sales. Nonprofit organizations can use marketing in the same manner, providing information about services. Perhaps the more important agenda for CBHOs is to educate MCOs that are not familiar with treatment of SPMI populations, inform funders about the costs of new programs and the needs of the community, and instruct the community on the value of the CBHO.

Historically, the mental health community has been relatively ineffective in promoting its cause. CBHOs are small to medium organizations with little experience in public policy development or lobbying initiatives. Psychologists, in particular, have not engaged as a group in the political process (Blouke, 1997). As cost containment is a major force in Medicaid managed care, CBHOs must make an effort to acquaint for-profit MCOs and the state about the effectiveness of community mental health services and issues dealing with special populations. The desire to determine efficacy of behavioral health services and the legitimacy of CBHOs in particular has caused funders to force the quick adoption of

model programs and "evidenced-based" practices. Unfortunately, the transition from research study to practical application can be time-consuming, costly, and, in some cases, less effective (Mordock, 1996). The provider's knowledge and experience can provide valuable information and restrain hasty adoption without adequate support.

Member organizations also exist for group advocacy. CBHOs need to directly interact and support member organizations to ensure that they represent their interests. Member organizations provide many of the same benefits as coalitions. They provide additional power to the CBHOs by virtue of their size and shared mission.

CBHOs also need to understand the benefits of regular communication with local representatives, educating them on the intricacies of managed care and its relationship to mental health services. Becoming more visible and providing direct information will help CBHOs to establish their value and advocate for the needs of their individual communities.

Summary

Resource dependency theories address the primary issue of resource uncertainty that faces CBHOs in the present environment. This theory concentrates on the premise that the environment is a key influence for an organization. In fact, the more an organization depends on the environment for its resources, the more influence the environment will have (Hasenfeld, 1992; Scott, 2003). This is particularly appropriate for this study as CBHOs depend primarily on Medicaid for necessary resources. Therefore, the change to Medicaid managed care should have a large impact on the survival of CBHOs.

Resource dependency theory also assumes that organizations can actively influence their environments (Guo, 2006; Pfeffer & Salancik, 2003). Therefore, organizations will make adaptive changes to secure needed resources. These changes or strategies include

reducing or eliminating unnecessary functions, adding new activities, forming linkages to obtain resources and gain power, and using political or marketing techniques to establish legitimacy. Therefore, this aspect of resource dependency supports the notion that CBHOs facing managed care changes will use adaptive strategies to change their organization. In fact, CBHOs will implement particular organizational changes that will help them to obtain greater resources legitimacy, and power. Thus, from this perspective, I expect that CBHOs that react to dynamic change with adaptive strategies will be more successful than those that resist change.

Mordock (1989; 1996) categorizes these organizational changes into seven "survival strategies". These strategies further develop resource dependency theory in relation to CBHOs in a managed care environment. As a result, I use these strategies to develop my hypotheses concerning the type of organizational changes that successful CBHOs will make. I will also use survival strategies to formulate my survey questions.

However, resource dependency does not fully recognize all of the conflicting influences that may guide CBHO behavior and, subsequently, my research. To address these influences, I look to other theories presented in the next two sections.

Population Ecology

Population ecology focuses on organizational populations and, like resource dependency, identifies the environment as a significant catalyst for population changes (Fennell & Alexander, 1993; Hatch, 1997). This theory is concerned with patterns of success or failure across all organizations within a given field. Therefore, population ecology is most effective in accounting for changes over long periods of time (Levinthal, 1991)

In this theory, environmental fit, or the ability of the organization to adapt it is environment, determines the success or failure of organizations. However, unlike resource dependency, population ecology models give little attention to cooperative relations among dissimilar organizations and do not address integration strategies.

Also, unlike resource dependency, population ecology theory notes that managers cannot completely control organizational outcomes. It does not eliminate human actions in variation and selection (Hatch, 1997; Scott, Ruef, Mendel, & Caronna, 2000). However, population ecology assumes that organizations find it both difficult and dangerous to make significant changes (Scott, Ruef, Mendel, & Caronna, 2000). Major changes in core features may increase the chance of failure, as it causes the organization to mimic the higher failure rate of new organizations. Changes to core features, such as role, mission, or purpose, essentially create a "new" organization, which is untested and may have a greater chance of failure.

Population ecology also assumes that organizations can change, but they rarely do so at the same speed as the environment. There is an unavoidable delay between a change in the environment and the organization's ability to recognize the change and then determine and implement its chosen course of action. In a dynamic environment, the organization's actions may already be useless. New changes in the environment may have occurred or the organization may have already failed. Therefore, timing is a major factor in the relative inertia of agencies in relation to the environment (Kiesler, 2004; Wischnevsky, 2004).

Population ecology theory is important in my analysis to help understand why some survival strategies may be more acceptable to CBHOs than are others. The risks associated with certain strategies may appear to outweigh the benefits. Organizations may also be more

amenable to changing certain operational aspects such as marketing tactics, rather than core features such as their mission or structure (Scott, Ruef, Mendel, & Caronna, 2000). Although resource dependency theory focuses on linkages as a primary strategy to obtain resources, population ecology suggests that this strategy would be too risky for most CBHOs to consider. This would indicate that most CBHOs in a managed care environment adopt internal organizational changes such as financing strategies and changes to program resources. However, CBHOs will be less likely to implement strategies that affect the core principles of a CBHO, such as role changes or structural redesign.

Applying population ecology theory to CBHOs would also indicate that CBHOS that are not currently operating in managed care environments might be reluctant to make early innovative changes within the organization due to the risk factors (Scott, Ruef, Mendel, & Caronna, 2000). CBHOs in managed care environments should be motivated to adopt survival strategies as opposed to CBHOS that are not. In addition, the longer a CBHO operates within a managed care environment, the less reticent to change they become.

Similarly, the timing of environmental change would also affect organizational decisions (Kiesler, 2004; Wischnevsky, 2004). Population ecology suggests that the longer a CBHO operates within a managed care environment, the greater the chance that they will adopt organizational changes in response to that environment. This contributes to the development of my first hypothesis that the number of years in Medicaid managed care positively affects the use of survival strategies. Therefore, I have used the number of years a CBHO is in a Medicaid managed care environment as my independent variable.

One of the criticisms of the ecological approach is the lack of emphasis on power. The nation-state is a source of resources and coercive power and imposes uniform structures

and procedures on organizations. Health care may be the industry that is most averse to change in the US because regulators, insurers, and professional groups such as physicians and institutions have a powerful interest in maintaining the status quo (Caronna, 2004). For CBHOs, state, federal, and local governments establish regulatory requirements that inhibit the organization's ability to change, at least in the short term. Therefore, to address these power issues, I examine institutional theory in the next section.

Institutional Theory

Institutional theory focuses on influences associated with social, cultural, political, and legal sectors (Hatch, 1997). Social and cultural demands are those that require organizations to play particular roles in society and to maintain certain outward appearances (Hatch). Institutional theory provides a framework for examining how conflict over values can influence organizational decisions concerning service delivery and accountability (Fennell& Alexander, 1993).

According to institutional theory, a need for improved organizational performance drives early adapters of change (DiMaggio & Powell, 1983). As the innovation spreads, it becomes less a strategy for improvement, and more a normative value necessary for legitimacy. Over time, the effect of individual change is to lessen the extent of diversity within the field. Isomorphism is the term that describes this process of homogenization of organizations. Organizations experience pressure to conform to their institutional environments because of coercive pressures from political institutions, normative pressures from occupational and professional constituencies, and mimetic pressures from other comparable organizations. The types are not always empirically distinct. These orders coexist, interact, and often exhibit diversity to cause tension and change (Scott, Ruef, Mendel

& Caronna, 2000). I will discuss each type of pressure separately to define it and its application to CBHOs and organizational change.

Coercive isomorphism is a direct response to a government mandate or the regulatory pillar (DiMaggio & Powell, 1983). Major new regulations are an example of coercive power (Flood & Fennell, 1995). Political decisions apply across the board to all organizations in the same class, thus making decisions less adaptive or flexible. Organizational structures then come to reflect these rules legitimized by the state. This is important for this study because CBHOs rely on government entities for both funding and legitimacy. The implementation of Medicaid managed care and its related initiatives are examples of government mandates.

In managed care, Medicaid initiatives include both cost reduction and access issues. MCOs also expect CBHOs to implement efficiency standards, new services, and new treatment paradigms. To meet these standards, CBHOs receive pressure to make changes with which they have no familiarity or expertise. The states and MCOs expect standardization so that CBHOs can be comparable. This may lead to changes that meet external standards, regardless of whether such changes actually increase effectiveness or efficiency. However, CBHOs also face pressures to conform that are not regulatory. Normative pressures also affect organizational changes.

Normative pressures reflect the extent to which organizations conform to cultural frameworks independent of efficiency considerations. For CBHOs, such pressures ensue internally with the rise in status of professional managers that concentrated on efficiency and management controls in direct conflict with traditional clinical values (Flood & Fennell, 1995). In CBHOs, there is not only a potential conflict between the beliefs of psychiatrists and professional administrators, but also a diverse mix of other clinical professionals, such as

social workers, psychologists, and counselors, each with differing sets of values and norms. The community at large, which has normative expectations about mental health care delivery, also places pressure on the CBHO to conform. The pressure is stronger for CBHOs to meet expectations if the employee population is large or community involvement is great (DiMaggio & Powell, 1983). Mental health programs must provide the kinds of services both external and internal constituents deem necessary for mental health care. In order to both meet standards and expectations of care and implement non-traditional changes, CBHOs also face mimetic pressure.

Neo-institutionalism argues that organizations mimic the behavior of others under conditions of uncertainty, particularly if they face a similar pattern of environmental or institutional forces (Alexander, D'Aunno, & Succi, 1996; Hasselbladh & Kallinikos, 2000). Organizations with weak technologies and complicated, non-standardized outputs are subject to strong rules that focus on the production process. This is true of the mental health field, where there is little conformity among stakeholders as to what constitutes effective care. In addition, regulators traditionally focus on processes, rather than outcomes (Scheid & Greenly; 1997; Smith, 1996). Organizations may then become similar to other organizations, because it is easier to conduct exchanges, to attract personnel, to maintain a good reputation, and be eligible for grants (Powell, 1991). When organizations produce services that are difficult to evaluate objectively, such as mental health services, organizations tend to continue to follow established patterns, even though such patterns may no longer guarantee survival (Oster, 1995).

I believe Medicaid managed care is a significant factor in organizational change for CBHOs. The concept of power in institutionalism supports this assumption. Medicaid is a

major influence in terms of reimbursement and regulatory requirements. CBHOs feel pressure to improve access, cut costs, and establish legitimacy through outcomes measurement, as these constitute the primary focus in managed care. Based on institutional theory, factors other than Medicaid, both internal and external, also inform organizational decisions. I believe that normative and mimetic pressures can exert more influence on CBHOs than the coercive pressures exercised by the Medicaid program. I use institutionalism to develop predictive variables other than Medicaid and to form my second hypothesis. My second hypothesis is that other predictive factors will have a greater influence on the organizational change than Medicaid managed care

Theoretical Location of Hypotheses

I expect all of these theoretical constructs to have an impact on the findings of my research study. I can obtain some insight toward analyzing organizational change behavior from each theory, but each is inadequate alone to fully answer my research questions or accurately predict behavior.

Resource dependency theory espouses that environmental influences on an organization increase based on the organization's reliance on the environment for resources. Thus, I agree that CBHOs may believe that Medicaid managed care threatens their survival due to their reliance on Medicaid for significant resources (Hasenfeld, 1992; Scott, 2003). In addition, resource dependency presumes that organizations actively make changes to adapt to a dynamic environment. Therefore, I believe CBHOs will make organizational changes to react to Medicaid managed care.

In contrast, population ecology states that timing is a significant factor in determining organizational change. There are risks associated with the selection of change strategies, and

organizations are slow to adapt. Thus, CBHOs that are not in a managed care environment will have very little impetus to initiate organizational changes. Therefore, it should also follow that the longer a CBHO operates in the Medicaid managed care environment, the greater the likelihood that they would implement adaptive strategies. This leads to the first hypothesis for my research:

H1: The number of years that a CBHO operates under Medicaid managed care will have a positive impact in relation to the organization's use of survival strategies.

In accordance with institutional theory, I expected to find that organizational changes implemented by CBHOs are not just a matter of regulatory requirements or political necessity, but that other internal factors shape the selection of changes (Cammack, 1992). I used these factors to assist in the development of other predictor variables for my analysis. Normative and mimetic pressures will significantly affect both an organization's decision to implement changes, but also affect its choice of strategies. In fact, I believe that these factors will have a greater influence on organizational change than Medicaid managed care. I would also expect to find that the changes implemented are similar across CBHOs that have been operating successfully in the managed care environment. This forms the basis for my second hypothesis:

H2: Other predictor variables will have a more significant positive impact on the use of survival strategies than the number of years in Medicaid managed care.

Resource dependency theory also presents various components, or strategies, to achieve organizational success in adapting to a changing environment. I use these strategies as the dependent variables for my analysis. In accordance with resource dependency, I use financial results to measure organizational success and to develop my third hypothesis:

H3: The use of survival strategies will have a positive impact on the organization's financial success.

Literature Review Summary

In this chapter, I have described the major entities that define the Medicaid managed care and mental health environments. I have presented a summary of the effect of managed care on CBHOs, the primary providers of Medicaid services to the mentally ill. Last, I have summarized the literature and theoretical constructs that form the basis for my research study and the formation of my hypotheses for analysis.

CHAPTER III

METHODOLOGY

Introduction

The implementation of Medicaid managed care programs for mental health services is a relatively recent phenomenon, expanding into most states within the last 12 years. Existing literature concerning Medicaid managed care focuses on effects either at the system level or at the individual consumer level (Kiesler, 2000; Priebe, 2000; Ridgely, Guard, & Shern, 1999; Wyant, Christianson & Coleman, 1999). However, there is very little comprehensive research on the effects of managed care at the organizational level.

The purpose of this research is to determine what influences Medicaid managed care has had on organizational changes in CBHOs as evidenced by the use of survival strategies, as defined in Chapter Two. Second, I am interested in what other factors have influenced CBHOs to implement survival strategies. Third, my study seeks to determine whether the implementation of survival strategies has had a positive effect on the financial results of CBHOs. Finally, because of my background as a CEO of a CBHOS, I am interested in establishing which particular initiatives CBHOs are implementing.

Research Questions and Hypotheses

My primary research questions for purposes of this study are:

1. Did CBHOs actively use survival strategies and make organizational changes since the implementation of Medicaid managed care?
2. What other factors predict the use of survival strategies by CBHOs?
3. Does the use of survival strategies positively affect the financial results of CBHOs?

- What survival strategies are most common among successful CBHOs since the implementation of Medicaid managed care?

For purposes of this study, I am measuring success by financial performance. My general hypotheses are:

H1: The number of years that a CBHO operates under Medicaid managed care will have a positive impact in relation to the organization's use of survival strategies.

More specifically, in relation to the variables used, I test the following:

H1a: The greater the number of years in Medicaid managed care, the greater the likelihood that the organization's will implement access initiatives.

H1b: The greater the number of years in Medicaid managed care, the greater the likelihood that the organization will diversify revenue.

H1c: The greater the number of years in Medicaid managed care, the greater the likelihood that the organization will implement non-traditional services.

H1d: The greater the number of years in Medicaid managed care, the greater the likelihood that the organization will implementation higher productivity benchmarks.

H1e: The greater the number of years in Medicaid managed care, the greater the likelihood that the organization will decrease unreimbursed services.

H1f: The greater the number of years in Medicaid managed care, the greater the likelihood that the organization will hire licensed and consumer employees.

H1g: The greater the number of years in Medicaid managed care, the greater the likelihood that the organization will decrease traditional employee positions.

H1h: The greater the number of years in Medicaid managed care, the greater the likelihood that the organization will implement alternative therapies.

H1i: The greater the number of years in Medicaid managed care, the greater the likelihood that the organization will implement for-profit enterprise initiatives.

H1j: The greater the number of years in Medicaid managed care, the greater the likelihood that the organization will implement integration strategies.

H1k: The greater the number of years in Medicaid managed care, the greater the likelihood that the organization will implement political strategies.

H1l: The greater the number of years in Medicaid managed care, the greater the likelihood that the organization will implement evidenced based practices.

H1m: The greater the number of years in Medicaid managed care, the greater the likelihood that the organization will implement outcomes measurements.

My second hypothesis is:

H2: The predictor variables will have a more significant positive impact on the use of survival strategies than the number of years in Medicaid managed care.

More specifically, the testable subcategories for this hypothesis are:

H2a: Organizational size will have a more significant impact on the organization's implementation of survival strategies than Medicaid managed care

H2b: Location will have a more significant impact on the organization's implementation of survival strategies than Medicaid managed care

H2c: Organization type will have a more significant impact on the organization's implementation of survival strategies than Medicaid managed care

H2d: Geographic region will have a more significant impact on the organization's implementation of survival strategies than Medicaid managed care

H2e: Employee receptivity to change will have a more significant impact on the organization's implementation of survival strategies than Medicaid managed care

H2f: Employee turnover and length of employment will have a more significant impact on the organization's implementation of survival strategies than Medicaid managed care.

H2g: CEO background and tenure will have a more significant impact on the organization's implementation of survival strategies than Medicaid managed care

My third hypothesis is:

H3: The use of survival strategies will have a positive impact on the organization's financial success.

I will test this hypothesis by using the following sub-hypotheses:

H3a: The greater the use of survival strategies, the higher the gross revenue.

H3b: The greater the use of survival strategies, the higher the change in gross revenue since 1998.

H3c: The greater the use of survival strategies, the higher the net revenue.

H3d: The greater the use of survival strategies, the higher the change in net revenue since 1998.

Research Methodology

In order to test my hypotheses, I used quantitative research methods to determine the differences among CBHOs that have made organizational changes and CBHOs that have resisted change. I surveyed existing CBHOs across the US, whether or not they are in areas with significant Medicaid managed care penetration, regarding organizational changes implemented over the past10 years. I designed the survey to obtain information from CBHOs concerning which survival strategies or organizational changes are most prevalent. The

dependent variables in this study are the survival strategies, or organizational changes, and the independent variable is the number of years in Medicaid managed care.

To ensure that I have defined the independent variable, years in Medicaid managed care, appropriately in the study, I included a question on the survey about the number of years enrolled in Medicaid managed care. In addition, I requested the percentage of gross revenue that are comprised of Medicaid managed care revenue and the managed care method of reimbursement. These questions provide additional information about the penetration of Medicaid managed care in the CBHO. I also mailed the survey to organizations that are not in Medicaid managed care areas for comparative purposes.

I identified the potential existence of variables other than the implementation of Medicaid managed care that may affect organizational change. I believed that factors such as staff resistance to change and other cultural issues might impede the adoption of innovative survival strategies. Questions regarding staff size, unionization, staff turnover and retention, and the background and tenure of the CEO are included to recognize these factors in the study.

Organizational structure and "sense of ownership" may have some impact on an organization's ability to change. Therefore, I have included questions regarding independence, integration, and profit status.

Other studies have indicated that such essential organizational limitations such as size and/or revenue levels, or geographic location (urban versus rural, US geographic region) may have a more direct impact on the center's ability to react to environmental issues (Drolen, 1990; Mordock, 1989). Therefore, these demographic questions are also included in the survey.

The organization's reliance on funding from Medicaid managed care and the number of years in a managed care environment are essential factors in this study to define the independent variable. A table of all survey questions and categories and their relationship to the overall survival strategies and the dependent, independent, and control variables is included in Appendix C.

I have chosen to pursue a design for description to create a basis for understanding the relationship between the implementation of Medicaid managed care and organizational changes in CBHOs. A design for description obtains descriptions of the characteristics of a population at one point in time (Mertens, 2000). As there are no other studies on CBHOs in a managed care environment, I believe that this will provide a snapshot of CBHOs that will assist both with my study and for use in future research.

A cross-sectional survey appears to be the best method for obtaining timely data across all types of CBHOs. Timeliness is an important feature of this study to provide both comparative information about the effect of Medicaid managed care and useful operational information for practical application for the CBHOs. CBHOs operate in a dynamic environment and changes occur rapidly, which will affect the usefulness of my study. Cross-sectional designs have the advantage of examining effects on large groups in a short time (Mertens, 2000). Although a longitudinal study has the advantage of following a population over a period of time, most states implemented managed care over 10 years ago, and without that baseline data, a longitudinal study would add little to my results.

Research Subjects

The CBHOs in my study are the unit of analysis. The identification of a CBHO is largely dependent on the organization's self-reported perception that they are operating as a

CBHO. In general, CBHOs have a significant reliance on government funding, defined as comprising 30% or more of gross revenue. CBHOs are also agencies that provide or have provided outpatient services in the community, particularly core services such as outpatient therapy, psychiatric services, and partial hospitalization.

I used Guidestar, which collects all IRS Form 990s, the nonprofit informational return filed by nonprofit organizations with revenue over $25,000, to identify the initial population. Guidestar uses the National Taxonomy of Exempt Entities (NTEE) to identify subclasses of the nonprofit sector and I have selected those organizations who reported themselves with an NTEE classification of a Community Mental Health Center. CBHOs self-report their classification on the 990s and, as such, it is subject to interpretation. Therefore, I also reviewed the mission and services of the organizations. I further eliminated clearly misclassified organizations, such as consumer drop-in centers that provide no services beyond social support and foundations that financially support CBHOS, but do not provide services. If there was inadequate information to make a clear determination, I included the organization in my population, but included questions in the survey that allowed the respondents to self-identify as misclassified. I then eliminated these recipients from my responses.

After elimination, my population was comprised of 652 organizations across the United States. I did not sample, but surveyed the entire population to ensure an adequate number of responses. I initially received 261 responses for a response rate of 40%. I further eliminated organizations that self-reported that they were misclassified, closed, or no longer operating as a CBHO from the response set and the total population. This resulted in a total response set of 231 organizations. The final response rate is 37%. I reasonably assumed that

among the organizations that did not answer the survey, there were more that did not meet the criteria. Therefore, I believe the response rate is adequate for purposes of this study.

Data Collection

I utilized an original cross-sectional survey to gather my independent and dependent variables. I distributed this survey to the Chief Executive Officer (CEO) of each organization, who self-reported the data for his/her organization.

Based on a review of the literature, there was no survey available to collect the information needed for my study. Therefore, I constructed an original survey instrument using information from the literature and from my practical experience. The survey is included in Appendix A. I designed the questions on the survey to capture the most frequently discussed organizational changes in the field. I abstracted the elements of the questions from both theoretical literature and from organizational literature used by CBHOs (Mordock, 1989, 1996; Bell & Fair, 2005).

The majority of the questions on the survey are multiple-choice questions, with a range of answers. I did this to minimize non-response errors (Mertens, 2005). The respondents to the survey are executive directors or CEOs of CBHOs. From my own experience, this group is not willing to complete long or complicated survey data and multiple-choice questions should be much faster and easier for them. In addition, this group also is not willing to share information that is too specific concerning their organizations as most are private and not required to file the same informational data as publicly traded, for-profit businesses. Providing response choices in the form of ranges enhances the group's comfort level in providing this information. The close-ended format of the questions may not capture every possible strategy among the CBHOs, but I am using this survey to identify

major strategies, not all possible variants. I did allow for write-in answers to most questions about strategies to help determine that I did capture the major strategies.

As this is an original survey, I have tested the instrument for validity and reliability with a sample group (Mertens, 2005). I mailed the survey to 20 CBHOs in Pennsylvania, based on a random sample, and 10 CBHOs, or 50%, returned surveys. I was able to do a follow-up interviews by telephone to ask specific questions about the instrument, including ease of completion, clarity of instructions, and if the questions achieved the desired information to assist in determining face and content validity (Mertens, 2005). I made appropriate changes to the survey instrument based on this information. I also sought expert advice on the survey instrument through my research committee and other industry providers.

This was a blind survey and I separately maintain any identifying information, such as requests by the CBHOs to obtain the results of this study, from the survey results. I mailed a written survey to all identified participants. I also gave the participants the choice to respond to the survey either by mail or on-line by providing a direct link to Qualtrics, the on-line survey software used by the Indiana University of Pennsylvania. Additionally, the National Council for Community Behavioral Healthcare, a provider member association with over 1,700 members, allowed me to post requests and reminders for survey submission on their online provider list serve.

Variables and Definitions

This survey has primarily closed format questions. In an effort to capture all the major strategies employed by organizations, I allowed for additional write-in answers about strategies the organization currently uses. The design of the survey allowed for pre-coded

results that I could input to my SPSS spreadsheet. I collected the write-in answers and then coded them in the same manner to add to the spreadsheet. The survey is included in Appendix A and the table in Appendix B shows the relationship of survey questions to the variables. I define my variables in the following section:

Demographic Information

Organizational Identifier is a unique numerical number sequentially applied to respondents. As this was a blind survey, I randomly assigned the numbers as I entered responses to Qualtrics or SPSS.

Location refers to the self-determined geographic description selected by the organization. The location choices were urban, rural, and mixed urban and rural. I entered each location choice into SPSS using a yes (1) or no (0) dummy variable.

Organizational category is the organization's primary structure, which is not necessarily a legal definition, but rather how the organization defines itself. The choices were independent non-profit, independent for profit, government entity, integrated nonprofit network, or integrated for-profit network. I entered each choice as dummy variable. The responses are mutually exclusive.

Number of employees refers to the average number of paid employees of the organization in the current year. The survey question allowed a selection from consecutive ranges of number of employees, entered as ordinal data.

State/Region is the state in which the organization operates. For the analysis, I combined the states into five traditional regions: Northeast, Midwest, Southeast, Northwest, and West, represented as dummy variables.

CEO tenure refers to the number of years of employment with the organization as a CEO. I entered the ranges of years as ordinal data.

CEO education refers to the primary field of study for the CEO. I combined the varying areas of study into three major categories: business/administration degree, clinical degree, and other degree. I entered the categories into SPSS as dummy variables. Business/administration primarily include degrees in business administration or public health administration. Clinical degrees are primarily social work degrees, but also included counseling, psychology, and psychiatry. The other degree category is a blend of various fields of study, but the major fields are theology and education.

Average turnover rate is the current employee turnover rate for the organization. I calculate turnover rate as the number of employees that terminated employment during the year divided by the average number of total positions at the organization. This ratio represents the organization's ability to retain employees and high turnover may be an indicator of employee dissatisfaction or major changes to employee mix and/or staffing ratios. Turnover information is a series of consecutive ranges, and thereby constitutes an ordinal variable.

Increased turnover is an indication as to whether turnover has increased in the last 10 years. This question was a yes (coded as 1) or no (coded as 0) answer.

