

A CASE STUDY OF NORTH TEXAS AREA COMMUNITY HEALTH CENTERS, INC.
AND THE IMPLEMENTATION OF INTEGRATED HEALTH CARE

by

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Abstract

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The purpose of this case study was to examine the implementation process of an integrated health care model in a primary care setting that serves a primarily low-income, Latino population. The main unit of analysis was semi-structured interviews that were conducted with seven clinical and administrative staff members. Additional units of analysis included direct observations, the grant application for the program, clinic reports and other related documents. A grounded theory approach was used to analyze the interviews. The results indicated that adequate training and preparation, buy-in from key personnel, possible communication barriers, tools for systematic follow-up and measurement, and organizational stability can greatly affect the implementation of an integrated health care model. Further research will need to be conducted to understand how challenges in implementation may affect health outcomes for patients.

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Chapter 1

Introduction

Research has shown that only about 33% of patients with a mental health disorder receive adequate treatment, demonstrating the need for increased access to and demand for treatment (Kessler et al., 2005). Community health centers are continuing to grow as providers of mental health treatment services and can provide a number of benefits in treating mental disorders including "improved coordination and communication between behavioral and medical providers and reduced stigma for patients receiving treatment" (Druss et al., 2006, p. 1783). The collaborative care model was developed as a method to address mental health in primary care settings by managing mental disorders as a chronic disease rather than treating acute symptoms (Thielke, Vannoy, & Unutzer, 2007). While collaborative care has been shown to be more effective than standard primary care in improving depression outcomes in a number of studies, a need for more research remains on understanding how to successfully translate intervention research to real-world program implementation (Gilbody, Bower, Fletcher, Richards, & Sutton, 2006; Unutzer, Powers, Katon, & Langston, 2005).

Chapter 2

Literature Review

Treating Depression with Integrated Health Care

In an effort to design a new care system to treat patients with chronic illnesses, Wagner, Austin, and Von Korff (1996) developed the Chronic Care Model (CCM) composed of key practice elements to improve patient outcomes. The authors identified five general areas that were important components of improving chronically-ill patient outcomes: the use of plans and protocols, the reorganization of practice to meet patient needs, patient education based on the patients' needs, an expert system to administer provider education and consultation, and supportive information systems to assist with outcome monitoring, care planning, reminders, and feedback (Wagner et al., 1996). In an examination of 82 articles studying the effects of the Chronic Care Model, Coleman, Austin, Brach and Wagner (2009) found that practices using the CCM "generally improve the quality of care and the outcomes for patients with various chronic illnesses" (p. 81).

The Chronic Care Model applied to the treatment of mental disorders in primary care settings has become known as integrated health care or collaborative care (Thielke et al., 2007; Unutzer, Schoenbaum, Druss, & Katon, 2006). According to Thielke et al. (2007), collaborative care differs from traditional primary care in two essential ways: the use of care managers and proactive follow-up and systematic tracking of outcomes. Collaborative care is more than just co-locating primary care providers and mental health specialists; it is the collaboration of primary care providers and specialty mental health care providers to develop and adjust treatment plans based on the measurement of symptom-related outcomes (Thielke et al., 2007).

The care manager in a collaborative care model plays the essential role of managing patients' mental disorders (Thielke et al., 2007). In other words, care managers function to "support effective collaboration between patients, primary care providers, and consulting mental health specialists, facilitating treatment changes indicated by systematic tracking of clinical outcomes according to evidence-based treatment guidelines" (Thielke et al., 2007, p. 582). Unutzer et al. (2001) describes care managers as creating a therapeutic alliance with patients and providing the "bulk of intervention specific care" (p. 788) through patient education, regular follow-up contacts with patients, the delivering of brief psychotherapy to patients, and participation in team meetings with primary care providers and team psychiatrists.

A meta-analysis of 32 studies of collaborative care models conducted between 2004 and 2009 showed meaningful improvements in depression outcomes for a wide range of populations, settings, and organizations. The researchers found that a collaborative care model is effective for patients diagnosed with depression in improving depression symptoms, adherence to treatment, response to treatment, remission of symptoms, recovery from symptoms, quality of life, and satisfaction with care (Thota et al., 2012). Research has also shown that physicians, therapists, and patients support the collaborative care model with the providers believing that it is the ideal patient care model (Taylor et al., 1999).

One model of integrated care is Project IMPACT (Improving Mood: Providing Access to Collaborative Treatment for Late-Life Depression), developed by a group of experts as a disease management program for late-life depression (Unutzer et al., 2001). In the research study, Unutzer et al. (2001) describes the IMPACT approach to treating depression as collaborative and stepped care. The collaborative care aspect of the model is described as a team of clinicians to treat depression. This team includes the patient,

the primary care physician (PCP), the depression clinical specialist (DCS), and a team psychiatrist. The authors also described the stepped care approach taken as a 3-step treatment algorithm. In Step 1, patients are prescribed an antidepressant by their PCP and are regularly followed-up with by the DCS who provides patient education, psychotherapy in the form of Problem Solving Treatment, and measures the patient's depressive symptoms using the PHQ-9 (Kroenke, Spitzer, & Williams, 2001). Patients who do not exhibit improvement after Step 1 move to Step 2, which involves a change in treatment, usually a switch to a different antidepressant. Step 3 is implemented when patients are still not responding to treatment, and involves a psychiatric consultation with the team psychiatrist and a combination of treatments (Unutzer et al., 2001).

In a study using 1,801 patients aged 60 years or older at 18 primary care clinics from eight health care organizations in five states, 45% of patients treated with the IMPACT model had a 50% or greater reduction in depressive symptoms after 12 months of treatment compared with the 19% of usual care patients. Patients treated with the IMPACT model also reported more satisfaction with depression care, lower depression severity, less functional impairment, and greater quality of life (Unutzer et al., 2002). Adaptations of the IMPACT model have also been effective in reducing depressive symptoms for low-income Latinos with diabetes, low-income patients with cancer, adolescents, and patients with comorbid major depression and/or dysthymia and diabetes mellitus (Ell et al., 2008; Gilmer, T.P., Walker, C., Johnson, E.D., Philis-Tsimikas, A., & Unutzer, J., 2008; Katon, et al., 2004; Richardson, L., McCauley, E., & Katon, W.J., 2009).

Depression in the Latino Population

Prevalence

It is estimated that the lifetime psychiatric disorder prevalence for Latinos residing in the United States is 28.1% for men and 30.2% for women. Latinos are even more likely to experience a psychiatric disorder if they are born in the United States, are proficient in the English language, or are third-generation Latinos (Alegria et al., 2007). Compared to Caucasians, Latinos are more likely to meet criteria for a psychiatric disorder and have higher prevalence of several anxiety disorders, and after controlling for the protective effects of interpersonal functioning, Latinos also have a higher prevalence of current mood disorders. The difference of rates of psychiatric disorders between the two groups has been found to be partially mediated by Latinos' heightened problems meeting their basic needs (Hernandez, Plant, Sachs-Ericsson, & Joiner, 2005).

Treatment Issues

The 2010 National Healthcare Disparities Report showed that in the year 2008, non-Latino whites were twice as likely to receive mental health treatment as Latinos (U.S. Department of Health and Human Services, Agency for Healthcare Research and Quality, 2011). Showing that this disparity has grown over time, Cook, McGuire, and Miranda (2007) found that the disparity between whites and Latinos for receiving mental health care increased from 2000-01 to 2003-04. Contributing factors of mental health care disparities between whites and ethnic minorities include providers' bias and stereotyping, providers' "statistical discrimination," provider and geographic differences, and health insurance differences (McGuire & Miranda, 2008). Research also shows that racial and ethnic minorities have less access to mental health services than whites and that Latinos underutilize mental health services (Cabassa, Zayas, & Hansen, 2006; U.S. Department of Health and Human Services, 1999).

