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BOSTON COLLEGE
School of Social Work

IF YOU MAKE IT, WILL THEY COME? THE IMPACT OF THE AFFORDABLE CARE ACT AND ORGANIZATIONAL CHARACTERISTICS ON HISPANIC MENTAL HEALTH CARE ORGANIZATIONS

A dissertation
by

ROBERT ROSALES

Submitted in partial fulfillment
of the requirements for a degree of
Doctor of Philosophy

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Dissertation Chair: Dr. Rocío Calvo

Abstract

Hispanics are less likely than non-Hispanic whites to use mental health service, even after controlling for various social, environmental, and health factors. Mental health services disparities between Hispanics and non-Hispanic whites have been well-documented and consistent over time. However, very little is known about the impact mental health care organizations have on Hispanics' access to mental health care, especially since the implementation of the Patient Protection and Affordable Care Act (ACA). The three papers in this dissertation utilize the 2010, 2014, and 2016 waves of the National Mental Services Survey (N-MHSS) to assess the impact of the ACA on Hispanics' access to mental health care and mental health care organizations' provision of integrated services. The N-MHSS is a national repository of data on the mental health organizations in the United States. This dataset was created to report the characteristics and client enrollment at mental health care organizations. Paper 1 uses the 2014 N-MHSS to describe the structural characteristics of mental health care organizations according to the proportion of Hispanics they serve and the organizations' structural characteristics in Medicaid expansion and non-expansion states. Paper 2 uses the 2010, 2014, and 2016 N-MHSS

waves to examines the impact of the ACA and the health safety net on Hispanic admissions at mental health care organizations. These three waves were merged together using a repeated cross-sectional design to assess whether Hispanic admissions increased after the implementation of the ACA. The final paper uses the 2014 and 2016 N-MHSS waves to assesses whether integrated care has increased at Hispanic-serving organizations compared with mainstream organizations two years after the implementation of the ACA. This paper also assessed whether the increased funding for integrated services under the ACA has disproportionately affected mainstream organizations compared with Hispanic-serving organizations.

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Chapter 1. Introduction

Despite having a similar prevalence of mental health disorders, Hispanics are less likely to use mental health services than non-Hispanic whites (González et al., 2010). Even when controlling for severity and duration, Hispanics with mental health disorders are significantly less likely to receive specialty mental health services compared to non-Hispanic whites (Alegría et al., 2002).

Extensive research highlight the individual factors that explain Hispanics' underuse of services. For instance, researchers found factors such as English proficiency, cultural beliefs, and acculturation to be related to Hispanics' use of mental health service (Bauer, Chen, & Alegría, 2010; Cabassa, Zayas, & Hansen, 2006; Chang, Natsuaki, & Chen, 2013; Rosales & Calvo, 2017). Though emphasis on the individual reveals important factors related to Hispanic service use, this information fails to identify the role that organizations and policymakers have on Hispanic mental health service disparities.

There is a lack of research examining the role of mental health organizations in addressing Hispanic mental health care service disparities. Hispanic-serving organizations (HSOs) serve large proportions of Hispanic clients and thus can help address Hispanic's issues with accessing mental health care. Additionally, health safety net organizations serve low-income Hispanics who might otherwise be unable to receive care. The implementation of the Patient Protection and Affordable Care Act (ACA)[1] provides an opportunity to support these organizations in their ability to alleviate Hispanic mental health service disparities. The expansion of the ACA increased access to

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[1]This dissertation uses the terms ACA and Obamacare interchangeably

physical health care, benefitting Hispanics with physical ailments more than their non-Hispanic whites (Chen, Vargas-Bustamante, Mortensen, & Ortega, 2016). It is possible that this major health reform also impacted Hispanics' access to mental health services.