Employee tenure (ALOS) refers to employee average length of service and is the average number of years that employees remain with the organization. Low tenure is akin to high turnover and may be an indicator of employee dissatisfaction or major changes to employee mix and/or staffing ratios. Responses are a series of consecutive ranges, thereby constituting an ordinal scale.

Employee receptivity refers to the CEO's opinion of the employees' overall resistance or acceptance of change. I used a Likert scale to gauge the CEO's perception of receptivity with five ratings ranging from very resistant to very receptive.

Employee benchmarks is a yes (coded as 1) or no (coded as 0) response regarding the CEO's perception of whether employees are meeting or exceeding productivity benchmarks established by the organization. Productivity benchmarks are the expectations of the organization regarding the amount of worked time the direct care employee will spend providing billable services.

Employee documentation is a yes (coded as 1) or no (coded as 0) response based on the CEO's perception of whether employees are submitting appropriate documentation to support services on a timely basis.

I consider both employee documentation and employee benchmarks as indications of employee satisfaction, receptivity to change, and ability to meet demands of the organization, all of which may affect the organization's ability to enact change.

Dependent Strategic Variables

Access refers to a financial strategy used to increase consumer volume by eliminating waiting times, reducing no-shows and cancellations for appointments, and improving the consumer's ability to receive services in a timely manner. I presented a selection of various strategies together with the ability to write in additional responses. I developed a summated scale based on the number of access initiatives used by the organization, which constitutes an interval variable.

Productivity is the average percentage of billable service time to total available hours worked for outpatient services. This a financial strategy used to improve the amount of

billable services provided in a given time frame and reduce the number of staff necessary to adequately serve the consumer population. I created an ordinal scale from the range of productivity percentages.

Payor Mix refers to a program resource strategy used to reduce the reliance of the organization on a major payor, such as a government program, by increasing services to other payors. In this study, Payor Mix is an ordinal scale estimated from the average percentage of revenue comprised of non-government payments from commercial insurance companies, private contracts, and donations and grants.

New Services are mental health services that are not part of the traditional core services offered by a CBHO. Such services may or may not be reimbursable under Medicaid managed care, but, nonetheless, represent a role change that differs from traditional services. New Services identified would include psychiatric rehabilitation, peer support services, technology-based treatment, and mobile community outreach services. Substance abuse services were included as it is not traditional for a mental health provider to provide dual mental health/drug & alcohol services. I allowed for write-in answers. I then developed a summated interval scale based on the number of New Services used by the organization.

Decreased services refers to specific traditional core services such as administrative case management and free community education that most Medicaid managed care plans do not reimbursed. Essentially, such programs would be services provided free of charge that may support the mission of the organization but would also add to its unreimbursed costs. I developed a summated interval scale based on the total number of core services decreased.

Increased staff is a range of the average percentage increase in the last10 years for specific positions that allow for support of new services or increased reimbursement. This

primarily consists of licensed clinical positions and consumer or former consumer employees. I developed an ordinal scale for measurement purposes.

Decreased staff is the total number of position types reduced or eliminated in the last 10 years and is summated interval scale. These are traditional positions that are either limited in scope or allowable reimbursement. This would include therapists with bachelor degrees, as opposed to licensed master's level therapists, or registered nurses, as opposed to certified registered nurses or physician's assistants.

Alternative services refers to the total number of non-mental health therapies used to diversify the mix of services, including wellness programs, holistic medicine, and other treatments not covered by government payors. It may also include subcontracts for good or services provided to other direct service providers. It is a summated interval scale.

Enterprise is the total number of for-profit ventures such as property development or rentals, paid training or consulting, and other non-profit operations. As CBHOs are traditionally non-profit entities, this is a role change strategy used to diversify reliance on a limited number of services and/or payors.

Integration refers to the changes in the traditional structure of the organization via mergers or joint ventures with other entities. Integration could potentially affect the size, geographic location, mix of services, or mission of the CBHO. Integration strategies include mergers with another CBHO, a for-profit entity, an integrated network, or ventures with agencies that provide non-traditional but related services such as substance abuse, residential treatment, and physical health services. The total number of integrations comprises a summated interval scale for analysis.

Outcomes is the measurement of the total types of outcomes used. Specific types of outcomes collected include consumer satisfaction surveys, measures of treatment effectiveness such as GAF, and specific outcomes measurement programs. The survey differentiates between accepted outcomes measures and more traditional process measurements such as number of consumers seen. This variable is a summated interval scale.

EBP (evidenced-based practices) refers to the treatment interventions designed to improve desired outcomes. The survey primarily includes practices accepted by the Substance Abuse Mental Health Services Administration (SAMHSA) as opposed to practices that may be unique to a particular organization. This variable is a summated interval scale.

Political is a variable used to measure whether the organization is employing political or marketing strategies as a means to achieving their goals. I created a summated interval scale from the number of initiatives used including direct interaction with government representatives, use of the internet in promoting the organization, and support of political action committees or other allowable lobbying efforts.

Dependent Financial Variables

Gross revenue is the total revenue before expenses and other deductions reported by the organization for the last full fiscal year. I use an ordinal scale of gross revenue ranges to represent the variable.

Gross Revenue Change refers to the increase or decrease, if any, in the organization's reported gross revenue over approximately 10 years. The survey asked for both the current year's gross revenue and 1998 gross revenue. I calculated Change in Gross Revenue from these amounts. The year 1998 was the base year because by 1998, all but three states had implemented some form of Medicaid managed care program (Donohue & Frank, 2000).

Therefore, 1998 represented the best approximation of a ten-year period and the theoretical beginning of Medicaid managed care for most organizations. This variable is an ordinal scale.

Net Revenue refers to total gross revenue minus expenses and other deductions reported by the organization for the last full fiscal year. I use an ordinal scale of net revenue ranges to represent the variable.

Net Revenue Change is the calculated increase or decrease, if any, for the organization's net revenue since 1998. This variable is an ordinal scale.

Independent Variable

My independent variable is Medicaid Managed Care. It is the average number of years the organization has operated in a managed care environment and measured on an ordinal scale as a set of ranges. The responses also included an identifier for organizations that currently do not operate in the managed care environment.

Data Analysis

I designed the survey with closed format questions that yield either nominal or ordinal data. I encoded the responses to each question on the survey to SPSS and analyzed the data using ordinary least squares multiple regression.

I first ran descriptive statistics, such as frequency tables, measures of central tendency, distribution skew and kurtosis, and histograms with normal curves, to review for incorrect or incomplete data and initial problems of fit. I found high rates of skew and kurtosis (higher than the absolute value of 1.0) in the dependent variables: increased staff, decreased staff, EBP, alternative services, enterprise, integration, and political. I subsequently ran bivariate linear regression models with casewise diagnostics and identified

significant outliers. As a result, I transformed these variables using the square root to approximate a normal distribution and eliminate issues with outliers.

I ran bivariate correlations among all variables to begin to identify potential problems with collinearity among my predictor variables. I also ran multivariate linear regression with collinearity diagnostics to obtain the variance inflation factor (VIF) and tolerance for each variable. My VIF for two variables, number of employees and gross revenue, approximated 5.0 and my tolerance approximated .2, which is a strong indication of multicollinearity, or that the correlations among the variables is undesirably strong (Hamilton, 1992). As both variables measure organizational size, I chose number of employees to represent size, and eliminated gross revenue as a predictor variable. I eliminated gross revenue because I also used this variable as a dependent variable in the analysis for Hypothesis 3. In addition, as many of the survival strategies are financial, I would eliminate some chance of spuriousness using a non-financial measure of size.

I ran ordinary least squares multiple regressions for each dependent variable to analyze its relationship to the independent and other predictor variables. As my hypotheses are directional, I used a one-tail test at the .05 level of significance.

Summary

The purpose of my study is to analyze the impact of Medicaid managed care, as well as other predictor variables, on the decision of CBHOs to implement organizational changes, specifically the implementation of survival strategies. In addition, I want to determine if survival strategies lead to a successful financial outcome for CBH Os. In order to analyze these relationships, I have formed the following primary hypotheses:

H1: The number of years that a CBHO operates under Medicaid managed care will have a positive impact in relation to the organization's use of survival strategies.

H2: The predictor variables will have a more significant positive impact on the use of survival strategies than the number of Years in Medicaid managed care.

H3: The use of survival strategies will have a positive impact on the organization's financial success.

I created an original, cross-sectional survey comprised of both closed and open-ended questions to obtain nominal and integral information from the population of CBHOs across the United States and received a 37% response rate. I used SPSS to encode and analyze the data.

I used ordinary least squares multiple regression to analyze the relationship between my independent and dependent variables. I also used descriptive measures, such as frequency distributions, to provide demographic information about the population. I discuss the final analyses and results in the next chapter.

Chapter IV

ANALYSIS AND RESULTS

Introduction

This chapter presents the details of my analysis and the subsequent results for each of my hypotheses. I also present an overview of the demographics of the population, including charts and discussion of the most prevalent survival strategies used by the population. The tables of coefficients in this chapter report significant variables only. The complete tables are included in Appendix E.

Demographics

The final respondents that fit the definition of a CBHO for this study totaled 231. Only two organizations reported that they did not currently provide outpatient therapy, but they did provide other core services such as psychiatric services. As shown in Table 1, most CBHOs are operating as independent, non-profit organizations (83.1%) and 11.3% reported that they operated as part of a nonprofit, integrated network.

The organizations that responded appear to represent the majority of geographic locations across the United States. The 220 respondents to the question represented 42 states and the District of Columbia. There were no surveys from Delaware, Idaho, Kentucky, Louisiana, Maine, Nevada, North Carolina, and North Dakota. The cases represented all of the regions of the United States, but, as Table 1 shows, only 5.9% of the population was from the Southwest. Percentages for the remaining regions are Midwest = 37.7%, Northeast = 23.6%, West = 18.6%, and Southeast = 13,6%. All 231 participants responded to the question about geographic location and responses were nearly equally spread: Urban = 37.2%, Rural = 30.7, and Mixed = 32%.

Table 1

Descriptive Statistics including Mean/Percentage Distribution for Independent Variable, Predictor Variables, and Financial Variables

		Total Respondents	Sum	Mean/Percentage Distribution
CATEGORY	INDEPENDENT NONPROFIT	231	192	83.1%
	INDEPENDENT FOR-PROFIT		4	1.7%
	GOVERNMENT ENTITY		8	3.5%
	NONPROFIT NETWORK		26	11.3%
	FOR-PROFIT NETWORK		1	0.4%
REGION	NORTHEAST	220	52	23.6%
	MIDWEST		83	37.7%
	SOUTHEAST		30	13.6%
	SOUTHWEST		13	5.9%
	WEST		41	18.6%
LOCATION	URBAN	231	86	37.2%
	RURAL		71	30.7%
	MIXED		73	31.6%
CEO'S YEARS IN POSITION		224		12.6
CEO DEGREE	BUSINESS/ADMINISTRATION	230	46	20.1%
	CLINICAL		178	77.4%
	OTHER		58	25.2%
SIZE	NUMBER OF EMPLOYEES	229		100.0
	50 or less		67	29.3%
	51-100		39	17.0%
	101-250		66	28.8%
	251-500		37	16.2%
	Over 500		20	8.7%
AVERAGE LENGTH OF EMPLOYMENT	YEARS	216		9.2
RECEPTIVITY TO CHANGE	YES	224	175	78.1%
	NO		44	19.7%
	NUETRAL		5	2.2%
MEETING BENCHMARKS	YES	221	166	75%
	NO		55	25%
MEETING DOCUMENT REQUIREMENTS	YES	224	209	93.3%
	NO		15	6.7%
MEAN TURNOVER RATE		221		15.5%
TURNOVER INCREASED IN 10 YEARS	YES	222	50	22.5%
	NO		172	77.5%
CURRENT GROSS REVENUES		230		$6.25m
CHANGE IN GROSS REVENUES		226		0.0
CURRENT NET REVENUES		225		$90k
CHANGE IN NET REVENUES		216		0.0
HAS MEDICAID MANAGED CARE	YES	229	172	75.1%
	NO		57	24.9%
YEARS IN MEDICAID MANAGED CARE		229		6.4
PRIMARY MANAGED CARE REIMBURSEMENT	FEE FOR SERVICE	164	122	74.4%
	CAPITATION		26	15.9%
	OTHER		16	9.8%
MEDICAID MANAGED CARE AS A % OF REVENUES		162		33.6

I sent the surveys to the CEOs of the organizations. CEO tenure in the organizations ranged from 1 year to 40 years. As Table 1 shows, the mean tenure was 12.5 years. Not surprisingly, 77.4% of the CEOS have some type of clinical degree. Psychologists comprise the largest group in the population, followed closely by licensed social workers. CEOS with business and/or administrative degrees represent 20.1% of the population. Interestingly, 25.2% of the population has backgrounds in fields other than clinical or business, including education, religion, theology, and law.

As indicated in Table 1, the organizations have employees that range from less than 50 (29%) to over 500 (8.7%). Small to medium organizations tend to be the norm as the category "less than 50" is the largest (29%), followed by 101 to 250 employees (28.8%). The average length of employment is approximately 9.2 years and correspondingly, the mean turnover rate is 15.5%. Most CEOs (77.5%) report that turnover has not increased in the last 10 years. Only sixteen organizations reported that the employees are unionized and only six had unionized in the last ten years. Therefore, I did not include unionization as a variable in the tables or the multivariate analyses because of the small number of responses. In addition, the majority of employees are meeting benchmarks (75%), meeting document requirements (93.3%), and are receptive to change (78.1%), according to the CEOs.

Per Table 1, the mean gross revenue for a CBHO is approximately $6.25 million in the last fiscal year, but the mean net revenue is only $90,000. In fact, over 30% of CBHOs experienced financial losses in the same fiscal year. There was little improvement in financial results noted since 1998, as the mean for both indicates no change.

Most importantly for this study, 24.9% of organizations do not operate in a Medicaid managed care environment. For the rest of the population, table 1 indicates that the mean number of years that the CBHOs have been in managed care is 6.4 years. For the CBHOs that do accept managed care, managed care represents, on average, 33.1% of total revenue. The primary method of managed care reimbursement is fee-for-service (74.4%).

Survival Strategy Descriptives

It is a little difficult to review the reported information for the survival strategies and the underlying initiatives, due to the sheer number of responses and variables. I have included tables of the strategies to better identify the prevalent organizational changes made by CBHOs.

Table 2 is included to show the number of CBHOs that implemented each type of survival strategy. For comparative purposes, I divide the table further to differentiate the responses between CBHOs that are in a Medicaid managed care environment and those that are not.

As Table 2 indicates, the variables access and productivity represent the primary financial strategies for CBHOs. Of the 229 respondents, 214 use access initiatives, or 93.5% of the population. I ran t-tests, which are not shown, on the access initiatives and found no significant difference between the means for CBHOs in a managed care environment and those that are not (p=.788), and over 90% of the population in both categories use at least one access initiative. This is particularly interesting as improved access, together with lower costs, is one of the primary purposes of managed care programs across the states. Clearly, most CBHOs are recognizing a need in this area.

Table 2

Description of the Number and Percentage of CBHOs, with or without Managed Care, using each Survival Strategy

		HAS MEDICAID MANAGED CARE				Total	Total Percentage	PHI
		No	Percent	Yes	Percent			
ACCESS	No	2	3.50%	13	7.60%	15	6.60%	
	Yes	55	96.50%	159	92.40%	214	93.40%	
Total		57		172		229		.171
PRODUCTIVITY	No	22	38.60%	42	24.40%	64	27.90%	
	Yes	35	61.40%	130	75.60%	165	72.10%	
Total		57		172		229		.137
PAYOR MIX	Yes	57	100%	171	100%	228	100%	
Total		57		171		228		.227
NEW SERVICES	No	8	14.00%	17	9.90%	25	11.00%	
	Yes	49	86.00%	154	90.10%	203	89.00%	
Total		57		171		228		.189
DECREASED SERVICES	No	34	60.70%	104	61.50%	138	61.30%	
	Yes	22	39.30%	65	38.50%	87	38.70%	
Total		56		169		225		.150
INCREASED STAFF	No	38	66.70%	96	56.50%	134	59.00%	
	Yes	19	33.30%	74	43.50%	93	41.00%	
Total		57		170		227		.120
DECREASED STAFF	No	50	87.70%	146	85.40%	196	86.00%	
	Yes	7	12.30%	25	14.60%	32	14.00%	
Total		57		171		228		.141
ALTERNATIVE SERVICES	No	40	72.70%	122	71.30%	162	71.70%	
	Yes	15	27.30%	49	28.70%	64	28.30%	
Total		55		171		226		.036
ENTERPRISE	No	29	50.90%	97	56.70%	126	55.30%	
	Yes	28	49.10%	74	43.30%	102	44.70%	
Total		57		171		228		,093
INTEGRATION	No	40	70.20%	104	60.80%	144	63.20%	
	Yes	17	29.80%	67	39.20%	84	36.80%	
Total		57		171		228		.155
EBP	No	17	29.80%	36	21.20%	53	23.30%	
	Yes	40	70.20%	134	78.80%	174	76.70%	
Total		57		170		227		.105
OUTCOMES	No	26	45.60%	64	37.60%	90	39.60%	
	Yes	31	54.40%	106	62.40%	137	60.40%	
Total		57		170		227		.208
POLITICAL	No	48	84.20%	128	75.30%	176	77.50%	
	Yes	9	15.80%	42	24.70%	51	22.50%	
Total		57		170		227		.118

Of the 229 total respondents, 165 CBHOs use productivity, or 72.1% of the population. One hundred thirty CBHOs (75.6%) in managed care environments use productivity benchmarks as opposed to 61.4% of CBHOs that are not in a managed care

environment. The Phi coefficient is .137 ,which reflects a weak bivariate relationship between the managed care environment and productivity.

Program resource strategies include payor mix, changes to service mix, and changes to the staff mix. All CBHOs use some level of payor mix, or diversification of revenue, making this the most popular strategy among the organizations. Over 90% of CBHOs also have implemented new services in the last 10 years, with the percentage of CBHOs not operating in a managed care environment (89%) slightly exceeding those in the managed care environment (86%). New services represent mental health treatments that are not traditional core services. For example, as medication management is a core treatment, implementation of or increases to this service are not in this strategic group. This change is a normal operational decision outside the scope of this study. On the other hand, peer support services would be a new service, as it was largely unknown before the implementation of managed care.

Less than 50% of the population uses the remaining strategies: decreased services (38.5%), increased staff (43.5%), and decreased staff (13.9%). CBHOs appear to be more reluctant to eliminate services or staff levels than they are to add new services to the existing core services. Decreases may be seen as a more significant decision as it affects the organizational mission and purpose. More tenured staff may occupy the employee positions for these services, which affects organizational culture. Therefore, CBHOs may experience both internal and external normative pressure to appear to maintain the status quo.

Role changes include alternative services and enterprise. Few CBHOs experiment with alternative therapies (28.7%). These therapies include holistic therapies such as Reiki

and massage therapy. Such therapies are not widely accepted and reimbursement may be limited.

Enterprise operations (43.3%) are a more popular role change strategy, although it is still limited in its application. Enterprise represents forays into for-profit services in an effort to diversify revenue sources and services. For-profit ventures can be quite daunting unless the organization has a particular level of expertise and business knowledge (Oster, 1995). Frequently, limited business knowledge, lack of resources, and the impact on the organizational mission are barriers to successful for-profit ventures among CBHOs.

Surprisingly, structural strategies are more popular among CBHOs (78.8%) than role changes, like enterprise. Structural changes include some form of integration and a change to the scope and focus of the CBHO (Kiesler, 2000; Mordock, 1989; 1996). Structural changes can also have greater benefits, including financial diversification, increased power as related to size and geographic dispersion, and meeting consumer needs with comprehensive services.

In recent years, government entities and other payors have stressed the need for measurable outcomes in behavioral health services. Consequently, it appears reasonable that 137 out of 227 CBHOs (62.4%) engage in results orientation strategies. In fact, several organizations reported that their states require use of a particular outcomes measurement system. As Table 2 indicates, 62% of CBHOs in a managed care environment use outcomes measures, as opposed to 54% of CBHOs outside of managed care. The Phi coefficient is .21, indicating a moderate relationship between the managed care environment and outcomes measurement.

As expected, CBHOs weakly use Political strategies (24.7%). This is understandable as CBHOs traditionally have not been politically active and many are small to medium

organizations with little political influence. For purposes of this study, political strategies also include internet-based marketing strategies, as these forums can increase public awareness regarding services and/or issues.

From this information, it appears that all financial strategies, some program resource strategies, structural changes, and results orientation receive more focus from CBHOs than the remaining strategies. Although unnecessary for analysis purposes, the particular initiatives within each strategy can also provide an understanding of CBHOs and their strategic choices. I have included descriptive information on the initiatives within each strategy.

Access

Table 3 details the primary initiatives within the variable, access, used by CBHOs. The use of productivity benchmarks are clearly a favorite initiative among CBHOs (72.2%). This initiative establishes clear expectations for staff for providing billable services in relation to administrative services, shown in the next chart entitled Productivity. Higher productivity benchmarks allow organizations to see more consumers with less staff, and result in better access and attendance.

Pay for performance, used by 25.3% of the CBHOs, links to productivity benchmarks. In this initiative, CBHOs go beyond establishing benchmarks and establish pay structures for employees based on the number of billable hours. Both these initiatives place additional stress on staff and may result in briefer sessions with consumers.

Table 3

Number and Percentages of CBHOs using Access Strategies

	N	No	Yes
Productivity Benchmarks	230	64	166
		27.8%	72.2%
Same Day Intakes	229	100	129
		43.7%	56.35%
Charges for No-Shows	229	148	81
		64.6%	35.4%
Pay for Performance	229	171	58
		74.7%	25.3%
Attendance Groups	229	180	48
		79.0%	21.0%
Walk-In Clinic	229	157	71
		69.0%	31.0%
Attendance Incentives	230	213	16
		93.0%	7.0%

The second most frequently used initiative in access is same day intakes (56.3%). This initiative seeks to improve access by assessing and triaging consumers for treatment on the same day that they initially seek such services. Essentially, it eliminates waiting lists and improves no-show rates. The downside to same day intakes is that consumers treated on a first-come, first served basis may experience long waiting times. CBHOs need to be highly organized and efficient to implement this initiative successfully.

Less than 50% of the population uses the remaining initiatives. Charges for no shows (35.4%) are fees imposed for not attending an appointment without adequate notice, generally less than 24 hours. Some states do not permit the imposition of fees for Medicaid patients and fees may be difficult to collect. Attendance groups (21%) educate consumers on the treatment process and the need to take responsibility for regular appointment attendance. No-shows for group treatment are less costly to the organization because the agency can bill for the treatment despite limited attendance. Walk-in clinics (31%), like same day intakes,

allow consumer to "walk in" to the medication clinic without an appointment. It is useful for consumer populations that have difficulty keeping to a schedule. Attendance incentives (7%) are enticements for consumers to attend appointments and usually have nominal value, such as entry into a raffle. I expect the use of this strategy to be minimal as many states consider such enticements as a form of bribery or a way to increase unnecessary care. Therefore, it is important that the awards be small and the process be carefully managed. It is interesting that most CBHOs do not double-book appointments, although industry standards do recommend this strategy for attendance issues (Lloyd, 2006).

Productivity

Table 4 shows the average outpatient productivity benchmark experienced by CBHOs. No benchmarks (13.6%) may reflect either organizations that do not establish benchmarks or organizations that find benchmarks unnecessary due to pay for performance structures or similar initiatives. Twenty-five organizations or 11.4% have benchmarks that are 50% or less, which indicates that direct staff are using 50% or less of worked time seeing consumers for billable services.

Table 4

Frequency Table of Productivity Benchmark Levels

	Frequency	Percent	Cumulative Percent
No Benchmarks	30	13.6%	13.6
40% or Less	8	3.6%	14.0
41 – 50%	17	7.7%	24.9
51 – 60%	83	37.6%	62.4
61 – 70%	63	28.5%	91.0
More Than 70%	20	9.0%	100.0
Total	221	100.0	

The largest number of CBHOs (83 or 37.6%) has productivity ranges between 51% and 60%. Another 83 CBHOs have productivity ranges in excess of 60%. Overall, the ranges

are unexpectedly low given the large number of CBHOs that set benchmarks. Industry recommendations for productivity ratios approximate 70%, and only 9% of CBHOs indicate that they are actually achieving ratios higher than 70% (Lloyd, 2006; Mordock, 1996).

Payor Mix

As shown in Table 5, all of the organizations that responded use payor mix. I have used commercial, EAPs, private contracts, donations/grants, and for-profit initiatives to denote a change in payor mix from more traditional government payments. In the table, I have also included cost-based reimbursement, a mix of county and state funds, and Medicaid managed care revenue purely for informational purposes. It is interesting that only 71 of 212 (33.5%) organizations do not receive cost-based reimbursement, leaving 141 (66.5%) that still do, given the studies that indicate that such compensation provides little incentive for CBHOs to improve access or services.

Table 5

Payor Mix: Frequency of non-Medicaid Payments as a Percentage of Gross Revenue

	None	10% or less	11-30%	31-50%	51-70%	71% and above	Total
Commercial	28	115	64	17	2	2	228
	12.3%	50.4%	28.1%	7.5%	0.9%	0.9%	
EAPs/Private Contracts	129	100	0	0	0	0	229
	56.3%	43.7%	0.0%	0.0%	0.0%	0.0%	
Donations/Grants	20	123	45	19	11	8	226
	8.8%	54.4%	19.9%	8.4%	4.9%	3.5%	
For-Profit	172	44	5	2	0	0	223
	77.1%	19.7%	2.2%	0.9%	0.0%	0.0%	
Cost-Based	71	44	32	18	27	20	212
	33.5%	20.8%	15.1%	8.5%	12.7%	9.4%	
Medicaid Managed Care	62	27	39	33	31	32	224
	27.7%	12.1%	17.4%	14.7%	13.8%	14.3%	

The largest sector of non-government funds is donations and grants, used by 200 of 226 CBHOs, or 91.2%, although typically such funds contribute only a small amount to

overall revenues. Donations and grants are still a traditional source of funds for nonprofit organizations as a whole and represent minimal diversification, despite its inclusion in Payor Mix.

The use of commercial insurance as a financial strategy is much more promising in terms of CBHO revenue diversification. Table 5 shows that two hundred organizations or 87.7% accept commercial insurance. Although commercial insurance represents 10% or less of revenue for most CBHOs, it represents greater than 10% of revenue for 36.5% of the population. This indicates a significant change in traditional payor mix. However, few CBHOs significantly use the remaining two initiatives, EAPs and for-profit initiatives. Overall, although Table 4 indicates some effort to diversify revenue, CBHOs continue to rely largely on government payments.