While Latinos recognize and label depression clearly, they do not initially see depression as an illness in need of mental health care (Martinez Pincay & Guarnaccia, 2007). Latino immigrants perceive the causes of depression as interpersonal and social factors that stem from their social and economic positions in the United States. These perceptions may also influence the treatment preferences of the population, which have been found to be a slight preference of counseling and social interventions rather than antidepressant medications (Cabassa, Lester, & Zayas, 2007; Martinez Pincay & Guarnaccia, 2007). Latinos identify many barriers to mental health services for depression including lack of insurance, costs of treatment and medications, lack of Spanish-speaking staff, stigma, and concerns about immigration status (Martinez Pincay & Guarnaccia, 2007). These barriers to treatment can lead to limited or non-preferred depression treatment. Additionally, Spanish-speaking Latinos are less likely than English speaking Latinos to receive preferred depression treatment, which may be due to language or cultural barriers (Dwight-Johnson et al., 2010).

Integrated Health Care with the Latino Population

The President's New Freedom Commission on Mental Health (2003) states that racial and ethnic minority populations (such as Latinos) are more likely to seek out and receive mental health services from primary care settings for a number of reasons including stigma surrounding mental illness, the level of trust with a family physician and lack of access to mental health specialists. Therefore, integrated behavioral and physical health care (also known as collaborative care) in a primary care setting is considered to be more accessible and less stigmatizing than receiving services from specialty health care settings (Sanchez, Chapa, Ybarra, & Martinez, 2012). Research has shown that a collaborative care model in a primary care setting that promotes patient activation and provides on-site counseling greatly increases the likelihood that low-income Latino

patients receive preferred depression treatment (Dwight-Johnson et al., 2010). This is an important factor in depression care emphasized by the Institute of Medicine (2001), who reports that addressing patients' treatment preferences is an essential component in improving quality of care.

In a review of depression treatments for Latino adults in primary care settings, Cabassa and Hansen (2007) found that treatments were more effective when they employed key components of a collaborative care model: systematic screening or case finding measures, culturally/linguistically adapted patient education materials, protocol-based psychosocial treatments delivered by trained clinicians, treatment decisions by a collaborative interdisciplinary team, and systematic monitoring of treatment progress using standardized measures. Collaborative Care has been found to be significantly more effective than care as usual in increasing rates of depression care, lowering depression severity, and lessening health-related functional impairment in older adult Latinos (Areal et al., 2005). Studies have also shown that the collaborative care model is effective in reducing depressive symptoms and improving functional outcomes for low-income Latinos with diabetes (Gilmer et al., 2008; Ell et al., 2010).

Implementation of Integrated Health Care in a Primary Care Setting

Primary care settings are the optimal locations for integration of behavior and physical health care because they are often the first point of contact for health issues, making them the “gateway to identifying undiagnosed or untreated behavioral health conditions” (Sanchez et al., 2012, p. 5). Primary care settings that wish to successfully implement an integrative health care model would need to incorporate early screening, identify and treat behavioral health disorders, and provide a culturally diverse workforce that treats the whole patient (Sanchez et al., 2012). Evaluations of implementations of integrated health care in primary care settings in Texas have shown that creating new

infrastructures is easier to do rather than restructuring existing ones, programs that did not fully integrate their care models and relied more on a referral based process experienced more challenges, leadership buy-in (including a "champion" physician) led to more success, the lack of psychiatric consultation led to more challenges, and management turnover is a major challenge for organizations trying to implement an integrated health care model (Hogg Foundation for Mental Health, 2012).

IMPACT researchers evaluated the implementation of the IMPACT model from the perspectives of the Depression Clinical Specialists (DCSs) from 18 primary care practices around the United States. Qualitative methods of focus groups and interviews revealed key themes that led to successful integration, defined as "the creation of a primary care based environment in which patients, providers, and the health care system successfully interact for the improvement of depression outcomes" (Oishi et al., 2003, p. 79). Results of the study showed necessary components of a collaborative care model that made successful integration possible according to DCSs: a multidisciplinary team with a clearly-defined care manager at the center, a care manager well-versed in depression treatment models, a clinical care manager who engages patients using education and behavioral strategies, case presentations at regular team meetings, expert input by the consulting psychiatrist, the use of reliable tracking methods for follow-up, and regular feedback on patient outcomes communicated to team members using simple assessment tools. Features that facilitated integration included clear goals and role definitions, thorough training supported by a manual, explicit protocols for care management, psychiatrist attendance of weekly team meetings, DCS visibility in the practice setting, persistent relationship building with clinic staff, clear boundaries in maintaining a care manager role, and sufficient access to information and support for the DCS (Oishi et al., 2003).

The IMPACT researchers also identified aspects of integration that would need further attention when moving the model from a research paradigm to a real world setting. These aspects included case finding, intervention length and caseload, documentation, DCS support, and psychiatric consultation (Oishi et al., 2003). Based on the conclusions from the IMPACT researchers, lack of addressing those aspects may lead to integration barriers. The Hogg Foundation for Mental Health (2008) also helps to identify some of the barriers that may be present when trying to integrate health care into primary care settings. These areas of barriers include clinical, organizational, policy, and financing. Clinical barriers can include the lack of understanding between primary care and mental health providers and an unwillingness to collaborate with each other. Organizational barriers are a lack of necessary infrastructure and clinic design to allow for collaboration. Integrated health care settings can also run into policy barriers surrounding the sharing of patient information and inability to treat certain mental health disorders. The most frequent barriers cited in integration are financial barriers which include funding, billing, and reimbursement (Hogg Foundation for Mental Health, 2008).

In a study that surveyed 84 organizations that provided behavioral health services in primary care settings in Texas, Sanchez, Thompson, and Alexander (2010) identified clinical, organizational, and financial barriers experienced by organizations attempting to integrate physical and mental health care. The authors found that the most common clinical barriers were “providers’ limited training in treatment of psychiatric disorders” and “providers’ lack of training in evidence-based behavioral health treatments” (Sanchez et al., 2010, p. 30), while the most common organizational barriers were workforce shortages and the limited time of physicians. The most common financial barriers cited by the organizations revolved around reimbursement issues including a

lack of reimbursement for consultation between primary care and behavioral health providers and reimbursement for paraprofessionals' services (Sanchez et al., 2010).

Chapter 3

Purpose of the Study

The purpose of this study is to examine the implementation of an integrated health care model at a community clinic in Fort Worth, Texas that primarily serves a low-income, Latino population. Although research has shown that collaborative care models are successful in the treatment of depression for Latino populations (Arean et al., 2005; Ell et al., 2010; Gilmer et al., 2008), more research is needed on how these models are implemented in specific settings. Furthermore, implementation research on integrated health care models has primarily focused on the perspectives of clinical staff members in multiple settings, such as Oishi et al. (2003), rather than from a multi-disciplinary perspective for one particular organization type or setting. Therefore, this case study seeks to explore the process of implementation of an integrated health care model for providing mental health treatment in a Federally Qualified Health Center from the perspectives of clinical and administrative staff members. Additionally, this study will identify perceived implementation barriers that were present to better understand how these barriers may have affected the implementation process.