Integrated care is another organizational factor, which can help to tackle Hispanics' lower access to mental health service. Within Hispanic culture, there is a stigmatized view of the use of mental health services (Interian, Martinez, Guarnaccia, Vega, & Escobar, 2007). The integration of primary and behavioral care can normalize the use of mental health services and help improve Hispanics' physical and behavioral health (Cabassa, Hansen, Palinkas, & Ell, 2008). The ACA increased the funding of grants aimed at integrating care in the health safety net. These grants intended to use integrated care to increase service access for individuals with serious behavioral and physical health (Substance Abuse and Mental Health Services Administration, 2017). These grants could help address Hispanic mental health service disparities through the increased provision of integrated care at HSOs.

Despite the ACA's aim to address health care access, there is a paucity of research examining this major health care reform's impact on Hispanic mental health care disparities. Furthermore, there is even less known about how the bolstering of integrated care grants under the ACA has impacted the provision of integrated care services at HSOs when compared with mainstream organizations (MOs). The following are the aims of the three papers included in the present dissertation, which will help to fill this gap in the literature.

Aims/objectives

Aim 1/Study 1: Define the organizational characteristics that are associated with the proportion of Hispanics at mental health care organizations in the United States. Although a great amount is known about the individual level factors associated with Hispanics' use of mental health services, less is known about how the providers of care can increase access. Additionally, the Affordable Care Act has substantially changed the landscape of health care organizations within the states that opted to expand Medicaid eligibility. Thus, these characteristics may differ depending on whether the organization is in an expansion or non-expansion state. This study aimed to assess whether mental health organizations in the United States shared commonalities around the proportion of Hispanics served, the setting from which they operate, their revenue source, their treatment focus, and whether they were in Medicaid expansion states.

Aim 2/Study 2: Examine the impact of the Affordable Care Act implementation and the health safety net on Hispanic mental health care use. Hispanics have less access to mental health services when compared with non-Hispanic whites. One of the greatest barriers to mental health services for this group is the lack of health insurance (Alegría et al., 2007). The ACA was based on the idea that increasing access to affordable health insurance and the funding of health safety net organizations would help address health care disparities. Consequently, the ACA included provisions to increase the eligibility for public health insurance and the funding of the health safety net. This study aimed to examine whether this increased funding and the changes to health care insurance under the ACA increased Hispanic admissions at outpatient mental health care organizations in the United States.

Aim 3/Study 3: Assess whether the expanded funding for integrated care has increased the provision of these services in Hispanic-serving organizations. HSOs are organizations that serve a large proportion of Hispanic clients. These organizations differ from mainstream organizations because they are typically set in Hispanic communities. Due to policies that favor non-Hispanic whites, Hispanic communities have historically received lesser funding than predominantly non-Hispanic white communities (Valdez, Padilla, & Valentine, 2013). Additionally, organizations with high proportion Hispanic clients are less likely to provide high quality of care (Jha, Orav, & Epstein, 2011; Jha, Orav, Zheng, & Epstein, 2008). Integrated care has been shown to decrease the disparity in quality of behavioral and physical care and outcomes for Hispanics compared with non-Hispanic whites (Bridges et al., 2014). The ACA intended to increase the provision of integrated care by enhancing the funding to community health centers and the funds needed to provide integrated care. The third aim of this dissertation is to examine whether the increased funding of integrated services under the ACA has had a different impact on the integration of services at HSOs compared with mainstream organizations MOs. I also examined whether the increased funding had the same effect on Hispanic-serving organizations as MOs.

Literature Review

Hispanics are currently the largest and second fastest growing minority ethnic group in the United States (U.S. Census Bureau, 2016). However, Hispanics are not a homogenous group of individuals with the same religious, political, or cultural beliefs. The US Office of Management and Budget (OMB) currently identifies Hispanics as those who identify as Cuban, Mexican, Puerto Rican, South or Central American, or another

Spanish-speaking group regardless of their race (U.S. Census Bureau, 2018). Hispanic sub-groups differ in terms of their health outcomes once they are in the United States. For example, studies have shown that Puerto Ricans have greater health issues when compared to their other Hispanic counterparts and do not benefit from health buffering immigration factors, such as the Immigrant Health Paradox, which effect Central and South American groups (e.g. Hummer, Rogers, Amir, Forbes, & Frisbie, 2000).