New Services

As shown in Table 6, new services include a number of initiatives. School-based services (53.3%) are the most popular new service and the only service that 50% or more of CBHOs have added in the last 10 years. Industry literature and many states have highly touted school-based services, as opposed to on-site clinic services, as effective treatment and a cost-saving measure. In addition, its implementation represents a change of venue, more than an introduction of an experimental treatment, making this change easier than most.

Intensive outpatient services (40%) are acute group therapy treatments and used to replace or enhance traditional partial hospitalization services. Intensive outpatient services are less acute than partial hospitalization but more intensive than weekly outpatient therapy. Therefore, this program is largely an extension of traditional services, making it a low risk initiative.

Table 6

Frequency Table of New Services

	N	No	Yes
School-Based Services	229	138	122
		46.7%	53.3%
Intensive Outpatient	230	159	92
		60.0%	40.0%
Consumer-Based Services	229	149	80
		65.1%	34.9%
D&A Services	229	149	80
		65.1%	34.9%
Psychiatric Rehabilitation	229	159	70
		69.4%	30.6%
Assertive Community Treatment	229	160	69
		69.9%	30.1%
Internet-based Treatment	229	177	52
		77.3%	22.7%
Inpatient/Residential	229	179	50
		78.2%	21.8%
Mobile Therapy/Medication	229	188	41
		82.1%	17.9%
Forensics	229	194	35
		84.7%	15.3%
Acute Partial Hospitalization	229	210	19
		91.7%	8.3%

Consumer-based services (34.9%), shown in Table 6, represent services delivered by consumer or former consumer hired as employees, such as peer support. This is a relatively new concept in consumer recovery and reportedly improves consumer's trust and support while obtaining other mental health services. States and MCOs highly recommend this service although it is somewhat difficult to implement. Consumer-provided service causes the CBHO to rethink the role of professional dominancy, which has been typical in health care.

It may seem incongruous to include drug and alcohol services (34.9%) as a "new" service. However, usually different agencies provide mental health and substance abuse

treatment and report to different departments within the state. Rarely are substance abuse issues and mental health problems treated at the same time. The idea of blended treatment has only become acceptable within the last 10 years in most areas. As a result, CBHOs are newly implementing D&A services or integrating with D&A providers.

Assertive community treatment (ACT) is a well-established, evidence-based practice and is a key component of community services in light of reduced inpatient stays. However, ACT can be costly to implement and maintain, which may account for low use across CBHOs (30.1%).

In Table 6, fewer than 30% of organizations have implemented the remaining initiatives in the past 10 years. Given the shortage of psychiatrists, transportation issues in rural communities, and the need to expand the consumer base, some CBHOs (22.7%) have chosen to use internet services. However, the technology is relatively recent and not all insurers reimburse for this service, which limits its use. In managed care, MCOs generally reduce inpatient and residential services first, both in terms of length of stay and rates. Mobile services have high costs, particularly in rural areas, primarily due to the expense of travel. Most Medicaid beneficiaries lose their insurance coverage during incarceration, so forensic services must be cost reimbursed. Not all local authorities are willing to reimburse these services. Acute partial hospitalization is a relatively new concept to combat reduced lengths of stay in traditional inpatient stays and, generally, reimbursement is poor. Given the drawback of each of these services, it is not surprising that they are not popular among CBHOs.

Decreased Services

As shown in Table 7, most organizations do not use decreased services as a strategy. A reduction in free community education services, a core service for CBHOs, is the most used organizational initiative represented here at only 27.4%. CBHOs may have a natural reticence to decrease services that are core to the organization's mission, despite the cost of maintaining these services. CBHOs may be concerned about the perception of the staff and the community at large if they noticeably reduce these services. Mordock (1989) indicates that most nonprofit organizations will revise procedures and improve efficiency before considering cutbacks.

Table 7

Frequency Table of Traditional Services Decreased

	N	No	Yes
Community Education	226	164	62
		72.6%	27.4%
Administrative Case management	226	190	36
		84.1%	15.9%
Charity Care	226	202	24
		89.4%	10.6%
Nursing	226	220	6
		97.3%	2.7%

Increased Staff

Previously, Table 1 showed that only 41% of CBHOs used increased staff initiatives as a survival strategy. However, such changes can be justified in connection with the use of other strategies. In Table 6, consumer based services were increased by 34.9% of the CBHOs responding and in Table 8, 210 CBHOs (93.3%) have significantly increased employed consumers. Medicare and commercial plans require licensed staff to provide services, unlike most Medicaid programs. Table 5 shows that 87.7% of CBHOs have some level of

commercial revenue. Consequently, as shown in Table 8, most CBHOs increased licensed social worker (81.4%) and counselor (90.2%) positions.

Also, as shown in Table 8, only 2.7% of CBHOs decreased nursing services, but 51.1% have increased positions for certified registered nurse practitioners (CRNPs), physician's assistants (PAs), and advanced practice registered nurses (APRNs) to provide such services (see Table 8). These positions have a broader scope of permissible responsibilities and provide a broader range of billable services. In fact, as Table 8 reveals, less than 50% of the CBHOs increased MD and psychologist positions. These practitioners tend to demand high salaries and the need for doctors exceeds supply in most areas across the nation. Thus, CBHOs fill this need with other licensed staff such as CRNPs.

Table 8

Frequency of Increased Licensed and Consumer Positions

	N	No	Yes
LSW	215	40	175
		18.6%	81.4%
Licensed Counselor	225	22	203
		9.8%	90.2%
CRNP/PA/APRN	225	110	115
		48.9%	51.1%
MD	228	127	101
		55.7%	44.3%
Psychologist	227	137	90
		60.4%	39.6%
Employed Consumers	225	15	210
		6.7%	93.3%

Decreased Staff

Like decreased services, the majority of CBHOs do not utilize decreases in costly staff positions as a strategy (see Table 9). I believe that the reasons are also similar. It may be difficult to reduce traditional staff positions without affecting the organizational culture despite the limited reimbursement such positions can produce.

Table 9

Frequency Table of Decreased Employed Positions

	N	No	Yes
Bachelor Level Therapist	226	172	54
		76.1%	23.9%
RN/LPN	226	176	50
		77.9%	22.1%
Other Unlicensed Staff	230	218	12
		94.8%	5.2%

Alternative Services

As shown in Table 10, the majority of CBHOs do not use alternative services. There is generally poor reimbursement for such services and they do not align well with traditional services and/or are experimental in nature.

Table 10

Frequency Table for Alternative Mental Health Services

	N	No	Yes
Holistic Services	227	181	46
		79.7%	20.3%
Subcontracted Services	227	190	37
		83.7%	16.3%

Enterprise

As shown in Table 11, approximately 43% of the CBHOs use enterprise initiatives, or for-profit ventures. Consultation services are the most widely used of the initiatives (30.3%). This particular venture may be the easiest and least risky venture as it primarily uses existing employee resources. It may also have the least impact on the overall mission, as organizations would consult on their current areas of expertise, be it operational, such as improving access, or clinical, such as EBPs.

There is little use of property rentals, leased services and staff, or property development. These ventures differ significantly from the missions of most CBHOs and require unique areas of expertise that is uncommon in CBHOs.

Other non-mental health services include a wide variety of for-profit ventures. Individually, less than 10 organizations use each type of venture. These services would include thrift shops, medical services, home health services, and transportation.

Table 11

Frequency Table of For-Profit Enterprises

	N	No	Yes
Consultation Services	228	159	69
		69.7%	30.3%
Equipment/Property Rental	228	204	24
		89.5%	10.5%
Leases Services/Staff	228	205	23
		89.9%	10.1%
Property Development	230	212	18
		92.2%	7.8%
Other Non-Mental Health	230	196	34
		85.2%	14.8%

Integration

Integration, particularly between mental health and physical health providers, has been a topic in the behavioral health industry since the beginning of Medicaid managed care. Some government entities consider integration as a better way to coordinate care as well as means for small CBHO organizations to expand services and increase capital. For example, the Patient Protection and Affordable Care Act calls for a Medicaid Medical Home pilot in 2011 (Mauer, 2010). This provision is to establish an integrated health care home for physical and mental health services, as well as other specialties, for consumers.

Despite this pressure, and the fact that over 47% of CBHO respondents already use some form of integration strategy (see Table 12), there is no individual initiative that is popular among the majority of CBHOs. Integration can have a significant impact on the continued existence of a traditional, independent CBHO. Such ventures may result in a loss of control, a change in mission, and an unequal distribution of resources. Therefore, it is not surprising that CBHOs would be slow to implement this strategy in a meaningful way.

Table 12

Frequency Table of Integration Strategies

	N	No	Yes
Co-Location with Non-MH Provider	228	195	33
		85.5%	14.5%
Physical Health	228	208	20
		91.2%	8.8%
Other CBHO	230	212	18
		92.2%	7.8%
For Profit	228	214	14
		93.9%	6.1%
Government	230	217	13
		94.3%	5.7%
Other	230	223	11
		95.2%	4.8%

As shown in Table 12, the primary means of "integration" is co-location of services with various non-mental health providers (14.5%). This type of integration involves occupying the same physical space, and may not necessary indicate better coordination of care. The agencies involved in collocation maintain their separate identities and, potentially, separate consumers.

Of all entities, CBHOs do integrate primarily with physical health providers, but this is true for only 8.8% of the population, or 20 CBHOs. Despite external pressures, use of this strategy is still not widespread. There are many possible reasons for this, including loss of separate identity and control, non-alignment of missions, and other issues that affect the ability of separate organizations to work well as one unit.

The next largest integration model is among CBHOs (7.8%), which indicates that the organizations already have similar missions and competencies. However, few CBHOs engage in the remaining integration strategies, such as for-profit integration.

Results Orientation

Results orientation strategies include both outcomes measurement and the implementation of evidenced-based practices (EBPs).

Outcomes Measures

As shown in Table 13, the majority of CBHOs (87.3%) use a consumer satisfaction survey to measure outcomes. Although there is disagreement about the value of subjective assessments, recent studies support the predictive validity of consumer's assessments of outcomes (McCabe & Priebe, 2002).

Measurement of consumer-driven goals (2.6%) fall into the same category and are applied based on a measurement instrument or via consumer perceptions. Such indicators

have the benefit of directly involving the consumer in their own recovery. The downside is that they are generally subjective survey questions, goals are inconsistent across consumers and organizations, and may not comparable across organizations.

Table 13

Frequency Table of Outcomes Measurements

	N	No	Yes
Consumer Surveys	228	29	199
		12.7%	87.3%
NOMS/State Required Measures	228	202	26
		88.6%	11.4%
Monitors GAF	228	203	25
		89.0%	11.0%
Periodic Testing	228	212	16
		93.0%	7.0%
Consumer-Driven Goals	228	222	6
		97.4%	2.6%
Internal Processes/Compliance	228	194	34
		85.1%	14.9%

The preferred approach to change analysis is pre/post measurement (Lyons, 1997; McCabe & Priebe, 2002). With the use of standardized measurement tools, such as the Global Assessment of Functioning (GAF), the provider assesses the client upon admission, at intervals throughout the treatment, and upon completion of services. The National Outcomes Measurement System (NOMS), promoted by SAMHSA, and state-required measurements, based on NOMS, are pre-post measurement systems as is GAF and other periodic testing. Unfortunately, Table 13 indicates that only 29.4% of the population uses such these recommended testing measures, although they may use other measures.

The last item, internal processes and consumer compliance, are process measurements such as number of billable services and consumer attendance. These are measures of efficiency, not efficacy. They were not included in the overall scale of outcomes for my analysis. They are included on this chart as indications of the percentage of organizations that may still not distinguish between processes and outcomes, although they may use other measures also.

EBPs

As shown in Table 14, EBPs encompass a variety of treatment approaches, some that are included on SAMHSA's web site and some that are not included or not approved. There is no overwhelming use of one approach over another, nor should there be. EBPs are empirically based treatment approaches that appear to be effective for certain diagnoses. The primary ENTs noted by CBHOs in Table 14 are CBT, or cognitive behavioral therapy used for various mood and personality behaviors and psychotic disorders, ACT (Assertive Community Treatment) that is used for individuals with severe functional issues, and DBT (dialectical behavior therapy), which is used to treat borderline personality disorders. Other practices listed in Table 14 include supported employment, which assists in vocational training and support, IDDT (integrated dual disorder treatment for individuals that have both mental illness and substance abuse issues, IMR (illness management and recovery), which assists individuals to manage their own illness, and MI (motivational interviewing), which elicits behavior change, particularly for substance abuse. The remainder of the practices are a combination of treatments that may or may not qualify as evidenced based practices, each of which few CBHOs (5 or less) use.

CBHOs should select EBPs based on the consumer population to be treated. One downside to EBPs is that there is little published evidence of efficacy outside of the controlled research environment. There is little practical evidence that EBPs work as expected in a "real world" practice. Another problem is that providers must receive adequate training and that processes be slowly implemented and tested. However, a few states are requiring implementation in short periods, and basing reimbursement on their use (Jarvis, 2006).

Table 14

Frequency Table of Evidenced Based Practices

	N	EBP Used	%
CBT		47	20.6%
ACT Outcomes		34	14.9%
DBT		30	13.2%
Supported Employment		26	11.4%
IDDT		17	7.5%
IMR		13	5.7%
MI		13	5.7%
Other SAMHSA EBP		21	9.2%
Other EBP		46	20.2%
N	228		

Political Strategy

As noted, CBHOs rarely use political and marketing strategies to their full advantage. As shown in Table 15, the most frequently identified marketing tool used is having a web site and only 21.1% of the CBHOs reported having one, while only 22.8% used the internet at all. Given the widespread influence of the internet, this is a surprising result. Only 15.4% of the CBHOs reported having regular interaction with their government representatives. A dismal 5.3% supported Political Action Committees that support the CBHOs direct interests with lawmakers. Despite the pressures to reduce Medicaid and Medicare budgets as well as the

impact of new healthcare reforms, most CBHOs are still unlikely to directly influence lawmakers or represent behavioral health interests in the public domain. This reticence could have a long-term impact on the future survival of CBHOs.

Table 15

Frequency Table of Political and Web-Based Strategies

	N	No	Yes
Regular Interaction with Government Representatives	228	193	35
		84.6%	15.4%
Lobbying	228	211	17
		92.5%	7.5%
Political Action Committees	228	216	12
		94.7%	5.3%
Web Site/Podcasts	228	176	52
		77.2%	22.8%

Summary

This section has provided a current snapshot of CBHOs and their reaction to the environment. These descriptions identify the primary characteristics of the population and provide information about organizational strategies. A more detailed analysis is necessary to fully answer my research questions and test my hypotheses. It is not possible to identify the primary predictors of organizational change or the success rates of the survival strategies from descriptive information alone. The next sections will address these issues through multivariate statistical analysis.

Analysis of Survival Strategies

This section includes summaries of the results of the multivariate statistical analyses, including summaries of the regression models and corresponding coefficient tables. I ran a series of hierarchical ordinary least squares regressions on the dependent survival strategy variables. I entered the predictor variables first in model 1, shown in the model summary for

each dependent variable, followed by forced entry of years in Medicaid managed care, as summarized in model 2, for each dependent variable. I examine the changes in R-square in model 1 to assess whether years in managed care significantly increases the explained variance in each of the dependent variables beyond the other predictors in model 1.

I additionally include a summary of the significant predictors for each dependent variable, which indicates the unstandardized and standardized beta, the significance level (p-value), and the VIF (variable inflation factor). The unstandardized beta (b) represents the slope of the regression equation, and I use it in my analyses to indicate the extent to which the dependent variable changes given a change in one unit of the predictor variable. However, as many of my variables are in ranges, it may be difficult to interpret the exact size of the change for specific variables based on the unstandardized coefficient. Therefore, it is important to review the standardized coefficient (Beta or B), which eliminates the issue of scale so that all coefficients are comparable. I use the standardized coefficient to evaluate the strength of the relationship between the dependent variable and the predictor variables. The VIF is a representation of the impact of collinearity among the variables in the regression equation. The VIF is always greater than or equal to 1.0, and the higher the VIF, the more likely that multi-collinearity is affecting the results. As all of the VIFs for the variables in the subsequent tables are below 2.0, multi-collinearity does not appear to be a significant problem in my analyses.

Financial Strategies

The purpose of financial strategies is to increase revenue, decrease costs, and improve the overall financial viability of the organization. In some sense, program resource strategies, role changes, and even structural changes are also “financial” as the primary use of these

strategies is also to increase funding. For purposes of the study, I define financial strategies as those changes that specifically focus on program efficiency and cost containment. These strategies use existing resources and services, but strive to increase the efficiency of use. I used two dependent variables to represent financial strategies: access and productivity.

Access

The dependent variable access is a type of financial strategy. It represents those initiatives that reduce waiting lists and waiting times, reduce no shows, and increase billable time. To represent this variable, I developed a scale of the total number of initiatives for each organization.

In Table 16, model 1, which includes all predictor variables but years in Medicaid managed care, the R-square explains 21.9% of the variance in the dependent variable, access. When I force years in Medicaid managed care in model 2, this independent variable only explains an additional 2.8% of the variance in the dependent variable. Therefore, the difference between the R-square and the adjusted R-square may be caused by measurement error or be a factor of the large number of predictor variables in the model. Both models 1 and 2 are significant as $p < .05$ in both cases.

Table 16-*Access Model Summary*

Model	R	R Square	Adj. R Square	Std error of the estimate	F	sig
1	.468	.219	.123	1.317	2.295	.002
2	.497	.247	.150	1.297	2.544	.001

In reviewing the coefficients in Table 17 for years in Medicaid managed care, the unstandardized regression coefficient b = -.13. In other words, for each ordinal change in the year in Medicaid managed care, Access decreases by .13 initiatives. In addition, the

standardized regression coefficient (Beta or B) is .19. These results indicate a weak, but statistically significant, relationship between the years in Medicaid manage care and access. However, I ran the regression assuming a one-tail test with a p-value of .05. Therefore, the relationship between years in Medicaid managed care and access runs in a contradictory direction and does not support my hypothesis.

Table 17-*Significant Variables from Access Coefficient Table*

Model		Unstandardized Coefficients	Standardized Coefficients	Sig.	Collinearity Statistics
		b	Beta		VIF
2	(Constant)	1.690		,008	
	CEO Tenure	.019	.128	0.0385	1.123
	CEO Business Degree	.476	.138	0.0315	1.178
	CEO Other Degree	-.122	-.038	0.2955	1.049
	Increase in Turnover	.597	.184	.007	1.195
	Number of Employees	.396	.363	.000	1.314
	Years in Medicaid Managed Care	-.133	-.188	.007	1.254

As shown in Table 17, the predictor variable size, as measured by the number of employees, is significant. The standardized regression coefficient is B = .36, indicating a moderately strong relationship and, therefore, the strongest predictor of access. The unstandardized coefficient (b=.40) indicates that an increase in the range of employees, which is approximately 50 additional employees per range, would result in a .40 increase in access. There is no obvious reason for this relationship. However, an organization may feel the need for more operational controls with a larger employee base, or the larger number of employees may allow the organization to implement more changes in practice.

The change in turnover rates in the past 10 years also indicates a weak relationship to access (B =. 18) indicates a weak, positive relationship between the variables. Turnover may

indicate fewer personnel, which would increase the need for access initiatives, which tends to allocate personnel more efficiently. It may also mean that entrenched employees have left the organization, allowing the CBHO to pursue new change strategies.

Both CEO tenure and CEO Business Degree indicate a minor positive relationship to access. CEO tenure has the least effect (B=.13), and CEO business degree is weak at Beta = .14. However, as access is largely a financial strategy that also focuses on efficiency, it is not surprising that this indicates that CEOs with business degrees would increase access by more than a CEO with a clinical degree. CEO with other degrees is not significant and is included for comparative purposes only.

Productivity

The average outpatient productivity percentage is average billable hours divided by the total available worked hours for an organization. The respondents selected their productivity percentages from a range of percentages. Access also includes a variable for the use of benchmarks, or lack thereof. However, this model considers the effect of the independent variable on the actual productivity percentage achieved.

In Table 18, model 1 of the regression analysis in Table 17 indicates that the predictor variables, other than years in Medicaid managed care, explain 30.8% of the variation in the productivity, which I consider a moderate predictive model. The addition of years in Medicaid managed care adds almost nothing to the model (R-square change is .001). Both models indicate significant overall at $p<.05$.

Table 18-*Productivity Model Summary*

Model	R	R-square	Adj. R-square	Std error of the estimate	F	sig
1	.555	.308	.222	1.534	3.569	.001
2	.556	.309	.218	1.538	3.389	.001

As shown in Table 19, the most important predictor of productivity is number of employees (B=.35), followed by rural location (B =.19), and CEO tenure (B= .14) and increase in turnover (B=.14).

Table 19-*Significant Variables from Productivity Coefficient Table*

Model		Unstandardized Coefficients	Standardized Coefficients	Sig.	Collinearity Statistics
		b	Beta		VIF
2	(Constant)	2.760		.001	
	Urban Location	.169	.048	0.284	1.592
	Rural Location	.722	.194	0.01	1.581
	Independent For-profit	-2.302	-.169	0.0085	1.132
	Government Entity	.290	.027	0.346	1.098
	Integrated Nonprofit Network	-.079	-.015	0.4165	1.183
	Integrated For-profit Network	-1.602	-.068	0.163	1.112
	Northeast	.164	.041	0.3045	1.441
	Southeast	-.795	-.144	0.0275	1.278
	Southwest	.071	.009	0.4515	1.239
	West	-.293	-.064	0.2025	1.369
	CEO Tenure	.025	.136	.028	1.150
	Increase in Turnover	.579	.144	.025	1.222
	Number of Employees	.475	.353	.000	1.359
	Years in Medicaid Managed Care	-.026	-.030	.343	1.259

For each ordinal increase in the employee range, the productivity range should increase by .48. The employee impact is logical, as each additional direct service employee would naturally produce more billable hours for the organization. Hiring indirect employees, such as administrative staff, and other indirect hours offset this effect.

Organizations that are in a rural location have a .72 (b =.72) greater impact on the increase in productivity percentages than organizations in a mixed location and a .55 (b=.72 minus b= .17) greater positive effect on productivity than urban organizations. Rural locations have both smaller pools for potential employees and fewer payor sources. It is

important for such CBHOs to utilize staff fully to meet consumer demand and, essentially, do more with less.

CEO tenure has a weak minor positive relationship (b=.03) to productivity. However, B=.14 and indicates a weak, although statistically significant relationship between CEO tenure and productivity. I have no particular reason for this relationship, except that CEOs with longer tenure may have experience to define appropriate productivity expectations for staff.

An increase in turnover rate in the last 10 years increases the productivity percentage range by .58. As each percentage range represents approximately 10 percentage points, a .58 increase represents an increase of approximately 5% to 6%. The termination of less productive employees in favor of more productive employees would result in a positive relationship between increase in turnover and productivity.

An independent, for-profit organization and the Southwest region indicate a negative, but statistically significant relationship to productivity (B=-.17 and B=,-.14). However, this analysis is a one-tail test at p = .05 for a positive relationship, and does not test for effects in the opposite direction.

My primary independent variable, years in Medicaid managed care, is not significant (p=.685) and does not explain significantly more of the variance beyond the other predictor variables.

Program Resource Changes

Program resource changes seek to change the mix of resources used by the CBHO. By changing the resource mix, the organization has less reliance on one type of service or one major payor. In addition, a change in staff mix often accompanies changes in other

resources, as some payors require higher levels of staff education and licensing. For purposes of this analysis, I include changes in payor mix, new mental health services, decreased core services, and increases or decreases to specific staff levels to measure program resource strategies.

Payor Mix

Payor mix represents the ability of the CBHO to develop multiple funding sources to diversify revenue. It reduces the reliance on one payor and the related impact that payor may have on the organization. For this study, I was particularly interested in the percentage of gross revenue received from non-government payors: commercial insurance, private contracts such as corporate-sponsored employee assistance programs, and, more traditionally, grants and donations. I created a scale of the total mix of alternate payors for each organization.

I first ran bivariate linear regression on the model with casewise diagnostics and identified one significant outlier case (outlier greater than three standard deviations). I reviewed the specific case and determined that the revenue percentages given for all payors by the CBHO exceeded 100% of gross revenue. I traced the case to the original survey and determined that this was a response error, not a keying error. Therefore, I believe it is appropriate to remove the case from this analysis. I ran the regression model again, excluding the case, and found no additional errors or outliers.

In Table 20 and 21, the model is significant (p =.004) and the explained variance for model 1 (R-square = .21) reveals a modest model. My primary independent variable of interest, years in Medicaid managed care, only explains an additional .4% of the variance in

payor mix, per Model 2. A review of the unstandardized regression coefficient in Table 20 for years in Medicaid managed care is not statistically significant (b=.05; p=.36).

Table 20- *Payor Mix Model Summary*

Model	R	R-square	Adj. R-square	Std error of the estimate	F	sig
1	.461	.213	.116	1.387	2.201	.004
2	.466	.217	.115	1.388	2.135	.004

In Table 21, the predictor variable that does show significance at the .05 level and positively affects payor mix is the independent for-profit organization (b=2.15). This is understandable, as a for-profit should have significant alternative payor sources by its very nature. An independent non-profit organization will have 2.15 greater alternative payor sources than will an independent non-profit organization. Independent for-profit organization is also the only important predictor of payor mix (B = .185).

Table 21- *Significant Variables from Payor Mix Coefficient Table*

Model		Unstandardized Coefficients	Standardized Coefficients	Sig.	Collinearity Statistics
		b	Beta		VIF
2	(Constant)	8.067		.000	
	Urban Location	-.280	-.093	0.1425	1.547
	Rural Location	-.562	-.178	0.021	1.550
	Independent For-profit	2.152	.185	0.0065	1.122
	Government Entity	-1.083	-.120	0.051	1.098
	Integrated Nonprofit Network	-.310	-.070	0.178	1.174
	Integrated For-profit Network	-2.431	-.121	0.049	1.099
	Number of Employees	-.247	-.214	.004	1.314
	Years in Medicaid Managed Care	.053	.072	.179	1.252

Other predictor variables that indicate a statistically significant negative impact on payor mix are rural location (B=-.18), integrated for-profit network (B=-.12) and number of employees (B=-.21). However, this is a one-tail test used to predict positive relationships

between the independent and dependent variables, and does not test relationships in the opposite direction.