Chapter 4

Methods

For the purposes of this study, an embedded single-case study design was chosen due to the examination of one of several programs within a single organization (Yin, 2003). Critical to the design of case studies is the use of multiple sources of data (Creswell, 2007). The main unit of analysis for this study included seven interviews with staff members who were involved in the implementation of a new integrated health care program. In addition to the interviews, other units of analysis included direct observations, thorough review of a grant application for the program, and review of reports and other clinic documents that describe the demographics of the population served, services offered, and other operational descriptions.

The Setting: NTACHC

In August 2012, The University of Texas at Arlington School of Social Work's iCAP (Innovative Community Academic Partnership) program awarded funding to four projects for the 2012-2013 academic year. Of these projects, METRIHC (Measuring and Tracking Integrated Health Care) formed a partnership between The University of Texas at Arlington, North Texas Area Community Health Center, Inc. (NTACHC), and MHMR of Tarrant County to implement a measurement-based integrated health care model to treat depression in an adult primary care setting.

North Texas Area Community Health Centers, Inc. (NTACHC) operates three clinics in Fort Worth, Texas: the Northside Community Health Center (main clinic with administrative offices), Southeast Community Health Center, and Wise County Community Health Center located in Decatur, Texas. NTACHC is the only Federally Qualified Health Center (FQHC) located in Fort Worth and was first funded in 2006

(Texas Department of State Health Services, 2012). FQHCs provide health care services to underserved communities, including Medicare, Medicaid, CHIP, insured, and uninsured individuals. Benefits that FQHCs receive include federal grant funds, enhanced payment for services to Medicaid and Medicare patients, Federal Tort Claim coverage, 340b drug pricing, and access to National Health Service Corps (Texas Department of State Health Services, 2012). NTACHC is governed by a nine-member board, the majority of whom (at least 51%) are patients of the clinic per federal requirements.

The Northside Community Health Center is located in the center of ten federally designated health professional shortage census tracts in Fort Worth (U.S. Department of Health and Human Services, 2013). In 2012, NTACHC served 10,782 unduplicated patients for a total of 27,963 patient visits. Of those 10,782 patients, 81% of them were Hispanic and 69% of them were uninsured. At least 65% of NTACHC's patients in 2012 lived below poverty level (North Texas Area Community Health Centers, Inc., 2013).

Design of the METRIHC program

The following specifications for the METRIHC project are based on the proposal application submitted to the University of Texas at Arlington School of Social Work ICAP program (Sanchez & Trivedi, 2012). The two core components of the METRIHC project are the use of an integrated health care team and use of measurement-based care. Members of the integrated health care team include the primary care providers, the care manager, a consulting psychiatrist, and the patients and their family members/loved ones. Working together, these team members develop and execute treatment plans for patients who are enrolled in the METRIHC program.

Measurement-based care in METRIHC uses the Patient Health Questionnaire (PHQ-9) and the Generalized Anxiety Disorder Assessment (GAD-7) (Spitzer, Kroenke, Williams, & Lowe, 2006) to assess patient progress in the METRIHC program and guide

treatment plans. These two measures are given to patients at every in-person or telephone session with the Care Manager. These measures are systematically documented by the Care Manager and communicated promptly to the integrated health care team using numbers and graphs.

The Care Manager, who was hired under the position of "Care Coordinator," is a Licensed Masters Social Worker who received specialized training in the collaborative care model. This important integrated health team member provides depression care management characterized by acute care, patient education on depression and its treatment, and brief psychosocial interventions. Depression care management provided by the Care Manager includes providing in-person clinical appointments and/or phone based care to review clinicians' treatment plans, assuring patient understanding of recommended treatment, addressing barriers to the proposed plan and supporting development of solutions to barriers, and providing recommendations for maintenance of wellness between visits. The Care Manager also acts as a liaison between the consulting psychiatrist and the primary care physician, communicating the psychiatrist's recommendations back to the primary care physician. One of the most important duties of the Care Manager is to maintain information on the measurement-based integrated health care received by patients, including patient measures, and systematically document this information.

Participants

Eligible participants for this study were NTACHC staff members who were chosen based on their involvement in the implementation of the METRIHC program and included both clinical and administrative staff. Those staff members were identified as the following: the Care Coordinator, the four primary care providers who refer patients to the METRIHC program including the Chief Medical Officer, the Nursing Director, the Program

Manager, and the Chief Executive Officer. The participation of both clinical and administrative staff for this study was necessary in order to gain a comprehensive understanding of the implementation of the METRIHC program at NTACHC.

This study provided the data for the Masters thesis for the Graduate Research Assistant (GRA) of the METRIHC project, who was instrumental in the implementation of the model at the study site. This GRA was also completing an advanced field placement internship at the clinic, which provided easy access to clinic staff and the data. Each of the eight identified possible participants were individually approached and invited to participate in the study by the researcher. The final sample included the Care Coordinator, three full-time primary care providers (including the Chief Medical Officer), the Nursing Director, the Project Manager, and the Chief Executive Officer.

Procedure

Semi-structured, in-person interviews were conducted with each participant. The interviews included 16 open-ended questions about the implementation of the METRIHC program (see Appendix A). The first 15 questions of the interviews were constructed using the necessary aspects of integration identified by Oishi et al. (2003). The final question asked participants to describe any clinical or organizational barriers to the implementation of the METRIHC program.

The University of Texas at Arlington Institutional Review Board (IRB) approved the study, and informed consent was obtained prior to each interview (see Appendix B). The interviews were conducted approximately six months after the start of the METRIHC program (defined as the start date of the Care Coordinator). Permission was sought to conduct the interviews at the clinic by the Chief Executive Officer, which was approved. The interviews varied in length from 15 to 30 minutes and each interview was audio recorded and transcribed verbatim by the researcher.

Data Analysis

A grounded theory approach was used to analyze the qualitative interviews.

While there are numerous approaches in analyzing qualitative data, grounded theory was chosen because it is best suited for grounding a theory in the views of participants to study a process or interaction involving many individuals (Creswell, 2007). The first step in the analysis process was to perform a line-by-line initial coding, which allowed the researcher to remain open in the analytics process and create codes that best fit the data (Charmaz, 2006). This initial coding process resulted in over 150 initial codes. Next, the researcher along with two secondary coders compared the codes within and across interviews and clustered conceptually similar codes together to rebuild the data into preliminary categories. In the final steps of the analysis, the preliminary categories were divided into five final categories, or main themes. The five main themes were reviewed and agreed upon by the researcher and both secondary coders.

Chapter 5

Results

Organizational Change

Change is a Process

The implementation of the METRIHC program was a process that occurred over lots of time and with many changes within the organization. It required the development of new materials and processes, as well as a new way of thinking about and approaching patient care. The necessary changes may have been more than the staff expected. One participant explained, "I think that the project is a lot bigger than we even imagined it was going to be." The enormity of the change the program brought about resulted in a lot of trial and error. Two administrative staff members discussed how clinic staff would test out a process and see how it worked, then make necessary adjustments. One participant gave an example regarding the process of referring patients to the METRIHC program:

I know when we first started with it, [the Care Coordinator] was pretty much getting referrals, pretty much like nonstop...and then we identified that there was an additional item that needed to be addressed...cause it was getting too large. So I think the training at first wasn't that great, but I think we obviously needed to have a plan and then try it out and then we saw that there needed to be changes and [the Care Coordinator] adapted that, and then she got more adequate referrals for the METRIHC program. So I felt that it was a growing process.