Despite the disparate health outcomes, many Hispanics immigrants share experiences with structural barriers that deter their integration within American society. Namely, structural barriers to mental health service use were identified as far back as the 1970s (Organista, 2009). Specifically, the Surgeon General's call on *Mental Health: Culture, Race, and Ethnicity* recognized that ethnoracial minority groups experience barriers to the use of mental health service. More recently, the *National Healthcare Disparities Report 2012* found that although the quality of mental health services has increased, access to those mental health services is still a substantial issue that is continually worsening for ethnoracial minorities (Agency for Healthcare Research and Quality 2013). This disparity can be seen in the comparative lower access of mental health service for Hispanics when compared with non-Hispanic whites (González et al., 2010). To date, Hispanic are less likely to use mental health services, and more likely to face barriers when seeking mental health services than non-Hispanic whites (Alegría et al., 2008; Cook et al., 2014; Creedon & Cook, 2016; González et al., 2010).

Theoretical Framework

There are various models that help explain ethnoracial minority health service disparities. For instance, the Network Episode Model III-R helps to explain how social

interactions affect health service use (Pescosolido, 2011). In contrast, the Behavioral Model of Health Service Use identifies individual predisposing, enabling, and need factors that facilitate the use of health care services (Andersen, 1995). Yet, there has been a discrepancy in frameworks that describe health care service disparities at multiple levels. Alegría, Pescosolido, and Canino (2009) created the *Socio-Cultural Framework for Health Disparities* (SCF-HD) to meet this absence of frameworks. The aim of the SCF-HD was to guide research in examining the structures, processes, and mechanisms that perpetuate health service disparities (Alegría, Pescosolido, Williams, & Canino, 2011).

According to the SCF-HD, health disparities are "racial and ethnic differences in access, health care quality or health care outcomes that are not due to clinical needs or the appropriateness of treatment" (Alegría et al., 2011, p. 366). In contrast to the US Department of Health and Human Services (2003) definition of health disparities, the SCF-HD argues that ethnic minority service preferences are not the cause of health disparities; rather, preferences are the manifestations of social structural issues that create health service disparities.

Alegría, Pescosolido, Williams, and Canino (2011) posit that health service disparities should be measured at multiple levels. They claim that these levels each play a different role in creating and maintaining health service disparities. Within the SCF-HD model are three levels including the macro, meso, and micro-levels. The macro-level includes the impact from federal and state economic policies, environmental contexts, and communities. The meso-level refers to the operations of the health care system and provider organizations. The micro-level points to the provider-client interactions and the

individual level factors that impede the use of health services. These three levels combine to create health service disparities between ethnoracial minorities and non-Hispanic white populations. This study will specifically examine how macro (i.e. the ACA, integrated care funding) and meso-level (i.e. mental health care organization characteristics, the health safety net) factors relate to the access to mental health care organizations and the provision of integrated care at HSOs.

Macro-level Factors

The impact of the Affordable Care Act on Hispanics' use of health care. At the macro-level, state and federal health care policies drive market forces to create health service disparities. Policies related to health insurance coverage are one macro-level factor that impacts Hispanics' use of mental health service use.

Due to the fear of low-income individuals becoming a burden on a state's economy, all states have enacted limited public health program eligibility criteria. The limited eligibility aims to decrease the number of individuals covered under public health insurance and control costs (Bodenheimer, 2005). Public health insurance is a federal and state funded program that provides free health insurance to low-income individuals living under the federal poverty level. Prohibitive health insurance policies bar vulnerable populations from using mental health services because of their inability to receive affordable care. For instance, adults with private health insurance were 1.5 times and adults with Medicaid were 3 times as likely to use mental health services when compared to their uninsured counterparts (Walker, Cummings, Hockenberry, & Druss, 2015). Among Hispanics, those without health insurance were significantly less likely to use

mental health services when compared to those with other types of health insurance coverage (Alegría et al., 2007).