Overall, all organizations in the population use some form of revenue diversification strategy, albeit at low levels. The predictor variables appear to have minimal effect on the use of this initiative. This may mean that most CBHOs do not consider this as an active strategy or that my method for identifying this strategy is erroneous. Mimicry may affect the CBHO's decision to use a payor mix strategy, and I did not define mimicry well as a factor in this analysis. The mix for most CBHOs may also not represent an actual change, as I used current revenue mix and did not include time as a factor on the survey question.

New Services

New services represent mental health services popularized since the implementation of Medicaid managed care and that usually differ significantly from traditional, core services. I also asked only for services that the CBHO implemented in the last 10 years to differentiate them from traditional services. Eleven major services emerged from the survey. The primary services included in the scale are outreach services such as mobile therapy or assertive community treatment (ACT), consumer-focused services such as peer support or psychiatric rehabilitation, internet-based services, and other off-site programs such as school-based services

In Table 22, both models are significant (p=.001) and model 1 has an R-square of 30.2%, which I consider to be a moderately strong predictor model. Model 2 only explains an additional 1.3% beyond Model 1 with the addition of years in Medicaid managed care.

Table 22-*New Services Model Summary*

Model	R	R2	Adj. R2	Std error of the estimate	F	sig
1	.615	.378	.302	2.073	4.978	.001
2	.625	.391	.312	2.057	4.978	.001

In Table 23, years in Medicaid managed care is significant in the table of coefficients using a one-tail test, but has a negative relationship to new services (b=-.16), which is contrary to my hypothesis. The relationship is weak (B=-.13), however, limited funding or a lack of funding by Medicaid managed care for some of these services may explain the direction of the relationship.

Table 23- *Significant Variables from New Services Coefficient Table*

Model		Unstandardized Coefficients	Standardized Coefficients	Sig.	Collinearity Statistics
		b	Beta		VIF
2	(Constant)	.064		.477	
	Urban Location	.200	.039	0.303	1.552
	Rural Location	.874	.165	0.016	1.544
	Independent For-profit	.391	.020	0.379	1.122
	Government Entity	-.740	-.049	0.225	1.098
	Integrated Nonprofit Network	1.068	.142	0.0165	1.173
	Integrated For-profit Network	1.694	.050	0.2175	1.099
	Northeast	1.170	.204	0.003	1.423
	Southeast	.877	.113	0.0495	1.231
	Southwest	2.529	.220	0.001	1.236
	West	1.986	.304	.000	1.363
	Number of Employees	1.027	.534	.000	1.314
	Years in Medicaid Managed Care	-.160	-.128	.032	1.254

Number of employees is the most important predictor of new services as B=.534, indicating a strong association. This relationship appears reasonable as CBHOs with a greater employee resources would be in a better position to implement new services as opposed to an

organization that had difficulty hiring appropriate levels of staff. Likewise, CBHOs implementing new services will require additional employees.

Table 23 also shows that the Northeast (B=.20), Southeast (B=.11), Southwest (B=.22), and West (B=.30) regions also are statistically significant predictors of new services. CBHOs located in the Northeast would result in an increase in new services by 1.2 services more than a CBHO in the Midwest (b=1.2). CBHOs in the West will increase the units of new services by an additional .8 services (b=2.0 minus b=1.2) in comparison to the Northeast, and Southwestern CBHOs would account for an additional 2.5 units in comparison with the West (b=2.53). It is difficult to account for all these relationships but the largest impact is the Southwest region, which includes Arizona, New Mexico, Texas, and Oklahoma. The geography in many of these states creates barriers to access and requires a unique approach to service delivery. Arizona, for example, was one of the first states to utilize telepsychiatry and teletherapy to reach distant consumers.

Other variables of significance include rural location (B =.17; b =.87). As consumers may have difficulty accessing services in rural locations, it is necessary for CBHOs to look for alternatives for services, especially for mobile and off-site services.

Integrated nonprofit networks also have a positive, strong impact on new services (b=1.07) in comparison to nonprofit, independent CBHOs. An integrated network would have a greater scope in services and potentially greater resources to implement new services.

Decreased Services

Decreased services focus on the reduction of traditional, core services, specifically those that are poorly reimbursed or unreimbursed in a managed care environment. These services can be relatively costly for CBHOs struggling with limited funding, but align with

the original organizational mission. The survey indicates few decreased services in the last 10 years. The scale for decreased services is limited to community education programs, administrative case management, nursing services, and other charity care services.

As shown in Table 24, the explained variance for both models indicate is 22%. This indicates that years in Medicaid managed care does not significantly improve the prediction of decreased services. In fact, as shown in Table 25, the unstandardized (b=-.003) and the standardized (B=-.009) regression coefficient are both near zero.

Table 24-*Decreased Services Model Summary*

Model	R	R-square	Adj. R-square	Std error of the estimate	F	sig
1	.469	.220	.124	.762	2.307	.002
2	.469	.220	.119	.761	2.184	.003

As shown in Table 25, the strongest predictors of ALOS (B=.23) and integrated for-profit network (B=.21). Employee ALOS has a minor, positive relationship (b =.18) to Decreased Services. Increases in employee tenure predict .18 more decreased services. I expected that CBHOs with a more entrenched staff would feel internal cultural pressure to retain core services.

An integrated, for-profit network would predict 2.35 more decreased services in relation to an independent, nonprofit network, controlling for other factors in the model. It is reasonable that an integrated, for-profit network would be more willing to make necessary decreases in favor of increased profits.

The Northeast shows a minor negative standardized coefficient (B-=.14) and receptivity to change shows a moderate standardized regression coefficient (B=-.22). However, this result is in the opposite direction of testing and is not considere4d in this study.

Table 25 – *Significant Variables from Decreased Services Coefficient Table*

Model		Unstandardized Coefficients	Standardized Coefficients	Sig.	Collinearity Statistics
		b	Beta		VIF
2	(Constant)	.327		.210	
	Independent For-profit	-.517	-.081	0.1365	1.122
	Government Entity	-.348	-.070	0.169	1.098
	Integrated Nonprofit Network	.069	.028	0.354	1.173
	Integrated For-profit Network	2.352	.213	0.002	1.099
	Northeast	-.258	-.138	0.049	1.423
	Southeast	.038	.015	0.4235	1.231
	Southwest	-.350	-.093	0.1145	1.236
	West	-.334	-.156	0.0275	1.363
	ALOS	.182	.225	.003	1.297
	Receptivity to Change	-.146	-.224	.001	1.107
	Years in Medicaid managed care	-.003	-.009	.457	1.254

Increased Staff

The dependent variable, increased staff, reflects significant additions of specific employee types in the last 10 years. In particular, the addition of licensed staff, such as licensed social workers and psychologists, and the hiring of consumers as employees are important to this study. Increases in these staff levels may actually increase costs due to higher salary levels of licensed personnel, but increases may be necessary to implement new services, attract commercial contracts, and gain legitimacy as a professional organization.

In Table 26, model 1 shows that the predictor variables (R=.25) account for 25% of the variance in the dependent variable increased staff. Model 2, which adds the independent variable, years in Medicaid managed care, adds only .5% to the explanation. A review of the coefficients in Table 27 supports the conclusion that the dependent variable is not significant in relation to the independent variable (b =.03; p =.15).

Table 26-*Increased Staff Model Summary*

Model	R	R-square	Adj. R-square	Std error of the estimate	F	sig
1	.497	.247	.155	.606	2.684	.001
2	.502	.252	.155	.605	2.611	.001

Table 27- *Significant Variables from Increased Staff Coefficient Table*

Model		Unstandardized Coefficients	Standardized Coefficients	Sig.	Collinearity Statistics
		b	Beta		VIF
2	(Constant)	-.568		.029	
	CEO Tenure	.008	.121	.047	1.123
	CEO Other Degree	.504	.332	.000	1.049
	Turnover Rate	.165	.244	.002	1.504
	Receptivity to Change	.067	.127	.038	1.107
	Years in Medicaid Managed Care	.027	.080	.146	1.254

Table 27 shows four other predictor variables do show statistical significance in relation to increased staff. An examination of the standardized regression coefficients shows that CEO has other degree (B =.33) is the strongest predictor of increased staff, followed by turnover rate (B=.24), receptivity to change (B=. 13) and CEO tenure (B =.12).

Based on the unstandardized coefficient (b=.50), a CEO with a non-clinical, non-business degree will increase the licensed staff percentage by .50 more than a CEO with a clinical degree. It appears logical that a CEO with a non-clinical degree would want to hire additional clinical expertise in their organization.

An increase in turnover rate would naturally have an effect on the hiring of additional staff to replace terminated workers. The impact is modest (b=.17), but the survey question asked for the percentage increase in specific positions. Therefore, the impact does not relate solely to the replacement of staff, but replacing staff by changing the staff mix.

CEO tenure has an insignificant relationship to increased services (b=.01). The relationship of receptivity to change is also weak (b=.07), but having employees that are

receptive to change indicates a culture that would have a positive impact on organizational change, including changes to staff mix.

Decreased Staff

The dependent variable, decreased staff, is included in the analyses to identify changes to staff mix made by reducing unlicensed positions that may generate little or no reimbursement. The only positions noted in the survey that met criteria were registered nurses and licensed practical nurses (RNs/LPNs), bachelor's level therapists, and case managers. Information gathered from the survey shows that only 32 organizations (13.9%) decreased these positions. Of these 32 CBHOs, 26 decreased positions by an average of 25% or less and six CBHOs decreased these positions on average from 26% to 50%. No organizations decreased these positions by more than 50% in the last 10 years. Given these results, I could not estimate the normal curve needed for linear regression using the average percentage. I created a new variable to count the number of position types decreased by organizations. Unfortunately, this also resulted in significant outliers. I transformed this new variable using the square root and was able to run a bivariate linear regression without significant outliers. These changes may affect the overall results of this analysis.

A review of the models shown in Table 28 indicates that model 1 explains 21% of the variance in decreased staff. The independent variable, years in Medicaid managed care, only explains an additional .9% of the variance, which is insignificant.

Table 28-*Decreased Staff Model Summary*

Model	R	R-square	Adj. R-square	Std error of the estimate	F	sig
1	.460	.211	.113	.399	2.158	.005
2	.469	.220	.117	.398	2.144	.004

In reviewing the coefficients in Table 29, only two of the predictor variables indicate the possibility of significance in relation to decreased staff. CBHOs in a rural location (B=.20) is the strongest predictor of decreased staff. Rural location (b=.18) will decrease types of staff by .18 staff more than CBHOs in a mixed location. Initially, this appears counterintuitive given the limited employee pool for rural CBHOs. However, with limited resources, it is more important for rural CBHOs to allocate these resources in an efficient manner.

Table 29- *Significant Variables from Decreased Staff Coefficient Table*

Model		Unstandardized Coefficients	Standardized Coefficients	Sig.	Collinearity Statistics
		b	Beta		VIF
2	(Constant)	-.145		.249	
	Urban Location	.105	.121	0.0825	1.540
	Rural Location	.184	.204	.01	1.544
	Northeast	.097	.099	0.1155	1.402
	Southeast	.048	.036	0.319	1.229
	Southwest	-.104	-.053	0.2445	1.213
	West	-.151	-.136	0.048	1.360
	CEO Tenure	-.006	-.122	.05	1.117
	Turnover Rate	.126	.291	.001	1.514
	Years in Medicaid Managed Care	-.098	-.098	.099	1.184

Turnover rate (b=.13) indicates that for each ordinal change in turnover, decreased staff would increase by .13. As turnover is a measure of the relationship of employee terminations to total employee positions, the relationship to decreased staff is logical.

West region (b=-.15) and CEO tenure (b=-.01) have small negative relationships to decreased staff. These are small relationships and in the opposite direction of my one-tail test.

Role Changes

Role changes represent strategies that actually change the organization's traditional core services, including the respective roles of consumers and staff. Increases and decreases in staff mix are both a change in program resources and a change in the CBHO's role. As I have already considered staffing changes, I am concentrating on the use of non-traditional services, that may change the organization's purpose or, in some cases, its mission. I have used two initiatives to measure role changes: alternative services and social enterprise.

Alternative Services

Alternative services include therapies such as holistic services and preventative treatments, and subcontracting for other services. I created a scale indicating the number of initiatives used by the CBHOs. I did not distinguish in this question whether or not these services were for-profit or non-profit services.

In Table 30, both model 1 and model 2 explain 18% of the variance in alternative services. This not only indicates a relatively weak model overall, but also no additional explanation is provided by including years in Medicaid managed care in the regression model. This conclusion is confirmed in Table 31, by examining the unstandardized regression coefficient, which is negligible (b=-.01; p=.297).

Table 30-*Alternative Services Model Summary*

Model	R	R-square	Adj. R-square	Std error of the estimate	F	sig
1	.426	.181	.108	.48145	2.467	.002
2	.426	.181	.103	.48281	2.309	.003

In Table 31, the variable West region is the strongest predictor of alternative therapies based on the standardized coefficient (B=.29), followed by Northeast region (B=.26), increase in turnover (B=.25), and number of employees (B=.21). Integrated for-profit

network (B=.15) and meets document requirements (B=.14) are weak, but significant predictors of alternative services.

The unstandardized regression coefficients for West region (b=.39) and Northeast region (b=.30) indicate moderate indicate that these regions predict an increase of 39% and 30% in alternative services, respectively in comparison to CBHOs in the Midwest. I would assume that the West would be more amenable to unique therapies than the Midwest. This may be true also for the Northeast, but there is no clear reason.

Table 31 also shows that the unstandardized coefficient for increase in turnover in the past 10 years (b=.29) shows a moderate positive relationship to alternative therapies. The only explanation that I have is that due to either fewer employees, or fewer embedded employees, CBHOs may have less resistance, or possibly a need, to implement alternative services.

The variable, integrated for-profit network, indicates a significant unstandardized coefficient (b=1.04), which means a CBHO in this category has a positive impact on alternative services that is 1.19 greater than an independent, for-profit CBHO, controlling for other factors in the model. However, as B=.15, it has a relatively weak effect on alternative services. This relationship appears to be reasonable as a for-profit network would have a greater array of services and may offer profitable alternative services.

Other variables that are significant at the .05 level and have a positive effect on alternative services are number of employees (b=.09) and meets document requirements (b=.26). The relationship for number of employees and alternative therapy is relatively weak, although the Beta of .21 indicates a moderate effect of alternative therapies. The unstandardized regression coefficient for meets document requirements shows a relatively

moderate relationship to changes in alternative therapy, but the Beta of .04 shows an insignificant impact on the dependent variable.

Table 31-*Significant Variables from Alternate Therapy Coefficient Table*

Model		Unstandardized Coefficients	Standardized Coefficients	Sig.	Collinearity Statistics
		b	Beta		VIF
2	(Constant)	-.521		.017	
	Independent For-profit	.323	.081	0.128	1.122
	Government Entity	-.088	-.029	0.343	1.098
	Integrated Nonprofit Network	-.145	-.095	0.96	1.17
	Integrated For-profit Network	1.042	.152	0.016	1.099
	Number of Employees	.081	.208	.004	1.314
	Northeast	.30	.258	.001	1.423
	Southeast	.071	.045	.273	1.231
	Southwest	.083	.036	.239	1.236
	West	.388	.291	.000	1.363
	Mets Document Requirements	.261	.142	.044	1.253
	Increase in Turnover	.288	.247	.001	1.195
	Years in Medicaid Managed Care	-.010	-.040	.297	1.254

Enterprise

Enterprise represents other profitable operations or services operated by CBHOs, in addition to alternative services. The primary services considered in creating the enterprise scale included: property development or rentals, sales or rentals of goods and services, training and consulting fees, and a myriad of less popular enterprises.

In Table 32, the models indicate a weak explanation of the variance in the dependent variable, enterprise. The explained variance for model 1 is 18%s and for model 2, it is only 18.2%. Therefore, years in Medicaid managed care does not significantly increase the explained variance in Enterprise. Moreover, as shown in Table 33, the unstandardized coefficient for years in Medicaid managed care is only -.01(p=.42) and the standardized coefficient is -.02, which indicates a negligible impact on enterprise.

Table 32-*Enterprise Model Summary*

Model	R	R-square	Adj. R-square	Std error of the estimate	F	sig
1	.425	.180	.107	.613	2.449	.002
2	.426	.182	.103	.614	2.315	.003

Table 33-*Significant Variables from Enterprise Coefficient Table*

Model		Unstandardized Coefficients	Standardized Coefficients	Sig.	Collinearity Statistics
		b	Beta		VIF
2	(Constant)	-.341		.144	
	Independent For-profit	.287	.057	0.22	1.122
	Government Entity	-.166	-.042	0.282	1.098
	Integrated Nonprofit Network	-.042	-.021	0.387	1.173
	Integrated For-profit Network	1.671	.191	0.045	1.099
	Number of Employees	.159	.318	.000	1.314
	Northeast	-.252	-.170	.020	1.423
	Southeast	-.116	-.058	.227	1.231
	Southwest	-.161	-.054	.241	1.236
	West	.09	.053	.256	1.363
	CEO Business Degree	-.201	-.128	.04	1.178
	Meets Document Requirements	.584	.248	.001	1.253
	Years in Medicaid Managed Care	-.005	-.015	.421	1.254

There are four significant predictors of enterprise. Number of employees is the strongest predictor of enterprise (B=.32), followed by meets document requirements (B=.25), integrated for-profit network (B=.19), and West region (B=.05).

Per Table 33, number of employees has a weak, positive impact (b=.16) on the increase in enterprise. Employees meeting document requirements (b=.58) results in a relatively strong positive increase in enterprise. Both of these relationships relate to the resource needs of an organization that is considering implementing for-profit services. It would be difficult to start an enterprise operation without an adequate employment pool. In addition, such employees would need to be efficient, as partially measured by document requirements, to operate a for-profit enterprise successfully.

The variable, integrated for-profit network is significant, as would be expected, as the dependent variable is for-profit enterprise. The use of enterprise operations will increase by 1.57 enterprises more in relation to integrated for-profit organizations than in relation to independent, nonprofit CBHOs, controlling for other factors in the model.

West region has an unstandardized regression coefficient (b=.09) that indicates that West region has a positive impact on the increase in enterprise by .09 greater than does the Midwest region. However, the relationship is relatively minor.

CEO with a business degree has a negative relationship to Enterprise, but it is contrary to the direction of the one-tail test. The direction of this relationship also seems contrary to expectations. I expected CEOs with a business background to be more inclined and better equipped to attempt for-profit services. Table 33 also shows Northeast region as having a moderately significant negative relationship to Enterprise, but again, this is in the opposite direction of the test.

Structural Redesign

Structural changes are those that actual change the form of the organization, through size, geographic location, or actual legal structure. The use of enterprise could be considered a structural change if it was an enterprise that was large enough to affect the overall purpose and mission of the organization. In this section, I am looking for these sizable changes through integration strategies.

Integration

I used integration initiatives to represent strategies that change the structure of an organization. Table 1 indicates that the majority of CBHOs are independent, non-profit organizations (83%) and only 10.8% have current net revenue in excess of $500,000. In a

managed care environment, Dangerfield & Van Camp (2006) surmise that organizations with less than $50 million in capitalization will not survive in the end. One way to increase size and expand services is to integrate with other organizations. Integration strategies run the gamut from simply co-location to a full merger. CBHOs have chosen to integrate with organizations such as other mental health providers, for-profit entities, physical health providers, and residential services.

In Table 34, Model 1 explains only 14.8% of the variance in the dependent variable, Integration. Model 2 shows that the addition of years in Medicaid managed care adds only an additional .2% to the explanation of the variance in integration. Correspondingly, as shown in Table 35, the unstandardized coefficient for years in Medicaid managed care is only .02 (p=.28) and the standardized coefficient is only .05, indicating a negligible impact of years in Medicaid managed care on integration.

In Table 35, only number of employees has a relatively moderate, positive impact (B=.34) on integration. The unstandardized regression coefficient (b=.17) indicates a weak, but positive relationship to integrated services, controlling for other factors in the model. My explanation for the relationship is that as number of employees indicates size, larger organizations with significant employee pools may be more inclined to integrate. This could be either because they have more opportunity or because they have adequate resources to attempt this risky strategy.

Table 34-*Integration Model Summary*

Model	R	R-square	Adj. R-square	Std error of the estimate	F	sig
1	.385	.148	.072	.610	1.940	.020
2	.387	.150	.068	.611	1.838	.027

Table 35-*Significant Variables from Integration Coefficient Table*

Model		Unstandardized Coefficients	Standardized Coefficients	Sig.	Collinearity Statistics
		b	Beta		VIF
2	(Constant)	.157		.315	
	Number of Employees	.166	.339	.000	1.314
	ALOS	-.125	-.199	.008	1.297
	Years in Medicaid Managed Care	.015	.047	.281	1.254

Employee ALOS has a negative relationship to the dependent variable (b=-.12), which is in the opposite direction of my one-tail test and therefore, negligible for this study.

Results Orientation

Results orientation concentrates on strategies that add to the legitimacy of the organization rather than directly affecting its finances or resources. Results orientation tries to measure effectiveness of the CBHOs operations instead of concentrating solely on efficiency. I have used two primary measures of results orientation: Outcomes and EBP.

Outcomes

I did not distinguish among the quality of outcome measurements collected by CBHOs in creating a scale for Outcomes. I did distinguish between actual outcomes measurements and the collection of process measurements (total number of consumers, total billings, etc.). The question regarding outcomes measurement has both closed answers and open-ended responses. CEOs provided both types of measurement tools as well as specific items measured. I used the data provided to group the information into larger categories of measurement tools, such as consumer satisfaction surveys, National Outcomes Measurement System (NOMS), consumer testing, measurement of life domains, etc.

Table 36 shows that both models are significant (p<.05), but model 1 only explains 19% of the variance in outcomes (R-square =.19). The addition of years in Medicaid managed care explains only an additional .7% of the variance beyond model 1. In Table 37, the standardized regression coefficient for years in Medicaid managed care is .12 and the unstandardized coefficient is .05 (p=.07), which also indicates a relatively negligible impact of years in Medicaid managed care on Integration.

Table 36-*Outcomes Model Summary*

Model	R	R-square	Adj. R-square	Std error of the estimate	F	sig
1	.433	.187	.088	.471	1.888	.016
2	.445	.198	.095	.469	1.916	.013

As shown in Table 37, government is the strongest predictor of outcomes, based on a standardized regression coefficient of .20, followed by number of employees with a standardized regression coefficient of .19. However, both show a relatively weak impact on outcomes.

Table 37-*Significant Variables from Outcomes Coefficient Table*

Model		Unstandardized Coefficients	Standardized Coefficients	Sig.	Collinearity Statistics
		b	Beta		VIF
2	(Constant)	1.117		.007	
	Urban Location	-.085	-.048	.295	1.552
	Rural Location	-.337	-.184	.021	1.544
	Independent For-profit	.770	.114	.069	1.122
	Government Entity	1.029	.195	.005	1.098
	Integrated Nonprofit Network	-.029	-.011	.443	1.173
	Integrated For-profit Network	-.772	-.066	.291	1.099
	Number of Employees	.124	.187	.013	1.314
	Years in Medicaid Managed Care	.051	.119	.072	1.254

In Table 37, government entities have a .86 greater positive relationship to outcomes (b=.86) in comparison to independent, nonprofit organizations. CBHOs that self-report as a government entity result in an increase in outcomes measured by .86 greater than an independent, nonprofit CBHO, controlling for other factors in the model. Government entities are concerned with the implementation of outcomes in a managed care environment to establish legitimacy and respond to taxpayers about the use of funds. In addition, they may have greater resources to implement outcomes measures than an independent, nonprofit CBHO.

Number of employees shows a relatively weak relationship (b=.12) to an increase in outcomes. However, number of employees represents size and, generally, the larger the organization, the more resources it has at its disposal to enact change.

CBHOs in rural locations have a negative effect on outcomes (b=-.32) in comparison to a CBHO in a mixed location. However, this analysis is a one-tail test that tests solely for positive relationships.

EBP

Evidenced-based practices (EBP) are mental health interventions, based on empirical research, that indicate effective treatment for specific diagnoses. There has been pressure on CBHOs to implement these practices from MCOs and government payors. I obtained responses from CBHOs as to which EBPs they were currently using via an open-ended question. I developed a scale of the number of practices and concentrated on EBPs recognized by SAMHSA.

As shown in Table 38, model 1 is significant at $p<.05$ and the model explains 19% of the variance in the dependent variable, EBP. Model 2 adds the independent variable, years in

Medicaid managed care, which contributes only .1% to the explanation of variance. I consider both of these results to indicate relatively weak models. Based on the unstandardized regression coefficient shown in Table 39 (b=-.02; p=.48) and a standardized coefficient of -.04, years in Medicaid managed care has a negligible impact on EBP.

Table 38-*EBP Model Summary*

Model	R	R-square	Adj. R-square	Std error of the estimate	F	sig
1	.436	.190	.117	.711	2.609	.001
2	.437	.191	.113	.712	2.458	.002

In fact, Table 39 indicates that the only predictor variable that indicates a moderately significant, positive impact (B=.34) on EBP is number of employees. For each unit that the range of number of employees increases, there will be a corresponding increase in EBP by .20 (b=.2; p=.01), controlling for other factors in the model. This is a relatively weak impact but a larger organization may have adequate resources to make this strategy viable, such as funding for EBP training and technology for documenting results.

Table 39- *Significant Variables from EBP Coefficient Table*

Model		Unstandardized Coefficients	Standardized Coefficients	Sig.	Collinearity Statistics
		b	Beta		VIF
2	(Constant)	.231		.263	
	Number of Employees	.199	.343	.000	1.314
	Northeast	-.031	-.018	.263	1.423
	Southeast	-.505	-.215	.0003	1.231
	Southwest	-.230	-.066	.190	1.236
	West	-.160	-.081	.153	1.363
	CEO Business Degree	-.298	-.163	.014	1.178
	Years in Medicaid Managed Care	-.002	-.004	.478	1.254

All other variables that indicate significance, Southeast region and CEO with business degree, are in the opposite direction of the one-tail test.

Political Strategy

CBHOs use political strategies to obtain legitimacy by educating, and perhaps influencing, the community and government representatives about the organization, its value to the community, and issues affecting its survival (Mordock, 1989; 1996). I created a scale of the total number of political strategies by case, which included use of web sites, internet-based marketing, interaction with government representatives, lobbying efforts, and support of political action committees.

In Table 40, the model shows that the R-square for model 1 is .21. The model explains 21% of the variance in political. The addition of years in Medicaid managed care in model 2 only explains an additional .8% of the variance beyond model 1. Furthermore, in Table 41, the unstandardized regression coefficient for years in Medicaid managed care is .03 (p=.11) and the standardized coefficient is .10, indicating a negligible impact of years in Medicaid managed care on political.