Other staff members discussed the development of new materials necessary for the integrated health care team. The Care Coordinator and a student intern worked to create psychosocial assessments for the patients, a documentation and patient tracking system, as well as a patient progress report used to provide feedback to the providers and patients regarding the patients' treatment. Along with the development of materials, staff members were also required to develop themselves in terms of the way they approached the treatment of depressed patients. One participant referred to the need of

the staff members to adjust their "mindset" when it came to providing integrated health care.

Another point brought up by participants was that the METRIHC program was still fairly new to the organization at the time of the interviews, with one participant describing it as in its "initial phases." Many challenges the organization was facing with the implementation of the program may no longer be issues as more time passes and kinks in processes and/or systems are smoothed out. This point was emphasized by one participant who stated that issues would "resolve slowly" and another participant who shared, "I've recognized a lot of loopholes that we are starting to fill, or cut-out."

Program Support

Support for the METRIHC program was necessary but not always evident by staff members. Several participants discussed a lack of support for the program demonstrated by a lack of "staff willingness to change," "resistance" by providers, and only a few staff members being "open to helping." One participant hypothesized that the clinic staff may have felt this way because the addition of the program meant "a lot of new things for us to adapt to and be involved with." While a few participants described the use of student interns and assistance from administrative staff members as forms of support the Care Coordinator was receiving, a majority of participants felt that the METRIHC program needed more support than it had. When describing the importance of staff participation in making the program successful, one participant explained, "It's ultimately the team effort that counts."

Other Organizational Influences

During the implementation of the METRIHC program, several other organizational changes were also occurring. One participant emphasized this point by saying "There's so many things happening in the clinic at the same time. It's

overwhelming to everybody." These changes included a leadership transition with the hiring of a new CEO, the implementation of an electronic health record system, high turnover in staff, and other "operational challenges," as described by one administrative staff member. Additionally, three staff members referred to the term "PCMH" during the interviews, which stands for Patient Centered Medical Home and was an accreditation the organization was seeking at the time of METRIHC implementation. One participant explained that the role of the Care Coordinator was essential to "help meet PCMH requirements" and another participant echoed, "Care coordination is a very important aspect of the PCMH model of care."

Roles in the Integrated Health Care Model

Having Multiple Roles

When asked specifically about the role of the Care Coordinator in the METRIHC program, most of the participants felt that the Care Coordinator had multiple roles, often referring to the many tasks her position entailed. The Care Coordinator was hired to perform two distinct roles: coordinating care for patients/assisting with patient specialty referrals and managing patients in the METRIHC program. This point was reiterated by two staff members who referred to the role of the Care Coordinator as being "halved into two different positions" and serving a "dual purpose." Other staff members described the Care Coordinator as having to wear "lots of hats." With so many duties allocated to the function of the Care Coordinator, some participants felt that the Care Coordinator had too many responsibilities. One of the primary care providers noted, "She's dawning on two roles...which is not really a good model of care because we have put too much on her plate."

Another aspect of the Care Coordinator position was that it lacked definition. While many of the participants felt that the role of the Care Coordinator in the METRIHC

program was clearly defined, a majority of them also expressed that a clear definition for what care coordination encompassed was not provided. One administrative staff member explained the lack of definition as a result of the position being newly created and continuously developed:

I think we were expecting for that Care Coordinator to continue to define the role and how care coordination was going to take place here. So I don't know whether it's clearly defined...cause I don't think it was done with that purpose...It gave us an opportunity to define what care coordination was going to be for the organization.

Role of the Care Coordinator

The role of the Care Coordinator in the METRIHC program was seen as providing a link between patients, their providers, and the health care system. Participants used words such as "middle man" and "glue" when describing the Care Coordinator. One primary care provider explained, "she functions as a bridge...between myself and the behavioral health specialist or the psychiatrist." Managing patients was also an essential function of the Care Coordinator, whether it was coordinating their specialty referrals, providing case management and regular follow up, and/or monitoring their health outcomes. One administrative staff person also described the Care Coordinator as an "advocate" for patients who can help them "navigate the system." A majority of the participants also highlighted the Care Coordinator's role in providing counseling to the patients enrolled in the METRIHC program. One provider explained, "Counseling, helping [patients] cope with their situation is going to be very important. And that's where the role of the Care Coordinator is going to be very important."

Roles of Other Staff Members

The administrative staff, consulting psychiatrist, and primary care providers also played important roles in the implementation of the integrated health care model. A few of the administrative participants described the administration's role as helping to support

the METRIHC program and the Care Coordinator with the dedication of both time and financial resources. One participant explained, "We've been her additional team support in trying to facilitate changes and get input." Some administrative staff members also expressed that they had an "outsider perspective" when it came to the METRIHC program, which put them at a disadvantage for understanding how the program worked between the patients, Care Coordinator, primary care providers, and consulting psychiatrist.

The consulting psychiatrist served to advise providers on how to treat certain cases, more specifically, making recommendations regarding medications for patients not responding to treatment. Many staff members also highlighted the psychiatrist's role in educating clinicians by providing trainings at the clinic site. One administrative staff member described the role of the psychiatrist in helping the patients and the providers:

I know that she's...been able to contribute back and not just helping the patient, but also helping the organization and evolving the providers....I think just helping them understand more and have more clarity in knowing what they can actually do.

Primary care providers' functioned to identify and refer patients for the METRIHC program. Every participant noted the providers' role in the "referral" process to enrolling patients in the program. Some staff members emphasized the role of the providers in prescribing medications to the patients. One provider explained, "[The Care Coordinator] has some knowledge as far as medications....She can point us in the right directions, but really we have to ultimately decide if that's safest for the patient or not." Also describing the differences between the role of the Care Coordinator and primary care providers, one provider stated "we don't actually work in the trenches, and a Care Coordinator is the one who actually works with the patients...on a day-to-day basis." Only one participant who was a provider described the primary care provider's role as "co-managing" patients with

the Care Coordinator. The point was further explained when she described how she introduces the program to the patients:

I mention to the patients about the program...and the role of the program. I reassure them that I'm still their provider, I'm still going to manage their mental illness. But, I can't see them as often as I'd like to. I can't track them as often as I would like to, and that this program helps me be able to do that through [the Care Coordinator].

A majority of staff members felt that there was a need within the METRIHC program for a primary care provider who would serve as a liaison to provide linkages and facilitate communication with providers. Two staff members stated that they believed the Chief Medical Officer was already functioning in this role, while two other staff members believed the Care Coordinator was adequately serving as a liaison. One participant explained that the Care Coordinator "functions in that role well," but did acknowledge providers might be "more receptive to hearing from another provider." However, other staff members felt that NTACHC was lacking a provider liaison who could encourage relationships between the integrated care team members while also "pushing the providers" and "holding the providers accountable."

Role Confusion and Frustration

Role confusion and resulting frustration was also brought up during the interviews with participants. Confusion with the role of the Care Coordinator was brought up by two staff members. One participant noted that there was an issue with NTACHC staff members not seeing the Care Coordinator "as a provider." Another participant further explained the confusion regarding the Care Coordinator by stating, "I think at first, there wasn't separation and so some of us thought this and some of us thought that on what she should be doing." Primary care providers also expressed agitation with their role in the METRIHC program. One provider explained, "I keep saying I didn't go into psychiatry for a reason, but I'm feeling like I'm becoming a psychiatrist, especially with

this program being here." Some providers expressed the preference for a psychiatrist to manage patients' behavioral health care by seeing the patients and prescribing their medications, rather than the primary care provider doing it themselves. One provider brought up this point by saying, "The providers may sometimes become frustrated and that may show....I think it was just that...sometimes it would be nice to let someone else manage that part of their health for us."