Table 40-*Political Model Summary*

Model	R	R-square	Adj. R-square	Std error of the estimate	F	sig
1	.461	.212	.141	.604	2.997	.001
2	.469	.220	.145	.603	2.934	.001

In Table 41, number of employees is the strongest predictor (B=.29) of political, followed by CEO with business degree (B=.14). CEO with other degree has a Beta of -,23, which is in the opposite direction of the one-tail test.

Number of employees has a weak positive relationship (b=.14), meaning that for each ordinal change in the range of number of employees, the number of political strategies will increase by .15, controlling for other factors in the model. Number of employees is a measure

of size and larger organizations may have more resources to expend to implement political strategies.

CEOs with a business degree (b=.21) will account for .21 greater political initiatives than clinical CEOs, controlling for other factors in the model. CEOs with business degrees may be more inclined to use web-based tactics or seek political change, given their focus and expertise. As previously shown in Table 2, CBHOs do not appear to use political or marketing strategies in a significant manner overall.

Table 41-*Significant Variables from Political Coefficient Table*

Model		Unstandardized Coefficients	Standardized Coefficients	Sig.	Collinearity Statistics
		b	Beta		VIF
2	(Constant)	-.167		.295	
	Number of Employees	.140	.291	.000	1.314
	CEO Business Degree	.210	.139	.034	1.178
	CEO Other Degree	-.339	-.23	.001	1.049
	Years in Medicaid Managed Care	.030	.097	.107	1.254

Financial Analysis

In this section, I analyze the effect of the implementation of survival strategies on the overall financial success of the CBHOs. My research question is: Does the use of survival strategies positively affect the financial results of CBHOs? I have used ordinary least squares multivariate regression to test my third hypothesis:

H3: The use of survival strategies will have a positive impact on the organization's financial success.

Similar to the analyses of survival strategies, I ran a series of hierarchical ordinary least squares regressions on the dependent financial strategy variables. I entered years in Medicaid managed care in model 1, shown in the model summary for each dependent

variable, followed by forced entry of the survival strategy variables, as summarized in model 2, for each dependent variable. I examine the changes in R-square in model 1 to assess whether the survival strategies significantly increase the explained variance in each of the dependent variables beyond the years in Medicaid managed care in model 1.

I believe that CBHOs will have a greater chance of survival and improved financial results if they implement survival strategies as opposed to remaining inert. In particular, I am interested in which survival strategies have a positive impact on financial results. I have used four dependent variables to represent financial success: gross revenue, gross revenue change since 1998, net revenue, or revenue in excess of expenses, and net revenue change since 1998.

Gross Revenue

Gross revenue is a measure of the size of the organization and the level of funding at its disposal to sustain its mission and improve its rate of survival. In the survey, I requested that CEOs report the range of gross revenue for the most recent fiscal year.

In Table 42, model 1 uses the control variable, years in Medicaid managed care, to measure the direct influence of managed care on gross revenue. The model is modest, but significant as the R-square is only .078 (p=.001). The control variable explains only 7.8% on the variance in gross revenue. Model 2 adds the survival strategies and the R-square indicates that these initiatives explain an additional 51% of the variance beyond model 1. This would indicate a strong model between the survival strategies and gross revenues.

Table 42-*Gross Revenue Model Summary*

Model	R	R-square	Adj. R-square	Std error of the estimate	F	sig
1	.280	.078	.074	1.682	17.887	.001
2	.714	.510	.475	1.267	14.691	.001

As shown in Table 43, productivity is the strongest predictor (B=.34) of gross revenues, followed by new services (B=.17), access and year in Medicaid managed care, both of which have standardized regression coefficients of .16, and enterprise (B=.14). With the exception of productivity, which is a moderate predictor of gross revenue, the remaining variables are weak, but significant predictors. Decreased services (B=.1) indicates a negligible impact on gross revenues. Payor mix also indicates a negligible negative impact (B=-.1), but is in the opposite direction of testing.

In Table 43, the unstandardized regression coefficient shows that an ordinal change in years in Medicaid managed care would result in a positive ordinal change in the gross revenue range (b=.14; p=.01). This is a weak relationship, but shows that the longer CBHOs spend in a managed care environment, the greater the increase to gross revenues, indicating that CBHOs adapt better to managed care over time.

Access (b=.20) and productivity (b=.34) are both financial strategies intended to directly increase services and revenue, and a positive relationship to gross revenue would be expected. The scale of gross revenue lists six ranges of revenue from $0 to over $10 million. Therefore, a .20 unit increase in gross revenue does not equal .20 of a dollar, but an increase in the overall range, which is a more significant increase. Theoretically, if a CBHO has gross revenue of $500,000 (the top of a range) and increases access initiatives by one ordinal change, gross revenue will increase to the next range ($500,000 to $1 million) by 20%, or by approximately $100,000.

Table 43- *Significant Variables from Gross Revenue Coefficient Table*

Model		Unstandardized Coefficients	Standardized Coefficients	Sig.	Collinearity Statistics
		b	Beta		VIF
2	(Constant)	1.299		.017	
	Years in Medicaid Managed Care	.140	.160	.001	1.084
	Access	.203	.164	.002	1.311
	Payor Mix	-.111	-.093	.042	1.154
	Productivity	.342	.340	.000	1.240
	Enterprise	.218	.136	.008	1.252
	New Services	.117	.170	.003	1.416
	Decreased Services	.209	.097	.036	1.155

Enterprise (b=.22) and new services (b=.12) are role change strategies, but focus primarily on the implementation of programs designed to increase and diversify revenue. Therefore, the positive relationship indicated, although weak, appears logical.

Decreased services have a positive relationship to gross revenue, indicating that for each ordinal change, the range of gross revenue will increase by .21. This relationship is particularly interesting, as most CBHOs do not use this cost-cutting strategy. However, based on the standardized regression coefficient (B=.1), the impact on gross revenues is significant, but weak.

Gross Revenue Change

Gross revenue change measures the increase or decrease in the range of gross revenue from 1998 to the last completed fiscal year. I am using a gross revenue range and the ranges are in $500,000 to million dollar increments. Therefore, this analysis shows only extremely large changes in revenue. Gross revenue for a CBHO may have also changed within the range, but that effect would not be identifiable in this study.

As shown in Table 44, model 1, which only includes the control variable years in Medicaid managed care, is not statistically significant at the .05 level of significance and the

R-square of .002 indicates an insignificant model. In fact, the R-square indicates that the model only explains .2% of the change in the independent variable. Model 2 is significant and explains an additional 14.7% of the variance in gross revenue change. This is a weak model but I use large ranges to represent gross revenue. Therefore, gross revenue change would also represent a substantial change in actual dollars.

Table 44-*Gross Revenue Change Model Summary*

Model	R	R-square	Adj. R-square	Std error of the estimate	F	sig
1	.049	.002	-.002	.532	.507	.477
2	.385	.149	.087	.508	2.417	.004

As shown in Table 45, the standardized regression coefficient (B=.2) indicates that increased staff is the strongest predictor of gross revenue change, followed by decreased services (B=.12), which is a weak but significant predictor. Both access (B=-.25) and New Services (B=-.14) are in the opposite direction of testing.

The independent variable, increased staff, has the most significant positive effect on gross revenue change (b=.23). Each ordinal change in the percentage range of licensed or consumer staff predicts a .23 change in gross revenue change, controlling for other factors in the model. Hiring increased levels of direct staff should increase revenue overall, but licensed staff may also expand the scope of services and/or receive higher reimbursement for services. Increases in consumer and former consumer employees may indicate additional services. The results reflect an increase in specific staff results in a corresponding increase in revenue over time. However, the analysis does not distinguish if particular staff positions (licensed staff versus consumer employees) are more beneficial.

Table 45-*Significant Variables from Gross Revenue Change Coefficient Table*

Model		Unstandardized Coefficients	Standardized Coefficients	Sig.	Collinearity Statistics
		b	Beta		VIF
2	(Constant)	.280		.126	
	Access	-.095	-.252	.001	1.295
	New Services	-.030	-.143	.035	1.422
	Decreased Services	.080	.122	.044	1.151
	Increased Staff	.223	.203	.003	1.177

In Table 45, the unstandardized coefficient for decreased services (b=.08; p=.003) indicates a negligible effect on gross revenue change, However, it would appear reasonable that reducing non-reimbursable services would have some beneficial impact on gross revenues and gross revenue change.

Net Revenue

Net revenue is a measure of financial viability, calculated as gross revenue less deductions and expenses. Similar to gross revenue, the responses related to net revenue were in dollar ranges from an overall loss (less than zero) to net revenue in excess of $500,000. Only 10.8% of CBHOs had revenue in excess of $500,000, 29.9% reported a loss, and 24.7% of CBHOs had net revenue of less than $50,000.

As shown in Table 46, years in Medicaid managed care (R-square=.05), as shown in model 1, explains only 4.8% of the variance in net revenue. Model 2 (R-square=.235) explains an additional 18.7% of the variance. Model 2 represents a moderately strong model.

Table 46-*Net Revenue Model Summary*

Model	R	R-square	Adj. R-square	Std error of the estimate	F	sig
1	.220	.048	.044	1.739	10.631	.001
2	.485	.235	.181	1.610	4.305	.001

In Table 47, increased staff is the strongest predictor of net revenues, based on the standardized regression coefficient of .17, followed by integration (B=.15), productivity (b=.14), and years in Medicaid managed care (.12), All of these variables have a weak, but significant impact, on net revenues.

Per Table 46, years in Medicaid managed care has a significant, but weak (b=.11; p=.03) relationship to net revenues. This indicates that there is a direct effect on net revenue, as there is in the relationship between years in Medicaid managed care and gross revenue. For every year in the managed care environment, the range of net revenue increases only by 11%. However, given the low net revenue for most CBHOs, this increase is still worth consideration. CBHOs that survive and successfully operate in a managed care environment will see some increase in net revenue.

Table 47-*Significant Variables from Net Revenue Coefficient Table*

Model		Unstandardized Coefficients	Standardized Coefficients	Sig.	Collinearity Statistics
		b	Beta		VIF
2	(Constant)	.626		.209	
	Years in Medicaid Managed Care	.111	.124	.029	1.084
	Productivity	.145	.142	.021	1.240
	Increased Staff	.627	.170	.007	1.180
	Integration	.257	.146	.018	1.229

The independent variables productivity (b=.15), increased staff (b=.63), and integration (b=.26) all show a positive relationship to net revenue.

Similar to the model for gross revenue, productivity is a financial strategy and predicts an increase in net revenue. Higher productivity levels mean that staff is producing increased billable hours. Thus, the organization increases revenue without a corresponding

sizable increase in expenses. Net revenue would increase, but the increase is relatively small at 14.5%.

Integration may increase size, geographic location, and overall services for a CBHO. Despite the overall high cost of this strategy, integration should lead to economies of scale, particularly for administrative expenses. The net effect would be a positive impact on net revenue.

The positive effect of increased staff is more complicated. As noted in the model for gross revenue change, licensed staff may present greater opportunities, but they also may require higher salaries. This may be negligible if pay for performance is used. It may also mean that the higher salaries are justified based on the amount of reimbursement produced. Hiring consumer employees may be even more advantageous from a financial standpoint. CBHOs hire employed consumers as peer specialists or in similar lower paid positions. However, net revenue may increase based on additional revenue generated by these less costly employees.

Net Revenue Change

Net revenue change measures the increase or decrease in the range of net revenue from 1998 to the last completed fiscal year. Similar to gross revenue change, I am using a range to represent net revenue. Due to this construction, this analysis results in only extremely large changes to net revenue change.

In Table 48, the models do not indicate a statistically significant model of any of the independent variables to net revenue change. Model 1 has an R-square of .000 and Model 2 would only explain 5.6% of the variance in the dependent variable.

Table 48-*Net Revenue Change Model Summary*

Model	R	R-square	Adj. R-square	Std error of the estimate	F	sig
1	.019	.000	-.015	.790	.070	.792
2	.237	.056	-.014	.794	.796	.672

Despite this disappointing result, it is understandable. According to Table 1, the majority of CBHOs (57.3%) have net revenue below $50,000 and more than half of these CBHOs experienced a loss. Given the use of ranges, 36% of respondents had no change in their range in comparison to 1998, and only 28% had an increase in their range during the same period. The use of ranges, combined with the low levels of net revenue and net revenue change, would not have identified anything but substantial changes. Given the managed care environment and the costs of implementing most new strategies, such substantial changes may not occur.

Summary of Results

In this section, I review the results of my analyses in relation to my original hypotheses.

Hypothesis 1

The purpose of my study is to analyze the impact of Medicaid managed care and other factors on CBHOs' implementation of survival strategies. My first hypothesis for this research is:

H1: The number of years that a CBHO operates under Medicaid managed care will have a positive impact in relation to the organization's use of survival strategies.

To test my hypothesis, I used years in Medicaid managed care as my independent variable. I included other predictor variables in my analyses: organization structure, geographic location including state and region, number of employees, CEO tenure and

background, and employee characteristics and culture. My dependent variables were the six survival strategies identified by Mordock (1989; 1996): financial strategies, program resource changes, role changes, structural redesign, results orientation, and political strategies. I identified 13 individual dependent variables to represent these strategies as they relate to CBHOs. I ran separate ordinary least squares multivariate regressions on each dependent variable.

In reviewing my analyses for years in Medicaid managed care and its effect on the use of survival strategies, I was not able to identify any significant positive relationship between the independent variable and the dependent variables. Based on this study, I would reject my hypothesis.

Although my analyses did not support my first hypothesis, the timing of this study may have been a significant factor. Medicaid managed care has been in place across the country for about 12 years. Organizations not operating in a managed care environment, or are new to this environment, would still be aware of industry literature, other CBHOs' changes, governmental pressures, and other industry information about organizational change. In addition, the majority of CBHOs rely heavily on Medicaid payments and face financial pressure from states' efforts to reduce budgets, even if they are not in managed care. CBHOs in any location or circumstance may feel budgetary pressures and face a decision to implement survival strategies. I did not consider these factors in my study and it may have had an impact on my results.

Hypothesis 2

My second hypothesis for this research was:

H2: The predictor variables will have a more significant positive impact on the use of survival strategies than the number of years in Medicaid managed care.

To test this hypothesis, I used the same variables and analyses as I did for my first hypothesis. I concentrated on the relationship of the other predictor variables to my dependent variables. Based on my analysis, years in Medicaid managed care had no positive impact on the identified survival strategies. However, there were numerous positive relationships identified for the other predictor variables and the survival strategies.

Despite the weak to moderate unstandardized coefficients and standardized coefficients for many of the predictor variables, my choice to use ranges for many of the responses affects the interpretation of the relationship. I cannot identify minor increases within a range for a dependent variable through the analyses. An increase in a variable would represent an increase in the overall range, not an increase of the variable units. Therefore, where ranges are used, a low coefficient for the variable range may actually represent a relatively sizeable increase in the units of the dependent variable. I show examples of these results in detail in the following discussion of major relationships among the variables.

In Table 49, I show a summary of the relationship among all of the predictor variables and each of the strategic variables. Based on the standardized regression coefficient (Beta) for each variable within the model, I have summarized the impact of the predictor variable on each strategic variable using the following categories:

1. None (no significant relationship) represents variables with no significant impact or a Beta that is less than .1. As my analyses are one-tailed tests, this would include variables with a negative Beta.
2. Weak denotes Betas between .1 and .2
3. Moderate denotes for Betas of .21 to .4
4. A strong impact indicates Betas in excess of .4.

Overall, number of employees, as shown in Table 49, which represents CBHO size, is a significant, frequently moderate predictor for most strategies, with the exception of staff mix changes (both increases and decreases to staff) and decreased services. I represented number of employees as a range of employee sizes (0-50 employees, 50 to 100, etc.) rather than a scale of employee headcounts. In reviewing the coefficients, a unit increase in number of employees represents a change in the group, rather than representing an increase in individual employee numbers. For example, a unit change in the range of employees would result in a corresponding increase of 1.03 new services. Roughly, with the addition of approximately 50 employees, I can predict that the number of new services would increase by approximately one service type. Nonetheless, it is not surprising to find that larger CBHOs that have more access to resources would be in a better position to adapt to the changing environment and adopt survival strategies.

Location was a significant factor for a number of survival strategies, particularly CBHOs that operate in a rural location. Rural locations is a stronger predictor of both productivity and new services than organizations operating in urban or mixed locations. In fact, urban location was not a significant predictor for any survival strategy.

It is understandable that productivity would be a prime financial strategy for rural organizations. Rural locations frequently have more difficulty in obtaining adequate personnel than CBHOs in urban locations. With a lower number of employees, it is important that each employee maximize their direct service time to meet demands and to acquire sufficient revenue.

The relationship between rural locations and new services would also reflect a desire to change to meet the needs of the rural consumer, where transportation and availability of other providers may be a problem. CBHOs in rural environments would want to add mobile services to reach consumers or add services that are not available through other local providers.

Related to location type is the region in which the CBHO operates. The Northeast, Southeast, Southwest, and the West were all greater predictors of new services than the Midwest. The Southwest was the most significant predictor of new services.

Unfortunately, the reason for these relationships between regions and the specific strategies is unclear without greater knowledge of the regions. There are many similarities across Medicaid managed care programs, including the need to reduce costs, increase access, and the desire for outcomes, and many states look to the others for ways to handle particular issues. There are also many differences as each state may implement managed care as it chooses within broadly defined federal parameters. CBHOs largely serve the same populations with similar services and receive reimbursement via the same mechanisms, but each state/region presents unique problems due to geography and culture.

Table 49

Summary of Significance of Relationships between Predictor Variables and Dependent Strategic Variables based on Standardized Coefficient

	ACCESS	PRODUCTIVITY	PAYOR MIX	NEW SERVICES	DECREASED SERVICES	INCREASED STAFF	DECREASED STAFF
Urban Location	none	none	none	none	none	none	none
Rural Location	none	**weak**	none	**weak**	none	none	**moderate**
Independent For-profit	none	none	**weak**	none	none	none	none
Government Entity	none	none	none	none	none	none	none
Integrated Nonprofit Network	none	none	none	**weak**	none	none	none
Integrated For-profit Network	none	none	none	none	**moderate**	none	none
Number of Employees	**moderate**	**moderate**	none	**strong**	none	none	none
Northeast	none	none	none	**moderate**	none	none	none
Southeast	none	none	none	**weak**	none	none	none
Southwest	none	none	none	**moderate**	none	none	none
West	none	none	none	**moderate**	none	none	none
CEO Tenure	**weak**	**weak**	none	none	none	**weak**	none
CEO Business Degree	**weak**	none	none	none	none	none	none
CEO Other Degree	none	none	none	none	none	**moderate**	none
Turnover Rate	none	none	none	none	none	**moderate**	**moderate**
ALOS	none	none	none	none	**moderate**	**weak**	none
Receptivity to Change	none	none	none	none	none	none	none
Meets Benchmarks	none	none	none	none	none	none	none
Meets Document Requirements	none	none	none	none	none	none	none
Increase in Turnover	**weak**	**weak**	none	none	none	none	none
Years in Medicaid Managed Care	none	none	none	none	none	none	none

Table 49
(continued)

Summary of Significance of Relationships between Predictor Variables and Dependent Strategic Variables based on Standardized Coefficient

	ALTERNATE SERVICES	ENTERPRISE	INTEGRATION	EBP	OUTCOMES	POLITICAL
Urban Location	none	none	none	none	none	none
Rural Location	none	none	none	none	none	none
Independent For-profit	none	none	none	none	none	none
Government Entity	none	none	none	none	**weak**	none
Integrated Nonprofit Network	none	none	none	none	none	none
Integrated For-profit Network	**weak**	**weak**	none	none	none	none
Number of Employees	**moderate**	**moderate**	**moderate**	**moderate**	**weak**	**moderate**
Northeast	**moderate**	none	none	none	none	none
Southeast	none	none	none	none	none	none
Southwest	none	none	none	none	none	none
West	**moderate**	none	none	none	none	none
CEO Tenure	**weak**	none	none	none	none	**weak**
CEO Business Degree	none	none	none	none	none	none
CEO Other Degree	none	none	none	none	none	none
Turnover Rate	none	none	none	none	none	none
ALOS	none	none	none	none	none	none
Receptivity to Change	none	none	none	none	none	none
Meets Benchmarks	none	none	none	none	none	none
Meets Document Requirements	**weak**	**moderate**	none	none	none	none
Increase in Turnover	**moderate**	none	none	none	none	none
Years in Medicaid Managed Care	none	none	none	none	none	none

For example, the Southwest is comprised of states with lower populations across broad geographic areas with geographic barriers such as mountains and deserts. The

Southwest faces the many of the same problems as any rural location in getting the consumer to the services. New Services such as mobile outreach and telepsychiatry may be necessary to meet consumer needs in this region. Additional research could provide more details in this area.

The type of organizational structure was significant for certain survival strategies: payor mix, service mix, alternative services, enterprise, and outcomes. Weak but significant relationship of an integrated for-profit network to alternative services and enterprise (for profit services), in comparison to an independent nonprofit organization appears clear. Such strategies are integral to the for-profit network's mission and purpose, and I would expect this relationship to occur.

Table 49 also shows that the for-profit network has a moderate impact on decreased services. This relationship is understandable, as a for-profit network would feel less cultural pressure to retain unprofitable services; in fact, the pressure would be in the opposite direction. However, only one organization identified itself as a for-profit integrated network. This may skew the results for his variable.

An independent for-profit organization has a weak, but significant impact on payor mix. There are only four independent for-profit organizations, so these results may be suspect. In reviewing the descriptive information, all four organizations used all the payor mix strategies included in the survey. Clearly, for-profit strategies are central to the mission of a for-profit CBHO, but apparently, the organizations also have significant grants and commercial insurance revenue.

There is a weak, but significant relationship between nonprofit networks and the implementation of new services. One of the major purposes of forming a nonprofit network

is the ability to offer a wider array of services not readily available through other providers, so the significance of this relationship appears reasonable. In fact, according to Table 2, all but one of the twenty-six nonprofit networks in the study had implemented multiple new services in the last 10 years.

The final organizational structure relationship is that government entities will increase the number of outcomes in comparison to an independent nonprofit organization. Given that results orientation is one of the major concerns of government entities and other funding sources, it is reasonable that these CBHOs would be more inclined to implement outcomes measures than more, limited independent nonprofit CBHOs.

Not surprisingly, the organizational culture, as evidenced by the survey responses related to CEOs and the staff, has a significant impact on many strategic decisions. CEO tenure has a minor positive effect on the use of the strategies: access, productivity, increased staff, alternative services, and political. The background of the CEO also affects access, as CEOs with business degrees are more likely to implement access initiatives than CEOs with clinical degrees. As access represents a financial strategy that seeks to create efficiency, it would be an area of concentration for a business-oriented CEO.

CEOs with other backgrounds, such as education or theology, have a greater tendency to increase licensed staff than CEOs with clinical degrees. This relationship is in opposition to my expectations as I wrongly assumed CEOs with clinical degrees would be more inclined to hire other licensed professionals. It may be that a CEO with other degrees feels the need to hire clinical professionals to provide the organization with the skills that they may lack.

Turnover statistics, as measured by both turnover and increase in turnover, have a positive relationship to access, productivity, staff mix changes, and alternative services. This

study measures higher turnover by both the turnover ratio and the increase in turnover in the last 10 years. The perceptions and embedded beliefs of the employees affect the culture and decisions of an organization. However, the relationship to access, productivity, and increased staff may have less to do with the culture, and more to do with a lack of adequate staff. With higher turnover rates, it is understandable that an organization would look to hire more staff with broader skills. Higher turnover would also force a CBHO to seek operational efficiencies as evidenced by both access and productivity.

The increased use of alternative services is less clear in relation to higher turnover, but it could be that such services fill gaps due to limited staff. Employees with alternate skills may be easier to obtain when re-filling positions. It could also be that higher turnover and fewer employees embedded in the traditional culture may allow the organization to explore alternative services.

Employees meeting document requirements moderately affects the number of enterprise strategies used by CBHOs. This also may be an indication of a focus on efficiency, as employees that can fulfill administrative requirements in a timely manner are able to adapt to a for-profit venture.

Not all of the predictor variables have an effect on the use of survival strategies for CBHOs. There was no relationship between urban CBHOs or employees meeting benchmarks with any of the dependent variables. However, these particular variables are only one measure used to characterize a larger predictive category. Employees meeting benchmarks was one measure of organizational culture, together with CEO tenure and background, employee turnover statistics, average length of service, receptivity to change, and ability to meet document requirements.

More importantly, all the survival strategies had a relationship to one or more of the predictor variables. Therefore, there is evidence that the predictor variables do partially explain the variance in survival strategies. Future, more detailed studies should eliminate the ranges and focus on specific variables to understand the further implications of my findings.

Hypothesis 3

In addition to understanding which independent variables affect the implementation of survival strategies by a CBHO, I was also interested in whether, in turn, survival strategies had a positive impact on the success of the organization. My third hypothesis is:

H3: The use of survival strategies will have a positive impact on the organization's financial success.

I used four dependent variables to define financial success: gross revenue, gross revenue change since 1998, net revenue (also known as excess revenue over expenses), and the net revenue change since 1998. The independent variables are the initiatives used throughout this study to define survival strategies. I used years in Medicaid managed care as my control variable to represent managed care revenue and its potential direct impact on financial success. I employed ordinary least squares multivariate regression on each dependent variable to test my hypothesis. I primarily concentrate on those survival strategies that have a positive impact on the financial results. A few minor negative relationships are indicated ($b < .1$), but as my hypothesis is directional, I am interested in those strategies that are positively correlated to success measures. In addition, such small coefficients may be the result of measurement error rather than reflective of a significant result.

In Table 50, I show a summary of the relationship among all of the strategic variables to each of the financial variables, based on the standardized regression coefficient (Beta) for each variable within the models. I use the same criteria as described previously for Table 49.