Frustration from staff members also resulted from constraints placed on them. One participant explained that staff members were sometimes "stuck" in terms of what they could do due to limited resources. Some staff members referred to certain tasks necessary for the functioning of the METRIHC program as "time consuming" and "double the work" due to inefficiencies in systems within the clinic. Every participant referred to the issue of time constraints in preventing the integrated care team members in functioning optimally, often resulting in staff frustration. Examples included providers not having time to meet with the Care Coordinator, limited time for documentation, and limited time team members could spend with patients. One participant specifically referred to the Care Coordinator as being "overburdened" with the performance of her dual roles and emphasized the need for materials/processes that "can lessen the burden on the care coordinator."

Communication

Knowledge/Understanding of the Program

Communication about the METRIHC program was critical for the staff member's understanding/knowledge of the program. Initial communication was done through trainings before the implementation of the program. Some participants felt that no training was given prior to implementation, while others acknowledged that they had a few meetings about the program, but believed the training was insufficient. One provider

stated, "I think we have been told what we are supposed to do...how to do the referral. That's about it." Staff members also expressed that they believed the training could have been improved. One participant explained what they would have wished to see in the training:

So I think that was one of the things we would do different....With a new program, this is what it's about, this is what's going to happen, this is what patients are going to experience, this is what the communication with the providers [will be]. It's just, I don't think that happened.

As a result of insufficient training, some of the participants described a lack of understanding from clinic staff about how METRIHC worked, and more specifically, a lack of understanding of the role of the Care Coordinator. One participant explained, "I'm not sure that everybody in NTACHC clearly understands...the Care Coordinator [position] itself and what it actually means." Another participant expressed that when the Care Coordinator was first hired, staff members needed "more clarity on how things are going to flow."

Once the program began implementation, staff members received guidance on procedures and goals from the Principal Investigator and Care Coordinator. Every participant agreed that the Care Coordinator had ample knowledge of biological and psychological depression treatment models. One participant described the Care Coordinator as "thorough" and "clear" when providing guidance to staff members and patients on depression scales. Other staff members highlighted the Care Coordinator's knowledge in regards to counseling, with some participants believing her knowledge was greater than the providers'. It was important for the Care Coordinator to communicate with providers and demonstrate her abilities so that she could "really put her role out there so that she she's needed, she's called upon," or in other words, create awareness among the staff as to her role within the integrated health care team.

Communication within the METRIHC Program

The integrated health care team members of the METRIHC program used various forms of communication with each other. Emails, messaging via the electronic health record system, telephone calls, and in-person meetings were all ways in which communication about patients within the program was conducted. Several staff members pointed out that a majority of communication happened through emails and messaging in the electronic health record system. Staff members also noted that all communication about patients between the consulting psychiatrist and primary care providers happened through the Care Coordinator. One provider explained, "As of now, because of the time constraints that we as providers have, [the] Care Coordinator is the only one who is between the psychiatrist and the physicians here." Some participants thought this was the most effective way of communicating given the circumstances. This idea was described by one participant who said, "I think that it's an effective way of communicating because the doctors don't have time to actually set aside and talk to each other."

Despite some participants feeling that communication through the Care Coordinator was effective, all of the participants agreed that communication within the program could be improved overall. One participant believed there was a "huge gap" in communication between clinic staff. Other issues in communication brought up by participants included miscommunications between team members due to language barriers, issues with patient confidentiality, and constraints of the electronic health record system. Three participants felt that direct communication between the primary care providers and consulting psychiatrist would be beneficial. One of the providers explained, "Maybe in certain situations where we feel that maybe the patient is not improving or there's something that we can do, maybe a direct communication with the psychiatrist

might be helpful." Another participant described how she thought direct communication could take place:

But that may be an opportunity, you know, where the Care Coordinator sets times...designated times where they go over certain cases at the providers meetings and she brings cases and the psychiatrist is there. Let's go quickly about this top three, or top four where we haven't seen [improvement]. So I think that's an area of improvement that I would suggest.

Communication and Relationships

Communication between the integrated health care team members also played a critical role in relationship building. Several staff members commended the Care Coordinator in her ability to create relationships with clinic staff. One participant stated, "I think she's been able to build a lot of relationships throughout all the different departments within the clinic." One of the providers described her relationship with the Care Coordinator as a "really smooth working relationship." The importance of trust was brought up by another provider, who explained that since the clinic providers did not have direct communication with the consulting psychiatrist, they had to trust that the Care Coordinator was passing along accurate information from her.

Along with improvements in communication, some participants felt that relationships between integrated health care team members could also be strengthened. In regards to the Care Coordinator's relationship with NTACHC staff, one administrative staff member stated, "I think they have respect for that role...I think that there is still a need for improvement." Another staff member felt that the METRIHC program could have benefited from a stronger relationship between the primary care providers and consulting psychiatrist when it came to consulting about patients. Additionally, differences in "point of view" and staff being able "to relate to and accept" information from other staff members were issues brought up from one participant during questions about communication. Two participants spoke of staff being frustrated with each other due to

communication issues, with one participant describing situations in which "emotions run high" and staff members then blamed one another when things went wrong.

METRIHC - How it Worked

Patients

A majority of staff members believed that there was a high need for behavioral health care at NTACHC because of the patient population the clinic served. Qualities unique to the patient population at NTACHC included the presence of multiple co-morbidities, including depression and hypertension, and a lack of resources "to help themselves get out of situations". One participant emphasized that the prevalence of depression and anxiety in NTACHC patients was a result of a majority of patients being immigrants:

Most of these patients are Hispanics that come here from a different county. When you move a person from one place to another place, it takes time for them to adjust. And they're not familiar with their surroundings, so everything seems like a task that they cannot accomplish. And that's where all the problems come from. That is why you see a lot of depression in this patient population. That's why you see a lot of anxiety.

While there was a clear need for behavioral health care for many patients, participants pointed out that participation in the METRIHC program was a choice the patients made. "You describe the program, you offer them the program, the benefits of the program. You can't force them into the program," one participant explained. Only one provider commented on patient participation in the program stating, "for the most part, most of the patients, especially my Hispanic patients, are very eager to participate." The provider also speculated that reluctance in some patients to participate in the program may be due to transportation issues or having private insurance that covers mental health care somewhere else.

Referrals and Enrollment

As previously mentioned, it was the providers' job to refer patients to the METRIHC program. The PHQ-9 and GAD-7 were used to assess patients' depression and anxiety levels and would guide the provider in making the decision as to whether or not to refer patients to METRIHC. If the provider decided the patient was appropriate for METRIHC, they would give the patient information on the program and encourage their participation. One provider explained this process:

So we screen them with the PHQ-9 or the GAD-7...and then depending on their score...we go into detail with them about the program and how they may benefit....After that discussion, if they say they want to participate, I then go ahead and write a referral in the computer system for the patient to be contacted by the METRIHC program.

Some providers referred the "maximum number" of patients to the METRIHC program, regardless of PHQ-9 or GAD-7 scores. One provider stated, "I just say okay, refer to METRIHC. And I refer everything whether its mild, moderate, whatever the scores are. I just refer." This approach led to over referring to the METRIHC program, which was a concept brought up by two participants. One participant explained, "...and once they started referring, unfortunately for them, they were referring people who didn't qualify for the program." Due to the large volume of referrals, the Care Coordinator had to take a targeted approach as to who she would actually enroll in the program by prioritizing patients based on their depression scores. One administrative staff member explained, "We have tons of referrals but that doesn't mean that they're all going to get enrolled....what they're doing is identifying those at higher levels of depression acuity....You're targeting the ones that need it the most."

Measurement

All but one participant mentioned the use of scales to measure patient's depression and/or anxiety levels in the METRIHC program. The PHQ-9 and GAD-7 were

not only used to assess patients for enrollment, but also to track patient progress throughout their participation in the program and guide treatment plans. One provider expressed her agreement in the Care Coordinator using the PHQ-9 to track patient progress by stating, "they do their PHQ-9s and they see how the scores are doing, which is a good thing....That's a measure, so it's a good thing." Another provider explained how measurement by the Care Coordinator was used to influence treatment plans:

She does the screening again and sees if their scores are improving, going up, and then tries to assess from them why that might be happening....So I can go in there, I try to go in there with a plan as to what we're going to do from that point on, looking at those measures..."

The Care Coordinator documented METRIHC patients' psychosocial assessments, treatment plans, and measures in her own documentation system. Since providers did not have access to the Care Coordinator's patient notes, the Care Coordinator developed a patient progress report to provide feedback regarding METRIHC patients using graphs of PHQ-9 and GAD-7 scores:

Our progress note that the intern developed was based off of the scales of a PHQ-9 and a GAD-7, so the graph is meant to be able to show in a one, like real-time, quick look, if a patient is improving or not.

Effects

A majority of participants did not know what the goals were for patients who were enrolled in the METRIHC program. Only two participants mentioned reductions in PHQ-9 and GAD-7 scores as a goal for patients, one of which said the goal was a 50% reduction, and the other who stated there was no stipulated goal. Despite not knowing what the goals were, most of the participants did feel the METRIHC program was helpful to patients in decreasing their depression and anxiety. One provider stated, "I see an improvement in the patients that I send out to the METRIHC program" and another provider agreed, "for most of the patients, I think it works out well."

Providers also experienced benefits of having the METRIHC program. All three of the participants who were providers expressed that the counseling provided to patients by the Care Coordinator was valuable. One provider shared:

I cannot do everything when I see a patient. Obviously, I will need more help....If I spend more time, it's a waste of resources and it's a waste of finances. But a Care Coordinator can have a more targeted approach and that's the whole purpose of her...is that we reduce the amount of time that a physician can spend counseling or doing stuff that a care coordinator can do, or a person who is experienced in counseling can do.

The regular tracking of patients by the Care Coordinator was also a benefit discussed by two of the providers. In regards to keeping up with patient depression measures, one provider stated, "And that's the reason why I send them out to the METRIHC program. So they can be tracked appropriately and I can get a good report on what's happening with their depression or anxiety." Another provider shared, "That's the beauty of the program. That's the whole point. So that's a great thing." when discussing the ability of the Care Coordinator to track patients progress and provide feedback to the provider in making treatment adjustments.

Integration

Clinic Systems and Processes

Several staff members referred to a lack of integration between the METRIHC program and existing clinic systems and processes. One participant stated that the integration of the Care Coordinator had "been a very long process because there was no foundation." The Care Coordinator had to make her own appointments, develop her own documentation system, and did not receive referrals for METRIHC patients while they were still present in the clinic, a concept known as "warm hand-offs." One participant felt that the functioning of the Care Coordinator was very different from that of other clinics, and as a result, there was "no comparison" to see if the implementation of METRIHC was

effective or not. Other participants brought up workflow issues and the need for standardization in processes when discussing the integration of METRIHC. In describing how the Care Coordinator needed to be more integrated within the clinic, one administrative staff member shared:

So I think that there's, there's more integration that is needed, in my opinion. And so where does that come from? I think it has to come from both sides....Her integrating into the entire operations and then the staff integrating in her role to a certain extent.

When it came to issues with integrating the METRIHC program, almost every participant mentioned NTACHC's electronic health record system, NextGen. Patient notes done by the Care Coordinator as well as patients' progress reports were not integrated into the NextGen system. One participant believed the problems with utilizing NextGen stemmed from not having a NextGen "expert," which prevented the Care Coordinator in knowing the best ways to input the patient's mental health care information into the system. Another participant referred to use of templates in the NextGen system, stating that the current use of the system was "not efficient." Most participants echoed the sentiment of one participant who stated, "The inability to fully integrate into a computer system has been a huge barrier."

Provider-Centered Issues

Three participants brought up issues with the primary care providers when it came to integrating health care at NTACHC. One participant felt that providers "really weren't interested in the mental health or integration" and another participant stated, "I think the need for engaged, motivated, champions around behavioral care...in terms of our providers. I think that's a barrier." Other participants referred to the inhibition providers possessed in diagnosing mental disorders and prescribing medications. In describing the many issues surrounding the providers, one participant shared:

Physicians were barriers. Their thought process was different. The lack of education about the program, as well as the implementation for the program and just anxiety and depression. The doctors here, although they prescribe medications, still lack some understanding of why we provide the medication and the fact that METRIHC was here in the building to begin with. They still wanted to refer over to MHMR.

Other challenges surrounding providers included "adapting the input to the provider staff" and the difficulty providers faced in managing their patients' mental health. One provider explained, "But, again, behavioral health is a difficult area in medicine to practice, especially in primary care, because we still got to manage all their other medical problems..." Additionally, one participant questioned whether or not providers were using information gathered by the Care Coordinator during METRIHC patient follow ups to guide treatment plans.

Lack of Resources

A majority of participants discussed a lack of resources in preventing successful integration of the METRIHC program. There was a need for more staff members to address the high need of mental health care for patients. As one provider put it, "we have too many patients, lots of demand, less of supply." Staff members who could provide administrative support to the METRIHC program for "making appointment or following up" with patients were also needed. Participants also noted that even though more staff was needed, there was a lack of space to host them. One participant explained, "Space is a huge barrier, because even though we're getting ready to pull in more help...we still don't have a lot of space to put them in."

A lack of resources within the clinic mainly stemmed from a lack of financial resources, which was brought up by all of the administrative staff members who participated in the interviews. The results of financial barriers included the inability to purchase a provider license on the NextGen system for the Care Coordinator, the inability to purchase needed supplies such as computers and phones, and the inability to hire

more staff to implement integrated health care and acquire space to place them. In regards to a lack of resources, one administrative staff member noted, "Again, these are limitations that come with us being an underfunded organization, being a community organization with huge financial challenges."

Chapter 6

Discussion

The current case study illustrates one example of implementation of an integrated health care program in the distinct context of a Federally Qualified Health Center that serves a primarily low-income, Latino population. Review of the implementation process from the perspectives of clinical and administrative staff provided for an in-depth, behind the scenes look at what can happen when an evidence-based model of depression care is implemented in a real-world primary care setting. Several key findings can be taken away from this study.

First, a lack of adequate preparation for the METRIHC program was indicated by NTACHC staff members. Trainings that include defined procedures for interventions and explanations of how the programs will benefit their community, patients, and organizations are extremely helpful in implementing integrated health care in primary care settings (Graff, Springer, Bitar, & Arredondo, 2010; Oishi et al., 2003). NTACHC staff felt that they did not receive sufficient training prior to the implementation of the program, and as a result, many staff members did not have a full understanding of the purpose of METRIHC and how the program worked. Additionally, many tools and processes had to be developed after the start of implementation, which may have ultimately slowed down the implementation process. This potential loss of momentum in carrying out the program has been shown to negatively affect implementation outcomes in other programs (Graff et al., 2010).