Table 50

Summary of Significance of Relationships between Predictor Variables and Dependent Financial Variables based on Standardized Coefficient

	Gross Revenue	Change in Gross Revenue	Net Revenue	Change in Net Revenue
Years in Medicaid Managed Care	**weak**	none	**weak**	none
Access	**weak**	none	none	none
Payor Mix	none	none	none	none
Alternative Services	none	none	none	none
Productivity	**moderate**	none	**weak**	none
Enterprise	**weak**	none	none	none
New Services	**weak**	none	**weak**	none
Decreased Services	**weak**	**weak**	none	none
Increased Staff	none	**weak**	**weak**	none
Decreased Staff	none	none	none	none
Integration	none	none	**weak**	none
Outcomes	none	none	none	none
EBP	none	none	none	none
Political	none	none	none	none

According to Table 50, there is no apparent relationship between any of the survival strategies and net revenue change over the past 10 years. This result indicates that the survival strategies, which may be effective in the short run, may have little impact in the long run. Only 27.7% of CBHOs reported any increase in net revenue since 1998. Several issues may have an impact on these results. First, I compare the net revenue range for 1998 to the net revenue range for the current year to calculate change. Some error is inherent with the use of ranges rather than using a single revenue amount. The use of ranges only identifies significant changes, and does not show lesser changes within a range. In addition, the model

does not consider timing of the implementation of the survival strategies. Finally, factors, other than those used in this study, may affect net revenue change, or, given that the study concentrates on survival, the dependent variable may be an inappropriate measure of financial success. In many cases, CBHOs are struggling just to survive; a significant increase in net revenue may not be a realizable goal in this environment.

There is also very little relationship between the survival strategies and the gross revenue change since 1998. The same problems that affect changes in net revenue are applicable to changes in gross revenue. According to Table 1, the majority of CBHOs report no changes in gross revenue, and only 34% report an increase. Gross revenue change also uses revenue ranges.

However, both increased staff and decreased services have a weak, but significant, positive relationship to gross revenue change. Logically, increasing staff positions results in corresponding increases in service provision that results in higher gross revenue over time. CBHOs may hire these positions to support new services or to provide services that have a higher reimbursement rate. It appears that CBHOs should consider changes in staff mix as a viable survival strategy in relation to increased gross revenue. Similarly, decreasing non-reimbursable services may have a long-term effect on gross revenues due to the decrease in uncompensated costs.

Although years in Medicaid managed care (years) show little or no relationship to the implementation of survival strategies, increases in years does result in a small increase in both gross revenue and net revenue. This indicates that CBHOs that have more experience in Medicaid managed care are more successful financially. It seems reasonable that as CBHOs spend more time in the managed care environment, they learn to operate more efficiently in

this environment. This result is not evident in relation to changes in gross or net revenue over a ten-year period. Therefore, it appears that this effect is noticeable in the current year revenue; it is too small to show a significant impact over time.

In addition to years in Medicaid managed care, Table 50 shows that gross revenue will increase in relation to implementation of the following strategies: access, productivity, change in service mix, and enterprise operations. All of these strategies improve financial results via operational efficiency and attracting new consumers and funding sources. A positive impact on gross revenue is possible even if the implementation of these strategies may be costly to the organization, as gross revenue does not consider expenses. However, some of these initiatives also have a positive effect on net revenue, which should be more important to the organization.

In addition to years in Medicaid managed care, Table 50 shows that current net revenue has a positive relationship to increases in productivity, new services, increased staff, and integration. Essentially, these results indicate that implementation of these survival strategies will result in improved financial viability for the CBHO in the short run, even after considering the costs of implementation and operation.

Productivity is a financial strategy that directly improves the efficiency of current operations by fully utilizing resources; in this case, the organization's current employees. The productivity percentage results in a significant increase in the range of net revenue, which indicates that it succeeds in this area.

The significant relationship between increased staff initiative and net revenue suggests that the investment in higher salaried, licensed positions has a direct financial benefit to the organization, despite the costs. For CBHOs, hiring licensed staff may provide

more options to broaden the scope of services, enter new services, and attract higher reimbursement from commercial payors. This is an important consideration for CBHOs concerned with efficient resource allocation.

New services and integration can have high start-up costs as well as risks to the perception of the CBHO's role and purpose. However, both strategies indicate that implementation can increase the range for net revenue. The positive impact of new services on gross revenue was more significant than its effect on net revenue, reflecting the costs of new programs, but it still adds to the overall bottom line. Integration does not appear to affect the larger categories in gross revenue, but it does provide the organization with additional excess revenue over expenses. One of the biggest fears the CBHOs have concerning integration is its financial sustainability (Bozzo, 2010). Overall, as net revenue are the funds that CBHOs retain for the improvement of the organization and its services, it is important to understand which strategies increase net revenue.

Neither the results orientation nor political strategies appear to have any relationship to the financial results of the organization. I expected this result, as CBHOs implement both of these strategies for reasons that are not directly financial. Outcomes, EBPs, and marketing/political tactics enhance the visibility and legitimacy of the CBHO. Funders can implement payment schemes based on results and this could lead to changes in reimbursement, but these are indirect results of the strategies.

Decreased staff positions and alternative services also do not have an impact on any of the financial results. A significant number of CBHOs do not use these strategies and this may affect the results.

Overall, although this study does not indicate significant long-term success, certain strategies do provide an opportunity to improve financial results in the short run. The analyses partially appear to support my third hypothesis. It is also important for CBHOs to concentrate to identify and concentrate on those strategies that have the greatest impact on success. My study provides support for the use of specific survival strategies.

Conclusion

In summary, analysis of my first hypothesis did not indicate that years in Medicaid managed care had any significant effect on the CBHO's decision to implement survival strategies. However, the timing and design of the model, particularly the use of ranges to represent certain variables, affects this negative result.

Despite the inherent limitations in the model, there is evidence that other predictor variables significantly influence the choice of survival strategies implemented in the last 10 years, which supports hypothesis 2. More importantly for CBHOs, the choice of specific survival strategies can lead to significant increases in gross and net revenue, which partially supports hypothesis 1.

CHAPTER V

DISCUSSION AND CONCLUSION

Discussion

The purpose of my research study was to determine the impact of the implementation of Medicaid managed care on CBHOs. Additionally, I hoped to identify the other factors that determined the use of survival strategies and whether such strategies contributed to the organization's success. Through this research, I hoped to add to the body of literature on organizational change and develop information about CBHOs for future research.

First Research Question

My first research question was: Did CBHOs actively use survival strategies and make organizational changes since the implementation of Medicaid managed care? Resource dependency theory indicates that environmental influence on an organization increases in relation to the organization's reliance on environmental resources (Hasenfeld, 1992; Scott, 2003). Because the states control the majority of resources for CBHOs, I expected that CBHOs would implement survival strategies based on the change to a Medicaid managed care environment. Thus, I developed my first hypothesis:

H1: The number of years that a CBHO operates under Medicaid managed care will have a positive impact in relation to the organization's use of survival strategies.

The findings did not support a relationship between years in Medicaid managed care and survival strategies implemented by CBHOs. There was evidence that CBHOs did implement survival strategies over the past 10 years, but my analysis did not establish any statistically significant difference between CBHOs in the managed care environment and

those that do not have Medicaid managed care. This negative result could indicate that my hypothesis was incorrect.

However, timing and research design may also have had an effect on my results. In fact, CBHOs did implement most of the strategies in this analysis after the implementation of managed care, based on the wording of the survey questions. Unfortunately, there was no statistical difference indicated among CBHOs in the managed care environment and those that were not. It may be that mimetic pressures caused CBHOs to adopt strategies regardless of the environment. It may be that other factors, not identified, in this study, were at play, such as government mandates due to budgetary pressures. Further research is necessary to determine the impact, or lack thereof, of Medicaid managed care on CBHOs.

Second Research Question

My second research question is: What other factors predict the use of survival strategies by CBHOs? I believe that, based on the theory of institutionalism, normative and mimetic pressures would have a more significant impact on organizational change than coercive pressures imposed by Medicaid managed care (Alexander, D'Aunno, & Succi 1996; DiMaggio & Powell, 1983). Thus, I developed my second hypothesis for analysis. My second hypothesis was:

H2: The predictor variables will have a more significant positive impact on the use of survival strategies than the number of years in Medicaid managed care.

In relation to this hypothesis, the study was partially successful. My analysis provided moderate results to explain the variance in survival strategies based on other predictor variables. Some predictor variables were noteworthy. Organizational size was a significant predictor for most survival strategies. Larger organizations have more resources,

including employee resources, to implement new services and other changes. I would also speculate that there is less internal, normative pressure that hinders change in a larger organization.

CBHOs in a rural environment are more likely to implement productivity strategies and new services in comparison to CBHOs in other locations. Most rural CBHOs have difficulty hiring adequate and appropriate staff. Consumer access to services is also an issue as the population is widely dispersed and transportation is limited. This poses unique problems for rural CBHOs in comparison to their urban counterparts. A higher productivity percentage allows rural CBHOs to "do more with less." If the percentage of billable time is high, existing staff resources can treat more consumers.

In addition, rural CBHOs can use mobile services or technology to treat consumers that live in remote areas. In comparison, CBHOs in the Southwest region also implement unique services more than other regions in the United States. I believe that occurs for the same reasons as CBHOs in rural locations. States in the Southwest region have a widespread population and significant geographic barriers to treatment.

Organizational structure had a significant impact on survival strategies. In particular, a for-profit structure positively affects revenue diversification, for-profit ventures, elimination of core services, and the use of alternative therapies. The relationships appear reasonable because these strategies either reduce unprofitable lines of service or create new profitable service lines. Unfortunately, there are only a few for-profit CBHOs included in the analysis, which may skew the results. However, overall, a for-profit venture has already redesigned the traditional structure of a CBHO and would feel less pressure to maintain the

status quo. Such an organization would be more likely to implement organizational changes than other CBHOs.

This is also true for the relationship between CBHOs that operate as a government entity and the strategy, outcomes measurement. There is an obvious correlation, but there are few government CBHOs in the study.

There is a positive relationship between nonprofit networks and the implementation of unique services. One of the purposes of network development should be to increase the array of services and better coordinate care. Therefore, this relationship appears to be reasonable. However, the implementation of new mental health services is relatively less risky than other strategies, such as structural redesign or role changes. New services are really an enhancement of the existing role of the CBHO, rather than a major core change. It is interesting that integrated nonprofit networks are still relying on less risky strategies similar to smaller, independent CBHOs.

Organizational culture also has an impact on the implementation of survival strategies. The theory of institutionalism is concerned with the influence of normative pressures on organizational change. Organizational culture is an example of a normative pressure and my study confirms its influence. Culture has the strongest positive influence on access initiatives, productivity percentages, and the hiring of licensed and consumer staff. These strategies relate to the type of employee hired and the work expectations for employees. Initially, I would assume that organizational culture would be a barrier to hiring new employees and higher performance standards. Traditionally, employees have a stake in maintaining the status quo. However, the hiring of new employees can also serve to change the culture.

This study finds the largest influences of culture on organizational change are from higher turnover ratios and the background of the CEO. This indicates a change in the overall corporate culture. Tenured employees appear to be leaving these CBHOs and new staff are accepting higher productive benchmarks. Hiring professional staff, including CEOs with business backgrounds, changes cultural influences and leads to new work standards. This finding may change the basic concept of the CBHO culture as an inert bureaucratic structure that is resistant to change. It also confirms the importance of internal culture in determining organizational changes.

Third Research Question

My third research question is: What survival strategies are most common among successful CBHOs since the implementation of Medicaid managed care? I did not construct a separate hypothesis around this question. I designed my survey to elicit the major strategic initiatives and I used them to develop my dependent variables. I provided the details of these strategies and their underlying initiatives in the demographic section of Chapter IV. Since there is little evidence of a statistically significant difference among CBHOs, whether or not they are in a managed care environment, I discuss the commonalities among all CBHOs.

The majority of CBHOs use financial strategies represented by access and productivity. These strategies concentrate on internal efficiency and are rarely threatening to the mission. Cost containment and access are also two of the major initiatives for all Medicaid managed care programs. Therefore, these strategies fit well with the larger system goals and respond to coercive pressures from the state (Scott, Ruef, Mendel & Caronna, 2000).

However, in looking within the strategy to the actual changes implemented, I find that most CBHOs appear to make changes slowly. For example, over 50% of CBHOs have adopted productivity benchmarks and same day intakes. In particular, consumers and payors would both find same day intakes acceptable and even preferable. This change improves access to services and may reduce initial no-shows for consumers. Same day intakes are also complicated to implement and difficult to maintain because the CBHO cannot be certain of each day's attendance level. Yet, CBHOs must have adequate staff available to meet the daily demand. Despite this drawback, it is clear that CBHOs are willing to absorb the internal problems because the community will easily accept this change. However, few CBHOs make more controversial financial changes such as double-booking appointments and attendance incentives, although such changes should result in the same benefits to finances and access.

Similarly, productivity benchmarks are relatively transparent to the community and the consumer, positively affect revenue, and serve to reduce waiting lists and wait times. The majority of CBHOs implement some level of productivity benchmark. However, industry literature and MCOs all recommend benchmarks of at least 70% of total worked time for outpatient services. Independent providers (non-CBHOs) have reported productivity ratios in excess of 80%. The positive effect on revenue of this strategy is both logical and supported by my analysis. Yet, only 37% of CBHOs have benchmarks in excess of 60% and nearly 25% of CBHOs have benchmarks below 50%. I can only surmise, based on my own experience and discussions with my peers, that normative pressures, as represented by the internal expectations of embedded staff, affect the desire and ability of CBHOs to implement this strategy fully. In fact, in my analysis, employee turnover has a positive relationship to productivity benchmarks, which confirms my suspicion.

According to Mordock (1989, 1996), financial strategies and program resource changes are the first strategies employed when organizations experience environmental changes and threats to their survival. My analysis supports this suggestion, as these are the only strategies used by the majority of CBHOs.

Of the program resource changes, all of the CBHOs in the survey have some diversification of revenue. The major non-governmental payor within this mix is grants and donations, which is a traditional and costly source of revenue. Despite the fact that all CBHOs in the study have some revenue diversification, it is minimal for almost all CBHOs, with non-governmental reimbursement representing less than 30% of total revenue. I question, therefore, whether my definition of payor mix represents an actual active strategy.

Both resource dependency theory and Mordock's model (1989; 1996) would indicate that attracting new revenue sources is a strategy with minimal risk, yet the CBHOs in this study have little success diversifying in a major way. In fact, the analysis shows that the current payor mix initiatives have no significant relationship to financial success. Based on this study, I cannot definitively answer why this situation exists. However, as a CEO of a rural CBHO, I have several suggestions. Despite managed care implementation, Medicaid continues to grow. It is such a large, entrenched part of our business that even with increases in other payors, Medicaid payments offset these increases, keeping the overall ratio of payments relatively stable. Secondly, most CBHOs have a fixed presence in the community as a clinic, or the safety net provider for consumers with serious and persistent mental illness. As such, it is difficult to attract consumers that have "lesser" issues with non-governmental insurance. It is a stigma issue, which extends to the agencies. Last, most commercial payors

require licensed staff to perform services. Most CBHOs still have inadequate licensed staff to meet these needs, although, according to my analysis, this is slowly changing.

New services are also a popular program resource change, used by 89% of CBHOs. However, school-based services, which are more of a change in venue than a change in service, is the most frequently added service and the only one that more than 50% of CBHOs have implemented. Intensive outpatient, which is largely an enhancement of an existing service, is second with 40% of CBHOs implementing it within the last 10 years. Both of these choices do not require additional expertise and have limited risk, as they extend traditional treatment methodologies.

Therefore, it appears that the more the service differs from traditional services, the less likely it is a viable choice for the majority of CBHOs. Population ecology theory suggests that organizations are more amenable to making changes that do not core features such as mission or purpose ((Scott, Ruef, Mendel, & Caronna, 2000). Population ecology would also suggest that most organizations are risk-averse and the health care industry may be the most reticent to make changes (Caronna, 2004). It appears that the choices of the CBHOs in my study confirm these theoretical constructs.

Conversely, nearly 45% of CBHOs also enter for-profit ventures, which is surprising. This initiative does seek to bring in additional revenue, but, generally, social enterprise is a strong departure from a CBHO's mission and purpose. However, in reviewing the individual for-profit initiatives, CBHOs are largely providing for-profit consulting services. These services do not represent a large departure from the CBHO mission, which initially included community education as a major purpose. They also utilize the CBHO's current level of

expertise. Therefore, it appears this strategy serves merely as a funding mechanism, and does not carry the high risk of other for-profit ventures.

Most CBHOs also use results orientation strategies, as indicated by outcomes measurement and EBPs. Results orientation does not have a direct effect on revenue, but there is strong pressure from funders to seek legitimacy through results. All three organizational theories in this study, resource dependency, population ecology, and institutionalism, recognize the organizational need for legitimacy (DiMaggio & Powell, 1983; Mordock, 1989; 1996; Pfeffer & Salancik, 2003; Scott, Ruef, Mendel, & Caronna, 2000).

Such strategies may be expensive and/or difficult to implement, but do not depart from the organization's mission. In addition, this is an example of when the three types of pressure from institutional theory, coercive, normative, and mimetic, interact to make the implementation of a strategy compelling. The states and MCOs strongly promote, if not require, outcomes measurement and EBPs. Consumers and the community at large are interested in the proven results of treatment. Organizations also face mimetic pressure through membership organizations and other CBHOs to establish legitimacy through results orientation.

In contrast, there is coercive and mimetic pressure on CBHOs to coordinate care and integrate with other agencies, similar to the results orientation strategy. Yet, only 37% of CBHOs have implemented some form of integration in the last ten years. The primary forms of integration are also benign. Co-location is the major type of integration, which is merely sharing space, not actually integration of mission or purpose. Co-location also does not guarantee actual coordination of care. I can only postulate that normative pressures from the

community and the organizational culture is in conflict with other pressures and currently informs CBHOs' decision to not integrate. Integration at a significant level would affect the CBHO's mission, purpose, role, and structure. Integration calls for a realignment of core elements of the organization that CBHOs clearly are not ready to address.

This is also true of many of the remaining strategies and initiatives. CBHOs do not use any of the other strategies to great extent. However, most of these strategies, such as decreased core services, alternative services, and decreased staff, may affect the CBHOs image and core values. The CBHO may face normative pressure to maintain the status quo regardless of any potential benefits.

Fourth Research Question

My last question is: Does the use of survival strategies positively affect the financial results of CBHOs? My third hypothesis was:

H3: The use of survival strategies will have a positive impact on the organization's financial success.

I used gross revenue, net revenue, and changes in gross and net revenue since 1998 to define financial success.

I found no significant relationships between the survival strategies and change in gross and net revenue, with one exception. Increasing licensed and consumer staff has a positive effect on the change in gross revenue. CBHOs that increase their licensed staff are in a better position to expand services and attract commercial payors. In addition, licensed staff have a broader service capability than staff that are not licensed. Depending on the state, LSWs can provide services similar to a psychologist; CRNPs are able to evaluate consumers instead of psychiatrists. Licensed positions can be costly, but psychologists and psychiatrists

command higher salaries and are in short supply in most states. In opposition to this, consumer employees usually have lower salaries, but allow the CBHO to explore different services, such as peer supports.

Unfortunately, gross revenue, and changes in gross revenue, do not consider expenses and are not an indication of excess revenue. The lack of a relationship between survival strategies and changes in net profit is troubling. However, there are limitations to my study design that may affect the results, such as the use of ranges to represent net profits. In addition, the majority of nonprofits have little or no excess revenue, which may also affect the results. Further research should focus on the long-term impact of strategies on financial success.

Many strategies had a positive impact on current year gross and net revenue. This is important as it shows some indication of financial success. The most important strategies are those that had an effect on both gross and net revenue, as net revenue represent the monies that CBHOs can use to support and improve the organization after normal expenses. Productivity and changes in service mix affect both financial indicators. As I noted in this section, the majority of CBHOs use these strategies and the assumption is that they will provide additional revenue with limited cost and risk. This study clearly supports this assumption.

In addition, integration strategies and changes in staff mix, particularly increased staff, also have a strong positive impact on current net revenue. I discussed the impact of the addition of licensed and consumer staff in relation to changes in net revenue in the previous section. Over 41% of CBHOs use this strategy.

Unlike staff mix changes, only 84 CBHOs use integration strategies. Bozzo (2010) suggests that CBHOs do not integrate because they are concerned with the financial sustainability of the combined entity. However, this study indicates that integration can have a positive effect on current net revenue, but further research is necessary to prove long-term sustainability.

Summary

Overall, my research identified moderate correlations between the predictor variables and survival strategies. I was also able to find limited correlations between survival strategies and financial success. Unfortunately, I was not able to find a relationship between Medicaid managed care and the implementation of survival strategies for CBHOs. A review of these results must also consider the limitations of this study.

Implications for Practical Application

This study provides demographic data and strategic information for 231 CBHOs across the United States. This results in a large source of comparative data in an industry where few benchmarking statistics or comprehensive information on organizational change currently exists. CEOs can use such information to benchmark their organization against their peers nationwide and develop strategic plans.

For example, the majority of CBHOs reported that they use some type of productivity benchmarking for their staff. Although this strategy affects current staff expectations, it is a relatively benign strategy to implement. It does not affect the core values or role of the organization. CEOs can implement higher productivity benchmarks through maximization of existing resources, which requires no additional cost. Furthermore, this strategy inevitably results in reduced waiting lists and better consumer satisfaction. However, industry

recommendations set benchmarks at 70% of total worked time or higher. Yet, despite the obvious benefits, only 37.5% of organizations establish outpatient benchmarks in excess of 60%. This study shows that higher productivity benchmarks have a direct positive relationship to both greater gross revenue and net revenue. In fact, it is the most significant contributor to gross revenue in comparison to all other strategies. CEOs should not only consider this information in their strategic planning but can use such information to inform staff and address corresponding cultural resistance.

Similarly, the hiring of licensed and/or consumer staff has a positive impact on, not only gross revenues, but the change in gross revenues, indicating that the implementation of this strategy may have long term benefits. The majority of organizations do consider staff mix changes to some extent. However, the hiring of licensed staff can be difficult and expensive, but the overall benefits mitigate these problems. Therefore, the improvement to gross revenue provides support for continuation and expansion of this strategy over time. Correspondingly, Table 5 shows the majority of CBHOs have limited revenues from commercial insurance and private contracts. The addition of licensed positions may assist CBHOs in increasing commercial revenue sources, as most non-Medicaid payors require licensed staff to perform services.

This study supports the need for adaptation to the environment. It indicates that remaining inert may be actually harmful to the organization, rather than "safe" as some organizations believe. My analyses were one-tail tests that concentrated on the positive impact of organizational strategies on financial success. However, there are indications in the study that maintaining some traditional roles or services actually has a significant negative impact on gross and net revenues. For example, payor mix has a weak, but significant

negative relationship to gross revenue. Donations and grants comprise the largest group of non-government funds, or payor mix, for CBHOs. Fund-raising can be time-consuming and expensive, yet generally, yields limited net benefits. Therefore, although most CBHOs use this traditional method of diversifying revenues, it may actually be harmful to overall financial success.

In addition, most organizations are loathe to reduce or eliminate traditional but poorly reimbursed services. This is largely due to community expectations, the culture of the organization, and the organization's overall view of its purpose. However, this study also shows a significant positive relationship between decreased services and both gross revenue and change in gross revenue. This indicates that decreasing costly services may have a long-term positive effect on revenues. From a business perspective, and nonprofit organizations are a professional business despite their altruistic mission, it is important to re-examine the value and relevance of the purpose and services of the organization as the environment changes.

An examination of the organization's relevance to the environment should also include major core changes. Mordock (1989, 1996) notes that organizations tend to first implement financial strategies and program resource changes that do not affect its core values or self-identity. However, dynamic environmental change may necessitate more severe organizational changes. This study shows not only the current state of the majority of CBHOs, but it provides an indication of the future trends and strategies that early adopters of change prefer, including major core changes.

For example, this study shows that integration strategies and for-profit enterprises are not popular endeavors for most CBHOs. Yet, enterprise models show a significant positive

relationship to gross revenue and integration strategies show a positive relationship to net revenues. In particular, industry standards and government entities alike heavily promote integration to attain better coordination of care among agencies and disciplines. From a business standpoint, integration can provide economies of scale and other cost savings.

Yet, despite the advantages, there is a reticence to consider such strategies. It is understandable that both enterprise and integration can be difficult and require detailed planning to execute properly, and both engender questions regarding the organization's identity and purpose. However, these strategies can take many forms that do not severely affect either the organizational mission or its independence. For integration, simple co-location or joint ventures for particular service lines do not require a loss of identity but can result in benefits to the organization and its consumers. Enterprise operations that focus on the particular expertise of the organization can actual enhance non-profit services. In order to survive, CBHOs need to look beyond their traditional roles and focus innovative methods to adapt to a new environment.

Most importantly, this study shows that, overall, adaptation, or survival, strategies can have a positive impact on an organization's ability to survive, and even thrive, in a managed care environment. In fact, my analyses show that the number of years a CBHO operates in the managed care environment has a positive effect on gross and net revenues. This indicates that, over time, organizations not only learn to operate in the new environment, but also become more financially successful. Change is difficult and frightening to organizations at multiple levels. However, the decision to remain inert despite dynamic changes to the environment can be equally risky. Organizations that adopt a "wait and see" attitude may find that they cannot react quickly enough to adapt effectively.

Research, such as this study, can partially mitigate risk by indicating which strategies have proven beneficial to similar organizations. This study shows that well considered strategies, even major changes that affect the organization's core, can result in overall financial success.

Implications for Organizational Change Theory

In Chapter Two of this dissertation, I reviewed three major theoretical constructs of organizational change in relation to my study: resource dependency, population ecology, and institutionalism. I also examined Mordock's (1989; 1996) model of survival strategies for non-profit organizations. My contention was that each of these models individually was inadequate to predict CBHO behavior in light of managed care, but that the interaction of various aspects of the theories and model would benefit my study. To some extent, these theories did successfully provide me with insight to my research questions. However, in other ways, each theory had limitations that affected my results.

Resource dependency theory appropriately focuses on the environment's impact on organizations, particularly in relation to the acquisition of necessary resources. My study indicates that strategies that have resource acquisition as their primary purpose are the most popular among CBHOs. However, resource dependency theory also focuses particularly on strategies that CBHOs consider risky or inappropriate, such as integration strategies, marketing tactics, or political strategies.

Despite the potential benefits shown by this study, integration threatens the organization's identity and independence and CBHOs limit the use of this strategy. Nonprofit organizations, particularly CBHOs, have narrowly defined missions and purposes. In addition, CBHOs also work within a catchment area, or limited geographic region, which also narrowly defines their identity internally and within the community. Therefore, there are

legitimate concerns about expansion through integration. The largest fear is that, within a broader network, the CBHO's primary focus, will be minimized or entirely lost. Resource dependency assumes that the acquisition of resources will somewhat override these concerns, where this study indicates that it does not. CBHOs are more reticent to adopt these strategies, despite potential benefits, than resource theory would indicate.