Support for the implementation of a new integrated health care program by staff members is critical to the program's success. Efforts to improve depression care in primary care settings tend to face more challenges when they don't have buy-in from all

parties involved (Meredith et al., 2006). More specifically, leadership support has been highlighted as an important factor in implementing changes in depression care treatment (Graff et al., 2010; Meredith et al., 2006). While NTACHC's administrative staff was perceived as having a role in supporting the METRIHC program, there was resistance present from most of the other staff members, including primary care providers. In some situations, buy-in from clinical providers was a stronger determinant in successful implementation of collaborative care models than leadership support (Bauer et al., 2011). The lack of support from the primary care providers at NTACHC, despite having leadership support, may have played a significant role in whether or not the implementation of the program would be successful.

A lack of support for the program may have been influenced by the extreme amount of change within the organization at the time of METRIHC implementation. Staff members seemed to already be overwhelmed by the recent implementation of an electronic health record system, changes in leadership, high staff turnover, and the push for PCMH accreditation. This finding confirms other research that has found it is more challenging to implement an integrated health care model in the face of management turnover, competing demands for clinician time, and competing quality improvement efforts (Meredith et al., 2006; Nutting et al., 2007).

The role of the Care Coordinator was a subject of confusion and frustration for NTACHC staff members. Clear role definition for Care Managers within an integrated health care team is crucial and facilitates the implementation of the model (Oishi et al., 2003). This lack of definition for the Care Coordinator was mainly a product of the two distinct roles the Care Coordinator possessed: managing METRIHC patients and providing care coordination for all NTACHC patients. The job of care managers in a collaborative care model focuses on managing one or more common mental disorders

(Thielke et al., 2007); however, this was not the case for the Care Coordinator at NTACHC who was expected to manage more than just METRIHC patients. As a result, the Care Coordinator was "overburdened" with the performance of her dual roles and staff members were frustrated with the confusion revolving around her position. NTACHC's deviation from the traditional collaborative care model described by Thielke et al. (2007) in the functioning of the Care Coordinator obviously created challenges for the METRIHC program and integrated health care team members. More research is needed to understand how this may have affected the improvement of health outcomes for patients enrolled in the METRIHC program.

Primary care providers also functioned differently within the METRIHC program compared to other traditional integrated health care models. Providers should work in partnership with the patient and care manager and not perceive the role of the Care Manager as taking over patients' depression care in a collaborative care approach (Oishi et al., 2003). However, NTACHC providers highlighted their role in "referring" patients to the METRIHC program rather than "co-managing" them with the Care Coordinator. This model of care more closely resembles a co-location of primary care and mental health services, which is described as providers working in "parallel under the same roof" (Thielke et al., 2007, p. 584), rather than a collaborative care model. The deficiency of providers working as a team with the Care Coordinator may have resulted from the preference of the providers to have someone else manage patients' depression care, indicating the requirement of primary care providers who are interested in providing behavioral health services for the successful implementation of an integrated health care model.

Communication and relationships between members of the integrated health care team proved to be a very important aspect of the implementation process. Like other

integrated health care models described by Oishi et al. (2003), METRIHC program staff found various ways to communicate with each other including the use of email, phone calls, EHR system messaging and brief in-person meetings. Despite their efforts, many felt that communication and relationships between staff could be improved. This improvement included direct communication between primary care providers and the consulting psychiatrist, which confirmed other research showing that the presence of both primary care providers and psychiatrists at team meetings were extremely helpful in creating "optimal treatment plans" (Oishi et al., 2003, p. 81). This brings up another point that was not specifically mentioned by NTACHC staff but has been emphasized by Oishi et al. (2003) as a powerful tool in promoting relationships among team members, which is the coordination of weekly team meetings. The absence of team meetings coupled with the absence of a liaison primary care provider who functions to "facilitate communication with providers (Oishi et al., 2003, p. 82) may have hindered crucial communication and relationship building necessary for the successful implementation of the METRIHC program.

Along with the addition of the Care Manager, systematic tracking of patient outcomes is a core component of the collaborative care model (Thielke et al., 2007). The importance of patient measurement through the use of the PHQ-9 and GAD-7 was emphasized by NTACHC staff; however, the use of stepped care algorithms was not. While providers may have used systematic measurements to guide clinical judgment in making adjustments in treatment plans, they did not use a specific stepped care algorithm such as the ones used when implementing the IMPACT model (Unutzer et al., 2001). Furthermore, systematic tracking of patients is usually assisted by a web-based clinical information system (or patient registry), which has proved to be an invaluable tool in preventing patients from falling through the cracks (Oishi et al., 2003). With no specific

mention of the use of such a tool, along with the many issues faced by the Care Coordinator in documentation for METRIHC patients with the electronic health record system, it can be concluded that systematic patient follow-up and measurement was a huge challenge for this organization.

The value of clearly defined goals has been emphasized in the implementation of an integrated health care model (Oishi et al., 2003). Many staff members at NTACHC reported not knowing what the specific goals were for patients (such as a certain decrease in PHQ-9 or GAD-7 scores) who were enrolled in the METRIHC program, further emphasizing the need for more adequate training. However, even though they did not have a clear idea on goals for their patients, primary care providers generally felt that the METRIHC program was helpful to patients in decreasing their depression and anxiety levels. This finding is consistent with other research that shows a majority of primary care physicians who implemented the IMPACT program felt that it improved clinical outcomes for depressed patients (Levine et al., 2005). Also consistent with Levine et al.'s (2005) findings was that NTACHC providers found it helpful that the Care Coordinator was able to regularly follow up with and track patients, which helped facilitate treatment adjustments when needed.

Finally, several barriers to the implementation of METRIHC were discussed by staff members. These barriers mainly revolved around organizational issues including a limited amount of staff and space dedicated to the METRIHC program and problems with using the electronic health record system. Organizational and financial barriers have been shown to be the most common barriers for Federally Qualified Health Centers in Texas who have implemented integrated health care (Sanchez et al., 2010). However, organizations often cite lack of reimbursement for services as financial barriers (Sanchez et al., 2010), which is different from the financial barriers reported by NTACHC staff. The

organization was struggling with "huge financial challenges" and the ability to provide funding for day-to-day operations, which was an issue not related to the addition of the METRIHC program. Concerns regarding reimbursement for METRIHC program services may not have been a priority since the Care Coordinator's position was partially funded by The University of Texas at Arlington School of Social Work iCAP program (Sanchez & Trivedi, 2012) and a majority of NTACHC's patients were uninsured. If NTACHC seeks to establish long-term sustainability for the METRIHC program, issues with reimbursement may become more of an interest.

Chapter 7

Limitations

The present study possesses limitations with regard to generalizability. Due to the use of a single-system case study design, the findings from this study only reflect the perspectives of staff members who implemented an integrated health care model at one Federally Qualified Health Center in Fort Worth, Texas and may not be representative of integrated health care programs in other primary care settings. Additional limitations are related to the interview process used with participants in the study. The results of the interviews may reflect participant biases and not portray certain topics or themes accurately. Relationships with the researcher who was conducting the interviews may have also affected the results. Some participants may not have been as honest nor forthcoming with their opinions on the implementation of the METRIHC program had they been interviewed by someone who had not been involved with the program or clinic.

Chapter 8

Conclusion

This case-study demonstrated that implementing an integrated health care model can be extremely challenging for some organizations, especially for those that lack resources and support of staff members. Many things should be taken into consideration before implementing a new model to address mental health care in a primary care setting including adequate training and preparation, buy-in from key personnel, possible communication barriers, tools for systematic follow-up and measurement, and organizational stability. While this study presented several challenges that can be experienced during the implementation process, further research will need to be conducted to understand how these challenges affect health outcomes for patients.

Appendix A
Interview Questions

The following questions are specifically referring to the implementation of the METRIHC (Measuring and Tracking Integrated Health Care) program at North Texas Area Community Health Centers, Inc. (NTACHC). Please answer to the best of your ability.

Before we can get started, please state your position at NTACHC.

1. Tell me about the role of the Care Coordinator. Do you think it is clearly defined? Why or why not? What do you see the role of the Care Coordinator as?
2. What do you think about the Care Coordinator's knowledge of biological and psychological mental disorder (especially depression) treatment models?
3. Tell me about the Care Coordinator's relationships with other NTACHC staff (including front office, nursing and medical assistants, and providers). How has this affected the delivery of integrated care?
4. What do you think about the Care Coordinator having a designated office space and easy computer access?
5. Tell me about patient cooperation in the METRIHC program. How do the integrated care team members engage patients in the program?
6. How is expert input from the consulting psychiatrist and primary care provider communicated to each other and the Care Coordinator? Do you think this is effective? Do you think it could be improved? If so, how?
7. Tell me about the psychiatric consultation process. How are the psychiatrist's recommendations communicated to the providers? Do you believe this is effective? Why or why not?
8. Would it be beneficial to have a liaison Primary Care Physician who provides linkages and facilitates communication with providers? Why or why not?
9. Tell me about how patients are enrolled into the METRIHC program. Is this effective? Why or why not?

10. Tell me about patient follow-up in the METRIHC program. What systems are used for tracking patients for follow-up care? Are they effective? Why or why not? Could they be improved? If so, how?
11. How are procedures and goals determined for patients in the METRIHC program? What guidance is provided for antidepressant choices, intervention flowchart and timeline, documentation, and clinical tracking procedures? Is this guidance sufficient?
12. How do team members get feedback on patient outcomes? Is this effective? If not, how could it be improved?
13. Tell me about the documentation system for METRIHC patients' physical and behavioral health information. Do you believe it is efficient? Why or why not?
14. Tell me about the training NTACHC staff received in the new integrated physical and mental health care model and approach. Was the training beneficial? Was the training sufficient?
15. What sort of support does the Care Coordinator receive in the performance of the Care Coordinator role by other NTACHC staff members and outside resources? Is this support sufficient? Why or why not?

What are some of the clinical and/or organizational barriers that you have identified as being present at NTACHC to the implementation of the METRIHC program?

Appendix B

Institutional Review Board Informed Consent Document

UT Arlington
Informed Consent Document

PRINCIPAL INVESTIGATOR

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TITLE OF PROJECT

A Case Study of North Texas Area Community Health Centers, Inc. and the Implementation of Integrated Health Care

INTRODUCTION

You are being asked to participate in a research study about the implementation of an integrated health care program at North Texas Area Community Health Centers, Inc.

Your participation in this study is voluntary. You may choose to participate or not participate in this study. You may also choose to withdraw from the study at any time. Your participation in this study will not affect your relationship with North Texas Area Community Health Centers, Inc. or your access to health care services. If you have any questions or do not understand anything, please ask the researcher.

PURPOSE

The specific purposes of this research study are as follows:

1. To explore different aspects of the implementation of an integrated health care program at North Texas Area Community Health Centers, Inc.
2. To identify barriers of the implementation of an integrated health care program at North Texas Area Community Health Centers, Inc.

DURATION

Participation in this study will last approximately 30 minutes to one hour.

NUMBER OF PARTICIPANTS

The number of anticipated participants in this research study is eight.

IRB Approval Date:

APR 26 2013

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IRB Expiration Date:

APR 26 2014

UT Arlington Informed Consent Document

PROCEDURES

As a research participant, you will be asked a series of interview questions by the researcher regarding the implementation of integrated health care at North Texas Area Community Health Centers, Inc. The interview will be audio recorded. After the interview, the tape will be transcribed, which means they will be typed exactly as they were recorded, word-for-word, by the researcher. The tape will be kept with the transcription for potential future research involving the implementation of integrated health care. The tape and transcription will not be used for any future research purposes not described here.

POSSIBLE BENEFITS

There is no direct benefit for participating in this study. Possible benefits for others include the increased awareness of the implementation of integrated health care and potential barriers when implementing an integrated health care model.

POSSIBLE RISKS/DISCOMFORTS

There are no perceived risks or discomforts for participating in this research study. Should you experience any discomfort please inform the researcher, you have the right to quit any study procedures at any time at no consequence.

COMPENSATION

No compensation will be offered for participation in this study.

ALTERNATIVE PROCEDURES

There are no alternative procedures offered for this study. However, you can elect not to participate in the study or quit at any time at no consequence.

VOLUNTARY PARTICIPATION

Participation in this research study is voluntary. You have the right to decline participation in any or all study procedures or quit at any time at no consequence. Furthermore, choice to participate or to not participate in this study has no effect on your employment or relationship with North Texas Area Community Health Centers, Inc.

CONFIDENTIALITY

Every attempt will be made to see that your interview is kept confidential. A copy of this signed consent form will be stored in a locked cabinet in the Faculty Advisor's office and all data collected (including transcriptions/tapes) from this study will be stored in the Faculty Advisor's UTA computer which is encrypted according to UTA standards for at least three (3) years after the end of this research. Your name will not be asked at any time during the audio recorded interview and your interview responses will not be linked to you in the publishing or presentation of any results. Additional research studies could

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evolve from the information you have provided, but your information will not be linked to you in anyway; it will be anonymous. Although your rights and privacy will be maintained, the Secretary of the Department of Health and Human Services, the UTA Institutional Review Board (IRB), and personnel particular to this research have access to the study records. Your records will be kept completely confidential according to current legal requirements. They will not be revealed unless required by law, or as noted above. The IRB at UTA has reviewed and approved this study and the information within this consent form. If in the unlikely event it becomes necessary for the Institutional Review Board to review your research records, the University of Texas at Arlington will protect the confidentiality of those records to the extent permitted by law.

CONTACT FOR QUESTIONS

Questions about this research study may be directed to Brittany H. Eghaneyan at 832-620-9389 or Brittany.hernandez@mavs.uta.edu OR to Katherine Sanchez at 817-272-3181 or ksanchez@uta.edu. Any questions you may have about your rights as a research participant or a research-related injury may be directed to the Office of Research Administration; Regulatory Services at 817-272-2105 or regulatoryservices@uta.edu.

As a representative of this study, I have explained the purpose, the procedures, the benefits, and the risks that are involved in this research study:

Signature and printed name of principal investigator or person obtaining consent Date

CONSENT

By signing below, you confirm that you are 18 years of age or older and have read or had this document read to you. You have been informed about this study's purpose, procedures, possible benefits and risks, and you have received a copy of this form. You have been given the opportunity to ask questions before you sign, and you have been told that you can ask other questions at any time.

You voluntarily agree to participate in this study. By signing this form, you are not waiving any of your legal rights. Refusal to participate will involve no penalty or loss of benefits to which you are otherwise entitled. You may discontinue participation at any time without penalty or loss of benefits, to which you are otherwise entitled.

SIGNATURE OF VOLUNTEER DATE

IRB Approval Date: APR 26 2013

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IRB Expiration Date: APR 26 2014

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Brittany H. Eghaneyan received her Bachelor of Science from The University of Texas at Dallas in Cognitive Science and Psychology and is a candidate to receive her Master of Science in Social Work with a concentration in community and administrative practice from The University of Texas at Arlington. She has worked with at-risk youth, sexual assault survivors, and women and children who have been victims of domestic violence. Her interests include research and policy in the areas of mental health, health care, and women's issues.