Secondly, marketing has a limited effect on nonprofits, particularly CBHOs and other healthcare providers. CBHOs' largest consumer population is comprised of Medicaid beneficiaries and other underserved or indigent populations. These consumers have little options for treatment other than CBHOs. Costs of services are relatively inelastic, and the ultimate consumer does not determine rates and or define quality standards. MCOs and the various governmental bodies regulate these items. Therefore, marketing principles do not drive the acquisition of resources for mental health, rendering most marketing tactics ineffective.

As CBHOs are also relatively small organizations with limited experience in the political arena, the political strategy is rarely used. As such, governing bodies largely ignore the organizations as potential partners and rarely invite CBHOs into the decision-making process. Although this may change over time, organizations tend to feel relatively powerless in affecting external change through political pressure. Also, as MCOs are somewhat insulated from political pressure and determine the ultimate rates paid to CBHOs, political strategies may be largely ineffective in terms of resource acquisition.

Lastly, resource dependency theory does focus on management capabilities to affect the environment, but fails to recognize that the leader's own perceptions may limit management decisions. Management, particularly those steeped in tradition, may fail to

recognize or react to change in a timely manner. My research does support that some leaders actively implement changes to adapt to the environment, and that certain strategies can lead to financial success. However, it is more difficult to ascertain why some organizations choose to not adapt and ultimately fail. Information about perceived barriers to adaptation would be valuable to organizational change research and resource dependency theory, in particular.

Population ecology does address failure rates across organizations to some extent, largely by limiting the effectiveness of management to influence the environment. Population ecology recognizes that management's ability or failure to recognize and implement needed change in a timely manner affects the success rate. Population ecology also recognizes that factors such as size affect the organization's ability to be successful.

My study shows that, in fact, the greater the years a CBHO operates in the managed care environment, the more financially successful that organization will be. Size is also a primary factor in the organization's decision to implement strategies. The reticence of CBHOs to implement certain strategies would also support the ecological theory in terms of timing and inertia. These findings support population ecology theory.

However, because of its focus on size, population ecology tends to relate to populations dominated by large organizations operating in highly competitive environments (Scott & Meyer, 1991). This clearly does not describe the fragmented mental health industry dominated by small, geographically distinct CBHOs. Like resource dependency, population ecology focuses on specific strategies, such as marketing, that are effective in competitive and profitable industries but that have little impact on CBHOs. As such, population ecology fails to explain the multiple factors that influence change in CBHOs. There is no clear

explanation as to why some CBHOs choose to remain inert while others actively pursue adaptation, despite similarities in environment, purpose, and experience. I noted in Chapter Two that population ecology fails to recognize the role of power as evidenced by MCOs and the state, but it also fails to note the pressure to maintain certain norms and conventions within the community and the industry.

Population ecology led me to assume that CBHOs that are not operating in managed care environment would have little impetus for change, and would remain relatively inert. However, the analyses did not support my first hypothesis. In fact, some CBHOs in managed care environments remained relatively inert. More importantly, CBHOs outside managed care made organizational changes at relatively the same rate as those within managed care. Therefore, multiple pressures, including access to industry information and the desire to follow industry leaders, also affects change.

Unlike population ecology, institutionalism does recognize the influence of multiple pressures on management decisions including the need to conform, but it is unclear what the ultimate result will be in the face of multiple and conflicting demands. In addition, like population ecology, institutionalism makes an argument for inertia in non-managed care environments. In fact, institutional theory indicates that organizations dominated by governmental regulation, particularly when coupled with normative pressures to maintain traditional roles, are less likely to make organizational changes. Yet, my study indicates that the majority of CBHOs will make certain changes regardless of the state of their environment.

Conversely, institutionalism identifies many of the pressures that affect nonprofit organizations and CBHOs. It appropriately recognizes the overwhelming pressures CBHOs

face to conform to traditional roles. However, in addition to the need to obtain resources, largely ignored by institutional theory, mimetic pressures also may counteract some of the normative pressure. Although institutionalism recognizes that these pressures interact to inform decisions, the question remains as to how these pressures interact and how it leads to either diversity or conformity among organizations. In other words, it is difficult to use institutional theory to predict expected outcomes. In fact, it is difficult to define certain pressures, such as industry expectations or community norms, in a way that permits measurement of their influence. This was notable in my study, as it partially contributed to the rejection of my first hypothesis.

Last, Mordock's (1989; 1996) model, designed for the nonprofit industry in light of managed care, provided me the most specific tool to design and analyze my results. Mordock's model successfully identifies not only the major categories of change considered by CBHOs, but also accurately predicts the hierarchy of these strategies. However, like resource dependency theory, the model is limited in relation to the recognition of all of the pressures that inform management decisions beyond resource acquisition. Finally, Mordock's model addresses the survival strategies that organizations should or will consider, but not the anticipated success rate of these strategies.

Overall, none of the theories appropriately addresses the expected success rate, or lack thereof, of adaptation or the implementation of organizational changes. In addition, these theories or models do not adequately addresses issues unique to the operation of a nonprofit organization.

For example, my study indicated no sustainable benefit from the implementation of most of the survival strategies based on the change in net revenue. Changes in net revenues

since 1998 had no relationship to the years in Medicaid managed care or any strategy. Although disappointed by these results, as a CEO of a CBHO, I also find this result understandable. The basic premise of a nonprofit is that the organization uses net revenues for the betterment of the organization, not for stockholders or any other private inurement. Therefore, the CBHO may use net profits from one year to improve services or acquire resources, which in turn leads to additional expenses in the subsequent years. In retrospect, the change in net revenues is a poor measure of success for nonprofits. More importantly, none of the theoretical perspectives of the model addresses the long-term success of strategies nor do they consider the different needs of a nonprofit.

The theoretical structures and models included in this study were helpful in designing and interpreting my research. Yet, the limitations of these constructs also affected the ability to predict behavior and make sense of the complicated environment.

Limitations

By using Guidestar, I am relying on provider organizations to self-determine the NTEE category by which they identify their organization. For example, the population may be smaller than originally anticipated as some organizations may list themselves as CBHOs that do not meet the additional criteria established for this population. Conversely, some CBHOs may file under a different NTEE category. In addition, Guidestar only lists organizations with gross revenue of $25,000 or more. Smaller organizations that did not report on Guidestar were not included in this study. The fact that I surveyed a large number of organizations across the United States and had an acceptable response rate partially mitigates this problem. In addition, the respondents self-reported their organizations as CBHOs, limiting the chance that non-CBHOs were included in the study.

I broadly designed my survey instrument utilizing nominal and interval data and a closed format (Mertens, 2005). This was a thoughtful decision used primarily to increase response rates. There are also limitations inherent in the study using this format. The information for most interval questions could be more specific. By using ranges, rather than a true scale, only extremely large effects are evident in the analysis.

The closed format may not consider all possible answers in the survey. I designed this survey as a descriptive study to obtain information about primary organizational changes and the questions should capture all significant issues. I also allowed for open responses on the survival strategy questions to try to captures initiatives not considered in the design of the survey. However, future research should use more in-depth questions about particular subsections of the survey instrument to test the responses.

Similarly, this study does identify major strategic initiatives and the impact on financial results, but it does not show the impact of the various individual initiatives and which are most effective. For example, the implementation of an Access strategy has a positive impact on gross revenue, but it is impossible to tell which initiative has the most impact. Future research could focus on which specific initiatives lead to financial success, such as walk-in clinics versus productivity benchmarks.

I used a cross-sectional survey in order to collect data because timing was a factor and I was examining the effects on several groups at one period in time (Mertens, 2005). Timeliness was an issue as Medicaid managed care has penetrated most states. However, the use of a cross-sectional design results in some limitations. A longitudinal study would have better identified the starting point of each group of CBHOs and impact of Medicaid managed care over time.

I tested this original survey with a sample of Pennsylvania CBHOs. I received their responses, and was able to speak with certain providers by telephone to ensure that the survey was appropriate, that they understood and properly answered the questions, and felt the questions were appropriate. I also reviewed the survey with my committee and other industry members for expert opinions on the questions. This provided me with face and content validity. However, I did not use other measures that would have improved validity and reliability. For example, re-testing rather than a sample pre-test or statistical analysis of my pilot survey would have improved reliability. In addition, one significant issue is that the responses, particularly responses that relate to corporate culture, represent the perceptions of the CEO, rather than from the employees themselves. However, industry literature does support the majority of my findings, giving me some comfort that the study had some measure of validity and reliability.

I rejected the use of a qualitative study based on timeliness and the need to increase response rate by using a blind study. Therefore, my survey was dependent on the CEOs that completed the survey and their perception of cultural issues within the organization. A mixed methods study, that includes a qualitative analysis, may have detected whether such perceptions were prevalent across the CBHO. A qualitative study would also have assisted me in identifying what considerations the CEO had regarding the use of specific survival strategies. The primary strategies and the impact of those strategies on financial results were included in my analyses. However, this study does not identify the reasons behind these choices. This information would have implications for current theory by examining barriers to change and the relationship of perceptions of leaders to change.

Based on the literature, I assumed that industry standards would have an effect on the choice of survival strategies. In large part, the major strategies and initiatives outlined in this analysis are those that are popular in industry literature, seminars, and member organizations. However, my survey questions failed to gather data that would allow me to identify industry standards as a separate independent variable. Therefore, I believe that the study fails to measure the impact of one of the most influential predictors.

In addition, I failed to recognize the impact that the industry environment may have on the results of this study. My first hypothesis attempted unsuccessfully to identify differences in survival strategies among CBHOs based on years in a Medicaid managed care environment. However, 47 states have had some form of Medicaid managed care since 1998 (Donohue & Frank, 2000). CBHOs do not operate in a vacuum. It is possible that implementation of the survival strategies began when managed care was implemented, whether or not the CBHO was operating in a managed care environment. The fact that most of the strategies identified occurred within the last 10 years partially supports this suggestion. My study did not show a relationship between years in Medicaid managed care and my survival strategies, but these factors may have affected the results.

I have a relatively large response group that covers most geographic locations and organizational structures. However, seven states did not respond to the survey. Since the state may indeed affect the implementation of managed care, reimbursement methods, and the need for particular strategies, this may have affected my data. This problem is partially mitigated by the large percentage of states that were represented and the classifications of states into regions, so that all regions were represented, if not all states.

This study concerned CBHOs in the United States and the impact of Medicaid managed care and other factors on the implementation of survival strategies. It also reviewed the impact of survival strategies on the financial results of CBHOs. My population is broad, but the unit of measure relates solely to CBHOs. Therefore, the results do not pertain to other healthcare entities or nonprofit organizations, outside of my population. The study did provide information for the intended population that can be used in future research.

Impact on Future Research

The intention of my research was to provide a broad overview of the relationship between Medicaid managed care and Community Behavioral Health Care Organizations**.** I also wanted to add to the literature on organizational change by identifying factors that lead to organizational change and positively affect the organization's financial results. Although I found no significant correlation between Medicaid managed care and the organizational survival strategies, I believe that the study still provided important data for future research.

Due to the limitations in my study, I believe that the effect of Medicaid managed care on the mental health field requires further exploration. Traditionally, CBHOs are bureaucratic structures that tend to resist change. Although I found no significant statistical relationship between managed care and dependent variables, it is clear from the responses that CBHOs have made some major organizational changes in the last 10 years. If the implementation of Medicaid managed care did not affect organizational change for CBHOs, then what was the major impetus for change? Was the factor(s) different for CBHOs operating within managed care and those that are not? A more detailed study is needed that can identify the impetus for this sudden movement, preferably exploring a causal relationship.

In reviewing the demographics, it appears that some strategies are more popular with CBHOs than are others. My study indentifies some the factors that influence choice. CBHOs rarely implement certain seemingly viable strategic choices. For example, there is definite pressure from industry and funding sources for some form of integration or collaboration between physical health and mental health. The new Patient Protection & Affordable Care Act strongly supports the medical home, which combines multiple services under one roof (Bozzo, 2010; Mauer, 2010). However, my survey shows only 20 CBHOs that have some form of integration with physical health providers.

Along with integration, resource dependency theory views political and marketing tactics as key strategies for success. My study shows that CBHOs do not generally use political strategies. In fact, only 21.1% of the organizations surveyed had a web site, which is a relatively benign marketing tool. Future research should focus on major strategies and the barriers organizations perceive regarding their adoption.

In keeping with this thought, it may also benefit research theory to better identify and focus on the unique characteristics of nonprofits as opposed to for-profit organizations. For-profit organizations have a primary duty to increase the value of the shareholders' investments. Nonprofits have no such impetus to increase net revenues. Therefore, it is important to understand what factors do drive CEOs of nonprofits and how they use available resources. This study provides some insight to these differences for further exploration.

The majority of CBHOs in my study are independent, nonprofit organizations. By concentrating solely on CBHOs with this organizational structure, my analysis would have had a more homogeneous population and less outliers, streamlining my results. On the other

hand, it would be interesting to build a long-term study on organizational structure. The emphasis on integration may lead to a different grouping of CBHOs in the future.

I noted in my study that most organizational research in healthcare centers on hospitals. Some issues may apply across the healthcare industry given similar payors, regulations, and populations served. However, the differences between a large inpatient physical health entity and a small outpatient mental health organization can be profound. As there continues to be a major push for CBHOs to integrate, an examination of these issues appears timely. Information from this study may be helpful in characterizing CBHOs for comparative purposes.

One of the most important features of this study was the effect of survival strategies on the financial success of the organization. Although there are many organizational theories, little organizational research measures the success of change strategies. There are many definitions for success, but I believe that financial success is key to the organization's survival, even in the nonprofit world. The use of ranges in my response categories limited the identification of changes in gross and net revenue. However, the research still identified improvements to the CBHOs finances. Detailed studies would provide specific information that practitioners can use in the decision-making process. In addition, my study only identified factors affecting current financial results. Future studies should identify the long-term impact of change strategies.

Healthcare is a dynamic industry and it is facing more daunting challenges from the recent Patient Protection & Affordable Care Act (Mauer, 2010). In its present form, the Act can have many repercussions for healthcare in general, and CBHOs in particular, across the nation. As regulatory agencies have yet to finalize the Act, this is a great opportunity to begin

longitudinal research of this sweeping phenomenon. The results of my research may help to develop studies that assess the implications and results from this next wave of reform.

Conclusion

The overall purpose of my research study was to obtain information on CBHOs that would add to the literature on organizational change. I designed the study to determine the effect Medicaid managed care has on an organization's decision to implement survival strategies. I was also interested in the effect of other predictor variables on this decision. Lastly, I wanted to determine the predominant survival strategies and their contribution to the financial success of the CBHO. The study was only partially successful.

The model did not support my first hypothesis. The independent variable, years in Medicaid managed care, did not have a significant impact on the implementation of survival strategies. There can be many reasons why the model did not work. My hypothesis may have been incorrect and another factor may be influencing organizational change. Timing and structure affect the results of a model and these issues may have affected this study. Future studies should retest my results by altering the design.

Through this research, I was able to obtain other valuable information. I was able to obtain current data on CBHO demographics, which future research can use to measure other environmental and organizational issues affecting behavioral healthcare. I was able to identify predictor variables that affect organizational change. I constructed my variables to identify only large changes across a broad spectrum of strategies. This can provide a basis for more detailed research about CBHOs and survival strategies.

There is extensive organizational literature on the expected reactions of CBHOs to dynamic change and the strategies needed for success. I attempted to test this literature by

identifying the correlations between survival strategies and financial results. I did show that specific survival strategies affect current financial performance. The next step is to research these survival strategies and their effect on long-term financial performance and CBHO survival.

CBHOs continue to be in a state of flux as the healthcare environment continues to evolve. My research studies the factors affecting major organizational change in the behavioral health field and the financial benefits of adaptation to the CHBO. The nation is on the brink of dynamic change across healthcare organizations, and I hope that this study is a starting point for future research on organizational change in mental health.

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Appendices

Appendix A
Community Behavioral Health Organizational Survey

Demographic Information

Please circle the most appropriate answer for each multiple choice or yes/no question. For questions with blanks, please provide the best answer possible.

1. What is the general location of your organization?
   a. Urban (Within a major metropolitan area)
   b. Rural
   c. Mixed Urban and Rural

2. Which category best describes your organization?
   a. Independent, no-profit
   b. Independent, for profit
   c. Public, government entity
   d. Non-profit, integrates service network
   e. For profit, integrates service network

3. Has your category changed in the last 10 years?
   Yes No

4. What is the average number of employees in your organization?
   a. 50 or less
   b. 51 to 100
   c. 101 to 250
   d. 251 to 500
   e. 501 to 1,000
   f. over 1,000

5. Are the majority of your employees unionized?
   Yes No

6. What were your organization's gross revenue for the fiscal year 1998?
   a. $500,000 or less
   b. $501,000 to $1,000,000
   c. $1,000,001 to $3,000,000
   d. $3,000,000 to $5,000,000
   e. $5,000,001 to $10,000,000
   f. $10,000,001 or greater

7. What were your organization's gross revenue for the last fiscal year?
   a. $500,000 or less
   b. $501,000 to $1,000,000
   c. $1,000,001 to $3,000,000
   d. $3,000,000 to $5,000,000
   e. $5,000,001 to $10,000,000
   f. $10,000,001 or greater

8. What were your excess revenue over expenses for the fiscal year 1998?
   a. Loss
   b. Less than $50,000
   c. $50,001 to $100,000
   d. $100,001 to $250,000
   e. $250,001 to $500,000
   f. $500,001 or greater

9. What were your excess revenue over expenses for the last fiscal year?
   a. Loss
   b. Less than $50,000
   c. $50,001 to $100,000
   d. $100,001 to $250,000
   e. $250,001 to $500,000
   f. $500,001 or greater

10. How many years has your organization accepted Medicaid managed care?
    a. No Medicaid managed care
    b. less than 3 years
    c. more than 10 years
    d. 3 to 6 years
    e. 7 to 10 years

11. Under Medicaid managed care, what is the primary (more than 50%) reimbursement method?
    a. No Medicaid managed care
    b. Fee for service/per diem
    c. Pay for performance
    d. Capitation
    e. Subcapitation

12. Please circle **all** of the following core services provided by your organization:
    a. Outpatient mental health
    b. Partial hospitalization
    c. Mobile crisis/walk-in crisis
    d. Drug and alcohol
    e. Consulting and education
    f. Psychiatric evaluations
    g. Medication management
    h. None of the above

13. In which state(s) do you operate? _____

Financial Strategies

14. Do you currently have a waiting list for services?
15. Yes No

16. In the last 10 years, have you implemented any of the following (circle all that apply)?

17. a. Same day intakes/appointments
    b. Productivity benchmarks
    c. Other _____
    d. Walk-in clinic
    e. Employee pay for performance/case rates

18. What is your average cancellation/no show rate?
    a. Do not monitor .
    b. less than 15%
    c. 16 to 20%
    d. 21 to 25%
    e. 26 to 30%
    f. 31 to 40%
    g. greater than 40%

19. In the last 10 years, have you implemented any of the following (circle all that apply)?
    a. Charges for no-shows
    b. Mandatory groups for no-show clients
    c. Walk-in services
    d. No show policy including discharge
    e. Attendance incentives
    f. Other _____

20. What is your average productivity percentage for outpatient services?
    a. Do not have productivity benchmarks
    b. 30% or less
    c. 31 to 40%
    d. 41 to 50%
    e. 51 to 60%
    f. 61 to 70%
    g. over 70%

Program Resources

21. What percentage of your total revenue is Medicaid managed care only?
    a. zero (no Medicaid managed care)
    b. 30% or less
    c. 31 to 50%
    d. 51 to 70%
    e. Greater than 70%

22. What percentage of your total revenue are from commercial insurance?
    a. Zero
    b. 30% or less
    c. 31 to 50%
    d. 51 to 70%
    e. Greater than 70%

23. Do you have employee assistance program or other private contracts for services?
    Yes
    No

24. What percentage of your total revenue are from cost-based funding?
    a. Zero
    b. 30% or less
    c. 31 to 50%
    d. 51 to 70%
    e. Greater than 70%

25. What percentage of your total revenue are from grants/donations?
    a. Zero
    b. 30% or less
    c. 31 to 50%
    d. 51 to 70%
    e. Greater than 70%

26. What percentage of your total revenue are from for profit ventures?
    a. Zero
    b. 30% or less
    c. 31 to 50%
    d. 51 to 70%
    e. Greater than 70%

Role Changes

27. Do you offer any alternative treatment services?
    a. Holistic or wellness programs (smoking cessation, fitness, etc.)
    b. Subcontracting services
    c. Other_____

28. Do you operate any of the following enterprises?
    a. Equipment or property rental
    b. Sale or lease of services (staff, computer programs, etc.)
    c. Training or consulting services
    d. Operation of other non-mental health enterprises
    e. Property development
    f. Other _____

29. Did you implement any of the following in the last 10 years (circle all that apply)?
    a. Intensive outpatient services
    b. Psychiatric rehabilitation
    c. Telemedicine
    d. Assertive community treatment
    e. Other _____
    f. Inpatient or residential services
    g. Acute partial hospitalization
    h. Peer specialists/consumer focused services
    i. Mobile therapy/medication

30. Have you eliminated or substantially decreased any of the following in the last 10 years?
    a. Community education programs
    b. Case management
    c. None
    d. Charity care
    e. Nursing services
    f. Other core services_____

31. How many years has the Executive Director/CEO been employed at this center _____

32. What is the primary degree held by the Executive Director?
    a. Business/management
    b. Public Administration
    c. Social Work
    d. Psychology
    e. Psychiatry
    f. Other _____

33. Have you increased the number of any of the following employee types in the last 10 years (circle all that apply)?
    a. Licensed social workers
    b. Licensed counselors
    c. Psychologists
    d. CRNP/PA
    e. Consumers/former consumers
    f. Other_____

34. Have you decreased the number of any of the following employee types in the last 10 years (circle all that apply)?
    a. Bachelor's level therapists
    b. RNs
    c. Other _____

35. What is the average turnover rate for your employees?
    a. Less than 10%
    b. 11 to 20%
    c. 21 to 30%
    d. 31 to 40%
    e. 41 to 50%
    f. over 50%

36. What is the average length of service for employees in years?
    a. Less than 5 years
    b. 6 to 8 years
    c. 9 to 11 years
    d. 12 to 15 years
    e. 16 to 20 years
    f. Over 20 years

<u>Structural Changes</u>

37. Has you entered into any joint ventures or mergers in the last 10 years (circle all that apply)?
    a. Physical health care
    b. Residential services
    c. Drug and alcohol services
    d. Government entity
    e. For profit organization
    f. Integrated Network
    g. Other _____

Outcomes Measurement

38. Do you have any of the following programs (circle all that apply)?
    a. Quality assurance program
    b. Utilization review/utilization management
    c. Evidenced based practices
    d. Other _____
    e. Outcomes measurement system
    f. Consumer outcomes surveys
    g. None

Political Issues

39. Have you implemented any of the following in the last 10 years (circle all that apply)?
    a. Lobbying activities
    b. Support of political action committees
    c. Regular interaction with representatives
    d. Creation of a web site
    e. Other _____

Return completed response form by _____ to: Ann Williams
c/o Community Guidance Center
793 Old Route 119 Highway N
Indiana, PA 15701

Responses to this form will be maintained at the highest level of confidentiality.
No specific information about an individual organization will be released for any purposes.

If you would like summary information from the completed study, please include the contact information below. Results will be mailed after all information is reviewed.

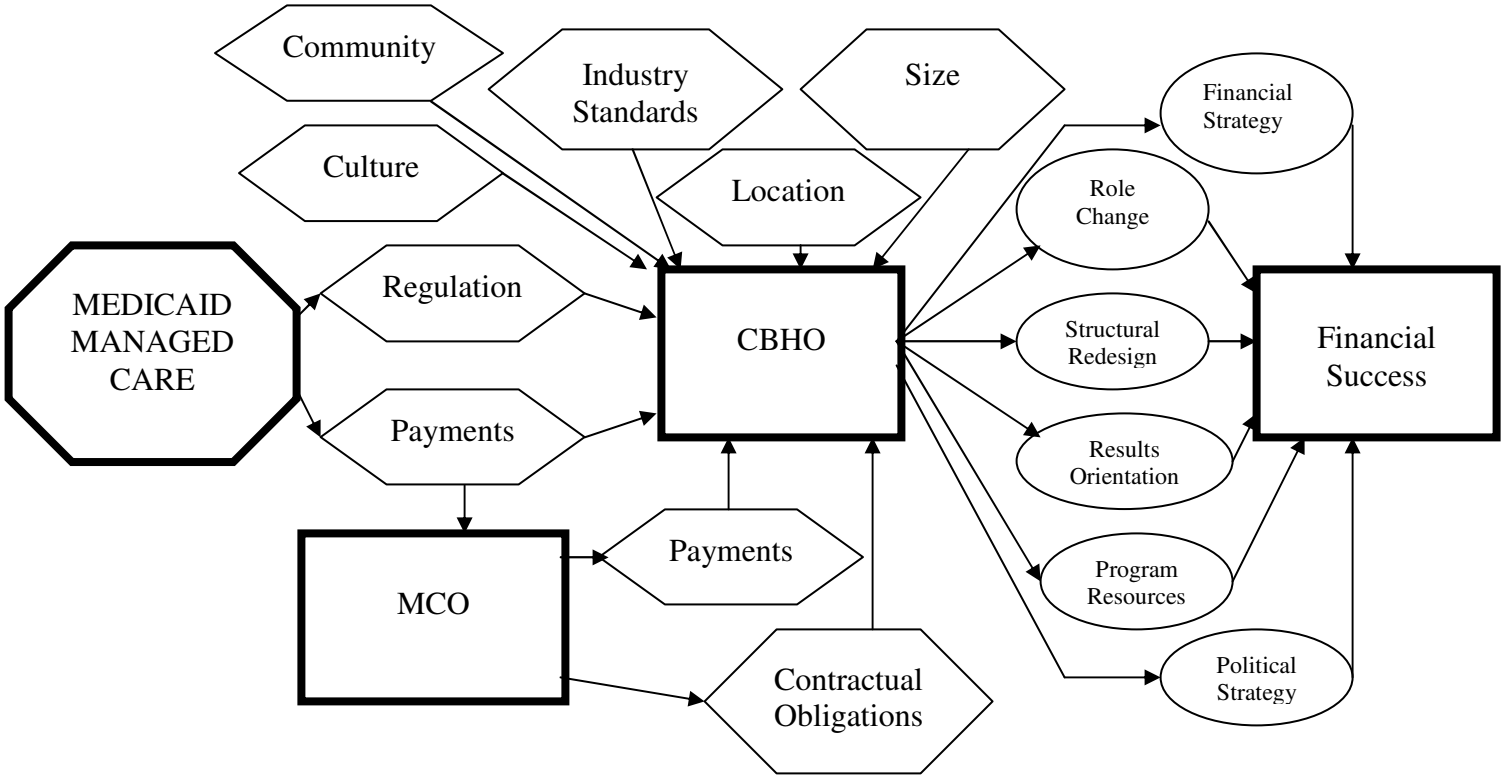
Name: _____

Organization: _____

Address: _____

_____

Appendix B
Research Model



Appendix C

Table of Survey Questions and Variables

Independent Variable	Other Predictor Variables	Dependent Variables	Strategy	Survey Question
Medicaid Managed Care				Demographic 13, 14 Resource 22
	CBHO Definition			Demographic 4, 5, 15
	Geographic Location			Demographic 1, 13
	Organization Category			Demographic 2
	Number of employees			Demographic 6, 8
	Unionization			Demographic 7, 8
	State Location			Demographic 16
	Turnover			Role 36
	ALOS			Role 37
	CEO Tenure			Role 32
	CEO Degree			Role 33
	Receptivity			Role 38
	Meet Benchmarks			Role 39
	Meet Document Requirements			Role 40
	Turnover Increase			Role 41
		Access	Financial Strategy	Financial 17,18
		Productivity Benchmark	Financial Strategy	Financial 19,20,21
		Payor Mix	Program Resources	Resources 23, 24, 25, 26, 27
		Increase in Staff	Program Resources	Role 34
		Decrease in Staff	Program Resources	Role 35
		New Services	Program Resources	Role 30
		Decreased Services	Program Resources	Role 31
		Alternative Services	Role Changes	Role 28
		Enterprise	Role Changes	Role 29
		Integration	Structural Redesign	Structure 42
		Outcomes	Results Orientation	Outcomes 43,44
		EBP	Results Orientation	Outcomes 45
		Political	Political Strategies	Political 46
		Gross Revenue		Demographic 10
		Gross Revenue Change		Demographic 9
		Net Profit		Demographic 12
		Net profit Change		Demographic 11

Appendix D
Cover Letter

Indiana University of Pennsylvania
Department of Sociology
Indiana, PA 15705

Dear Chief Executive Officer:

I am writing to ask your assistance in acquiring valuable information concerning the survival of community behavioral health organizations (CBHOs) in the managed care environment. Many CBHOs across the nation have experienced substantial changes to funding and operations as a result of the advent of Medicaid managed care programs. Others stand at the brink of significant Medicaid reform. All face daily challenges to their survival.

I am a doctoral student in the Administrative and Leadership Studies program at Indiana University of Pennsylvania. I am conducting a study of CBHOs as part of my doctoral research to assess the changes precipitated by Medicaid reform and to accumulate information regarding effective survival strategies employed by CBHOs. I am also the Chief Executive Officer (CEO) for the Community Guidance Center, a community behavioral health organization in Pennsylvania. I believe that this information will be valuable to all of us as we struggle to create appropriate benchmarks, incorporate new ideas for funding, and deliver quality services.

I am asking you to complete the enclosed brief survey by January 31, 2010. Alternatively, you may send your email address to: annicgc@yahoo.com **and I will send you the direct link to take the survey on-line.**

Participation is voluntary and all responses will be kept strictly confidential and individual information will not be reported or shared with others. I will, however, be happy to share the aggregated results of this study with you upon completion if you provide your contact information on the separate enclosed sheet. You may also request a copy by emailing me at annicgc@yahoo.com**. Contact information will be retained separately from the actual survey responses to maintain confidentiality of your responses.**

Please complete the response form and return it in the enclosed, self-addressed, stamped envelope to:

Ann Williams

Doctoral Student

Indiana University of Pennsylvania

793 Old Route 119 Highway North

Indiana, PA 15701

Email: ANNICGC@yahoo.com

Telephone: 724-465-5576, ext. 231

Project Director:
Dr. Susan Boser
Indiana University of Pennsylvania
Associate Professor
Department of Sociology
102 McElhaney
Indiana, PA 15705
Phone: 724-357-1291

This project has been approved by the Indiana University of Pennsylvania Institutional Review Board for the Protection of Human Subjects (Phone: 724/357-7730).

Thank you in advance for your cooperation and assistance in providing this important information. Please contact me if you have any questions or require additional information.

Sincerely,

Ann Williams
Doctoral Student
Indiana University of Pennsylvania

Enc.: 1

Appendix E
Tables of Coefficients

Table 51-*Access Coefficient Table*

Model		Unstandardized Coefficients	Standardized Coefficients	Sig.	Collinearity Statistics
		B	Beta		VIF
2	(Constant)	1.690		0.0075	
	Urban Location	-.154	-.053	0.2645	1.552
	Rural Location	.026	.009	0.4585	1.544
	Independent For-profit	.724	.065	0.1835	1.122
	Government Entity	-.208	-.024	0.368	1.098
	Integrated Nonprofit Network	.364	.086	0.123	1.173
	Integrated For-profit Network	-.309	-.016	0.4105	1.099
	Northeast	-.371	-.114	0.08	1.423
	Southeast	.006	.001	0.4925	1.231
	Southwest	-.131	-.020	0.395	1.236
	West	-.148	-.040	0.308	1.363
	CEO Tenure	.019	.128	0.0385	1.123
	CEO Business Degree	.476	.138	0.0315	1.178
	CEO Other Degree	-.122	-.038	0.2955	1.049
	Turnover Rate	.046	.032	0.3525	1.504
	ALOS	.025	.018	0.41	1.297
	Receptivity to Change	-.053	-.047	0.256	1.107
	Meets Benchmarks	-.009	-.003	0.486	1.287
	Meets Document Requirements	-.034	-.007	0.465	1.253
	Increase in Turnover	.597	.184	0.007	1.195
	Number of Employees	.396	.363	.000	1.314
	Years in Medicaid Managed Care	-.133	-.188	0.007	1.254

Table 52-*Productivity Coefficient Table*

Model		Unstandardized Coefficients	Standardized Coefficients	Sig.	Collinearity Statistics
		B	Beta		VIF
2	(Constant)	2.760		0.0005	
	Urban Location	.169	.048	0.284	1.592
	Rural Location	.722	.194	0.01	1.581
	Independent For-profit	-2.302	-.169	0.0085	1.132
	Government Entity	.290	.027	0.346	1.098
	Integrated Nonprofit Network	-.079	-.015	0.4165	1.183
	Integrated For-profit Network	-1.602	-.068	0.163	1.112
	Northeast	.164	.041	0.3045	1.441
	Southeast	-.795	-.144	0.0275	1.278
	Southwest	.071	.009	0.4515	1.239
	West	-.293	-.064	0.2025	1.369
	CEO Tenure	.025	.136	0.028	1.150
	CEO Business Degree	.080	.019	0.3955	1.191
	CEO Other Degree	-.195	-.049	0.235	1.051
	Turnover Rate	.051	.029	0.3655	1.592
	ALOS	-.016	-.009	0.4525	1.324
	Receptivity to Change	.048	.034	0.316	1.171
	Meets Benchmarks	.354	.082	0.1385	1.312
	Meets Document Requirements	-.197	-.031	0.336	1.256
	Increase in Turnover	.579	.144	0.025	1.222
	Number of Employees	.475	.353	.000	1.359
	Years in Medicaid Managed Care	-.026	-.030	0.3425	1.259

Table 53-*Payor Mix Coefficient Table*

Model		Unstandardized Coefficients	Standardized Coefficients	Sig.	Collinearity Statistics
		B	Beta		VIF
2	(Constant)	8.067		.000	
	Urban Location	-.280	-.093	0.1425	1.547
	Rural Location	-.562	-.178	0.021	1.550
	Independent For-profit	2.152	.185	0.0065	1.122
	Government Entity	-1.083	-.120	0.051	1.098
	Integrated Nonprofit Network	-.310	-.070	0.178	1.174
	Integrated For-profit Network	-2.431	-.121	0.049	1.099
	Northeast	.322	.094	0.1295	1.423
	Southeast	.356	.077	0.1605	1.231
	Southwest	-.801	-.117	0.0655	1.236
	West	-.313	-.081	0.1615	1.362
	CEO Tenure	.010	.064	0.194	1.124
	CEO Business Degree	.330	.092	0.113	1.180
	CEO Other Degree	.180	.053	0.2305	1.051
	Turnover Rate	-.091	-.060	0.241	1.505
	ALOS	.055	.038	0.317	1.296
	Receptivity to Change	-.084	-.071	0.167	1.108
	Meets Benchmarks	.271	.075	0.171	1.286
	Meets Document Requirements	.217	.040	0.3025	1.253
	Increase in Turnover	-.003	.000	0.495	1.196
	Number of Employees	-.247	-.214	0.004	1.314
	Years in Medicaid Managed Care	.053	.072	0.1785	1.252

Table 54-*New Services Coefficient Table*

Model		Unstandardized Coefficients	Standardized Coefficients	Sig.	Collinearity Statistics
		B	Beta		VIF
2	(Constant)	.064		0.4765	
	Urban Location	.200	.039	0.303	1.552
	Rural Location	.874	.165	0.016	1.544
	Independent For-profit	.391	.020	0.379	1.122
	Government Entity	-.740	-.049	0.225	1.098
	Integrated Nonprofit Network	1.068	.142	0.0165	1.173
	Integrated For-profit Network	1.694	.050	0.2175	1.099
	Northeast	1.170	.204	0.003	1.423
	Southeast	.877	.113	0.0495	1.231
	Southwest	2.529	.220	0.0005	1.236
	West	1.986	.304	.000	1.363
	CEO Tenure	-.016	-.059	0.182	1.123
	CEO Business Degree	.328	.054	0.208	1.178
	CEO Other Degree	.257	.045	0.2375	1.049
	Turnover Rate	-.258	-.101	0.0895	1.504
	ALOS	.294	.119	0.0445	1.297
	Receptivity to Change	.024	.012	0.425	1.107
	Meets Benchmarks	-.599	-.099	0.078	1.287
	Meets Document Requirements	-.353	-.039	0.285	1.253
	Increase in Turnover	.417	.073	0.139	1.195
	Number of Employees	1.027	.534	.000	1.314
	Years in Medicaid Managed Care	-.160	-.128	0.032	1.254

Table 55 – *Decreased Services Coefficient Table*

Model		Unstandardized Coefficients	Standardized Coefficients	Sig.	Collinearity Statistics
		B	Beta		VIF
2	(Constant)	.327		0.2095	
	Urban Location	-.032	-.019	0.4125	1.552
	Rural Location	-.047	-.027	0.378	1.544
	Independent For-profit	-.517	-.081	0.1365	1.122
	Government Entity	-.348	-.070	0.169	1.098
	Integrated Nonprofit Network	.069	.028	0.354	1.173
	Integrated For-profit Network	2.352	.213	0.002	1.099
	Northeast	-.258	-.138	0.049	1.423
	Southeast	.038	.015	0.4235	1.231
	Southwest	-.350	-.093	0.1145	1.236
	West	-.334	-.156	0.0275	1.363
	CEO Tenure	-.001	-.015	0.4215	1.123
	CEO Business Degree	-.065	-.033	0.3315	1.178
	CEO Other Degree	-.077	-.041	0.2805	1.049
	Turnover Rate	.077	.092	0.1395	1.504
	ALOS	.182	.225	0.0025	1.297
	Receptivity to Change	-.146	-.224	0.001	1.107
	Meets Benchmarks	.243	.123	0.06	1.287
	Meets Document Requirements	-.020	-.007	0.466	1.253
	Increase in Turnover	.113	.060	0.2135	1.195
	Number of Employees	.077	.122	0.0635	1.314
	Years in Medicaid Managed Care	-.003	-.009	0.4565	1.254

Table 56- *Increased Staff Coefficient Table*

Model		Unstandardized Coefficients	Standardized Coefficients	Sig.	Collinearity Statistics
		B	Beta		VIF
2	(Constant)	-.568		0.029	
	Urban Location	-.140	-.104	0.110	1.552
	Rural Location	.072	.051	0.271	1.544
	Independent For-profit	-.440	-.085	0.121	1.122
	Government Entity	.073	.018	0.401	1.098
	Integrated Nonprofit Network	.021	.011	0.442	1.173
	Integrated For-profit Network	.530	.059	0.203	1.099
	Number of Employees	.043	.084	0.142	1.314
	Northeast	.044	.029	0.361	1.423
	Southeast	-.092	-.044	0.278	1.231
	Southwest	-.045	-.015	0.423	1.236
	West	-.037	-.021	0.393	1.363
	CEO Tenure	.008	.121	0.047	1.123
	CEO Business Degree	.043	.027	0.358	1.178
	CEO Other Degree	.504	.332	0.000	1.049
	Turnover Rate	.165	.244	0.002	1.504
	ALOS	-.014	-.021	0.393	1.297
	Receptivity to Change	.067	.127	0.038	1.107
	Meets Benchmarks	.149	.092	0.115	1.287
	Meets Document Requirements	.110	.046	0.279	1.253
	Increase in Turnover	-.160	-.106	0.078	1.195
	Years in Medicaid Managed Care	.027	.080	0.146	1.254

Table 57-*Decreased Staff Coefficient Table*

Model		Unstandardized Coefficients	Standardized Coefficients	Sig.	Collinearity Statistics
		B	Beta		VIF
2	(Constant)	-.145		0.2485	
	Urban Location	.105	.121	0.0825	1.540
	Rural Location	.184	.204	0.01	1.544
	Independent For-profit	-.113	-.028	0.3515	1.089
	Government Entity	.048	.018	0.401	1.101
	Integrated Nonprofit Network	.132	.104	0.0865	1.177
	Integrated For-profit Network	.065	.011	0.4385	1.102
	Number of Employees	.022	.068	0.1945	1.277
	Northeast	.097	.099	0.1155	1.402
	Southeast	.048	.036	0.319	1.229
	Southwest	-.104	-.053	0.2445	1.213
	West	-.151	-.136	0.048	1.360
	CEO Tenure	-.006	-.122	0.05	1.117
	CEO Business Degree	.002	.002	0.4875	1.179
	CEO Other Degree	-.113	-.115	0.0545	1.048
	Turnover Rate	.126	.291	0.0005	1.514
	ALOS	.037	.088	0.1355	1.296
	Receptivity to Change	.031	.091	0.109	1.107
	Meets Benchmarks	-.196	-.190	0.0085	1.272
	Meets Document Requirements	.035	.023	0.3865	1.250
	Increase in Turnover	.071	.073	0.17	1.189
	Years in Medicaid Managed Care	-.098	-.098	0.0985	1.184

Table 58-*Alternate Therapy Coefficients*

Model		Unstandardized Coefficients	Standardized Coefficients	Sig.	Collinearity Statistics
		B	Beta		VIF
2	(Constant)	-.521		0.017	
	Urban Location	.035	.034	0.344	1.552
	Rural Location	.038	.09	0.338	1.544
	Independent For-profit	.323	.081	0.128	1.122
	Government Entity	-.088	-.029	0.343	1.098
	Integrated Nonprofit Network	-.145	-.095	0.96	1.17
	Integrated For-profit Network	1.042	.152	0.016	1.099
	Number of Employees	.081	.208	0.004	1.314
	Northeast	.30	.258	.001	1.423
	Southeast	.071	.045	.273	1.231
	Southwest	.083	.036	.239	1.236
	West	.388	.291	.000	1.363
	CEO Tenure	-.006	-.107	0.068	1.123
	CEO Business Degree	.004	.003	.485	1.178
	CEO Other Degree	.146	.125	0.035	1.041
	Turnover Rate	-.056	-.108	0.096	1.504
	ALOS	.061	.121	0.058	1.297
	Receptivity to Change	.046	.114	0.055	1.107
	Meets Benchmarks	-.010	-.008	0.53	1.287
	Meets Document Requirements	.261	.142	0.044	1.253
	Increase in Turnover	.288	.247	0.001	1.195
	Years in Medicaid Managed Care	-.010	-.04	0.297	1.254

Table 59-*Enterprise Coefficient Table*

Model		Unstandardized Coefficients	Standardized Coefficients	Sig.	Collinearity Statistics
		B	Beta		VIF
2	(Constant)	-.341		0.144	
	Urban Location	.056	.043	0.31	1.552
	Rural Location	-.007	-.005	0.48	1.544
	Independent For-profit	.287	.057	0.22	1.122
	Government Entity	-.166	-.042	0.282	1.098
	Integrated Nonprofit Network	-.042	-.021	0.387	1.173
	Integrated For-profit Network	1.671	.191	0.045	1.099
	Number of Employees	.159	.318	.000	1.314
	Northeast	-.252	-.170	.020	1.423
	Southeast	-.116	-.058	.227	1.231
	Southwest	-.161	-.054	.241	1.236
	West	.09	.053	.256	1.363
	CEO Business Degree	-.201	-.128	0.04	1.178
	CEO Other Degree	.006	.004	0.476	1.049
	Turnover Rate	-.011	-.016	0.425	1.504
	ALOS	.054	.084	0.143	1.297
	Receptivity to Change	.022	.044	0.275	1.107
	Meets Benchmarks	-.167	-.106	0.089	1.287
	Meets Document Requirements	.584	.248	0.001	1.253
	Increase in Turnover	.005	.003	0.482	1.195
	Years in Medicaid Managed Care	-.005	-.015	0.421	1.254

Table 60-*Integration Coefficient Table*

Model		Unstandardized Coefficients	Standardized Coefficients	Sig.	Collinearity Statistics
		B	Beta		VIF
2	(Constant)	.157		0.315	
	Urban Location	.049	.038	0.327	1.552
	Rural Location	.083	.061	0.246	1.544
	Independent For-profit	.225	.045	0.276	1.122
	Government Entity	-.325	-.084	0.133	1.098
	Integrated Nonprofit Network	.120	.063	0.209	1.173
	Integrated For-profit Network	-.610	-.071	0.173	1.099
	Number of Employees	.166	.339	.000	1.314
	Northeast	-.108	-.074	.174	1.423
	Southeast	-.035	-.018	.413	1.231
	Southwest	.099	.034	.337	1.236
	West	.106	.064	.223	1.363
	CEO Tenure	.-.001	-.017	0.410	1.123
	CEO Business Degree	.027	.018	0.411	1.178
	CEO Other Degree	.081	.056	0.223	1.049
	Turnover Rate	-.092	-.142	0.054	1.504
	ALOS	-.125	-.199	0.008	1.297
	Receptivity to Change	.032	.063	0.201	1.107
	Meets Benchmarks	-.154	-.100	0.111	1.287
	Meets Document Requirements	.279	.121	0.067	1.253
	Increase in Turnover	.025	.017	0.413	1.195
	Years in Medicaid Managed Care	.015	.047	0.281	1.254

Table 61-*Outcomes Coefficient Table*

Model		Unstandardized Coefficients	Standardized Coefficients	Sig.	Collinearity Statistics
		B	Beta		VIF
2	(Constant)	1.117		.0065	
	Urban Location	-.085	-.048	.295	1.552
	Rural Location	-.337	-.184	.021	1.544
	Independent For-profit	.770	.114	.069	1.122
	Government Entity	1.029	.195	.005	1.098
	Integrated Nonprofit Network	-.029	-.011	.443	1.173
	Integrated For-profit Network	-.772	-.066	.291	1.099
	Number of Employees	.124	.187	.013	1.314
	Northeast	-.180	-.091	.145	1.423
	Southeast	-.151	-.056	.242	1.231
	Southwest	.293	.074	.179	1.236
	West	-.161	-.071	.199	1.363
	CEO Tenure	.006	.062	.210	1.123
	CEO Business Degree	.020	.009	.452	1.178
	CEO Other Degree	.148	.075	.256	1.049
	Turnover Rate	-.001	-.002	.492	1.504
	ALOS	-.039	-.046	.289	1.297
	Receptivity to Change	-.053	-.077	.155	1.107
	Meets Benchmarks	-.028	-.013	.425	1.287
	Meets Document Requirements	.266	.085	.147	1.253
	Increase in Turnover	-.127	-.064	.208	1.195
	Years in Medicaid Managed Care	.051	.119	.072	1.254

Table 62- *EBP Coefficient Table*

Model		Unstandardized Coefficients	Standardized Coefficients	Sig.	Collinearity Statistics
		B	Beta		VIF
2	(Constant)	.231		0.263	
	Urban Location	-.092	-.060	0.234	1.552
	Rural Location	-.050	-.031	0.356	1.544
	Independent For-profit	.067	.011	.437	1.122
	Government Entity	.216	.047	0.254	1.098
	Integrated Nonprofit Network	-.054	-.024	0.273	1.173
	Integrated For-profit Network	-1.071	-.105	0.07	1.099
	Number of Employees	.199	.343	0.00	1.314
	Northeast	-.031	-.018	.263	1.423
	Southeast	-.505	-.215	.0003	1.231
	Southwest	-.230	-.066	.190	1.236
	West	-.160	-.081	.153	1.363
	CEO Tenure	.007	.094	.097	1.123
	CEO Business Degree	-.298	-.163	0.014	1.178
	CEO Other Degree	.080	.046	0.252	1.049
	Turnover Rate	.049	.063	0.223	1.504
	ALOS	-.061	-.082	0.144	1.297
	Receptivity to Change	-.051	-.085	0.117	1.107
	Meets Benchmarks	.125	.068	0.187	1.287
	Meets Document Requirements	.277	.101	0.091	1.253
	Increase in Turnover	.022	.012	0.433	1.195
	Years in Medicaid Managed Care	-.002	-.004	0.478	1.254

Table 63-*Political Coefficient Table*

Model		Unstandardized Coefficients	Standardized Coefficients	Sig.	Collinearity Statistics
		B	Beta		VIF
2	(Constant)	-.167		0.295	
	Urban Location	-.118	-.093	0.143	1.552
	Rural Location	-.054	-.041	0.318	1.544
	Independent For-profit	.493	.101	0.086	1.122
	Government Entity	.144	.038	0.302	1.098
	Integrated Nonprofit Network	.139	.075	0.162	1.173
	Integrated For-profit Network	.234	.028	0.352	1.099
	Number of Employees	.140	.291	.000	1.314
	Northeast	.008	.006	.473	1.423
	Southeast	-.006	-.003	.465	1.231
	Southwest	.002	.001	497	1.236
	West	.061	.038	.322	1.363
	CEO Tenure	-.007	-.102	0.084	1.123
	CEO Business Degree	.210	.139	0.034	1.178
	CEO Other Degree	-.339	-.238	.001	1.049
	Turnover Rate	-.053	-.084	0.164	1.504
	ALOS	.008	.012	0.439	1.297
	Receptivity to Change	.013	.026	0.360	1.107
	Meets Benchmarks	.043	.028	0.309	1.287
	Meets Document Requirements	.169	.075	0.169	1.253
	Increase in Turnover	.081	.057	0.229	1.195
	Years in Medicaid Managed Care	.030	.097	0.107	1.254

Table 64- *Gross Revenue Coefficient Table*

Model		Unstandardized Coefficients	Standardized Coefficients	Sig.	Collinearity Statistics
		B	Beta		VIF
2	(Constant)	1.299		0.0165	
	Years in Medicaid Managed Care	.140	.160	0.001	1.084
	Access	.203	.164	0.002	1.311
	Payor Mix	-.111	-.093	0.042	1.154
	Alternative Services	.092	.024	0.331	1.194
	Productivity	.342	.340	.000	1.240
	Enterprise	.218	.136	0.0075	1.252
	New Services	.117	.170	0.0025	1.416
	Decreased Services	.209	.097	0.036	1.155
	Increased Staff	.241	.067	0.1095	1.173
	Decreased Staff	.154	.040	0.228	1.138
	Integration	.054	.031	0.285	1.229
	Outcomes	.202	.056	0.148	1.170
	EBP	.182	.043	0.2135	1.172
	Political	.218	.051	0.171	1.153

Table 65-*Gross Revenue Change Coefficient Table*

Model		Unstandardized Coefficients	Standardized Coefficients	Sig.	Collinearity Statistics
		B	Beta		VIF
2	(Constant)	.280		0.1275	
	Years in Medicaid Managed Care	.011	.042	0.27	1.083
	Access	-.095	-.252	0.0005	1.295
	Payor Mix	-.016	-.044	0.268	1.153
	Alternative Services	.075	.064	0.191	1.204
	Productivity	.016	.052	0.239	1.231
	Enterprise	.034	.071	0.1705	1.256
	New Services	-.030	-.143	0.0355	1.422
	Decreased Services	.080	.122	0.044	1.151
	Increased Staff	.223	.203	0.0025	1.177
	Decreased Staff	.011	.009	0.4485	1.141
	Integration	-.034	-.065	0.1895	1.227
	Outcomes	.122	.112	0.0605	1.176
	EBP	.117	.090	0.106	1.167
	Political	-.032	-.025	0.3645	1.153

Table 66-*Net Revenue Coefficient Table*

Model		Unstandardized Coefficients	Standardized Coefficients	Sig.	Collinearity Statistics
		B	Beta		VIF
2	(Constant)	.626		0.2085	
	Years in Medicaid Managed Care	.111	.124	0.0285	1.084
	Access	.024	.019	0.396	1.316
	Payor Mix	-.028	-.023	0.3645	1.154
	Alternative Services	-.002	.000	0.4965	1.196
	Productivity	.145	.142	0.021	1.240
	Enterprise	.092	.056	0.21	1.249
	New Services	.099	.141	0.03	1.428
	Decreased Services	.111	.051	0.2265	1.161
	Increased Staff	.627	.170	0.0065	1.180
	Decreased Staff	.028	.007	0.458	1.141
	Integration	.257	.146	0.018	1.229
	Outcomes	.199	.055	0.2085	1.167
	EBP	.230	.054	0.214	1.170
	Political	.063	.014	0.415	1.155

Table 67-*Net Revenue Change Coefficient Table*

Model		Unstandardized Coefficients	Standardized Coefficients	Sig.	Collinearity Statistics
		B	Beta		VIF
2	(Constant)	-.049		0.4495	
	Years in Medicaid Managed Care	-.007	-.019	0.4	1.084
	Access	-.037	-.065	0.211	1.283
	Payor Mix	-.021	-.041	0.2975	1.153
	Alternative Services	-.154	-.087	0.1325	1.197
	Productivity	-.004	-.009	0.4555	1.236
	Enterprise	-.055	-.077	0.168	1.248
	New Services	.032	.101	0.1175	1.424
	Decreased Services	-.045	-.047	0.269	1.153
	Increased Staff	.105	.064	0.2065	1.208
	Decreased Staff	.125	.072	0.172	1.147
	Integration	.059	.077	0.168	1.253
	Outcomes	.190	.118	0.0625	1.157
	EBP	.145	.076	0.163	1.169
	Political	-.047	-.025	0.373	1.161