The Patient Protection of Affordable Care Act (ACA) of 2010 was a major health care reform policy that intended to make health care more accessible and affordable. This policy did so by increasing the eligibility for public health insurance to 138% of the federal poverty level, augmenting the funding of health safety net services, and creating an individual mandate where all individuals were required to have some form of health insurance.

The enactment of the ACA has improved Hispanics' ability to seek appropriate health care services. Before the enactment of the ACA, 36% of working-age Hispanics did not have health insurance. However, after the enactment of the ACA, Hispanics' uninsured rate decreased substantially to 23% (Doty, Blumenthal, & Collins, 2014). Furthermore, since the enactment of the ACA, Hispanics are more likely to have a physician visit and less likely to delay care (Chen, Vargas-Bustamante, Mortensen, & Ortega, 2016).

The writers of the ACA intended to make all Americans abide by the individual mandate to ensure that healthy individuals could help defray the costs from those with greater health care needs. However, on June 2012, the US Supreme Court ruled that states would have the choice to adopt the Medicaid expansion. On January 2014, the date the ACA was fully implemented, only 25 states chose to adopt the expansion (Kaiser Family Foundation, 2017).

States' choice to opt out of the ACA created a differential impact between the expansion and non-expansion states. For instance, the uninsured rate decreased most for

those in states that enacted the policy change. Under the ACA, the Hispanic uninsured rates decreased by 18% for those living in the expansion states, yet it did not significantly change the Hispanic uninsured rate in the non-expansion states (Doty, Rasmussen, & Collins, 2014). Likewise, the gap in access to care between Hispanics and non-Hispanics was lessened in the expansion states, with no change in the non-expansion states (Sommers, McMurtry, Blendon, Benson, & Sayde, 2017). Community health centers in the expansion states were also more likely to serve Hispanic clients than community health centers in non-expansion states (Hoopes et al., 2016).

Although other policies have attempted to address mental health care access, the ACA is well-positioned to address these issues. The Mental Health Parity and Addiction Equity Act of 2008 (MHPAEA) was the first health care policy to mandate that group health insurance plans, such as employer provided health insurance plans, cover mental health benefits at the same level as physical health. Research shows that Hispanics were still less likely to receive mental health treatment after the implementation of the MHPAEA than non-Hispanic whites (Goldberg & Lin, 2017). Since private health insurers were left out of this policy, Hispanics with private health insurance could have been subjected to higher out-of-pocket costs from seeking mental health services. Subsequently, the ACA extended the MHPAEA mandate to private health insurers in order to ensure greater access to mental health services (Centers for Medicare and Medicaid Services, 2018). This extension could result in greater access and lower out-of-pocket costs for Hispanics with private health insurance.

Integrated care funding. The health care system uses a fragmented model of care, where individuals seek physical and behavioral care from separate locations. The

current dominant health care model can be costly to clients due to the increased time transporting between physical health and behavioral health specialist appointments. Additionally, health care providers lose efficiency that could be gained from providing holistic services in one location (Kodner & Spreeuwenberg, 2002). The colocation of services can mitigate this loss in time and efficiency.

Integrated care combines the colocation of services with the collaboration of care (Brennan et al., 2009). Definitions of integrated care widely vary throughout the literature. Yet, the essential aims of all integrated care programs are to reduce the division and increase the coordination between behavioral and health care delivery systems (Ouwens, Wollersheim, Hermens, Hulscher, & Grol, 2005).

Currently, there is a push from researchers and policy makers to shift current mental health services into an integrated care model. That is because integrated care results in higher quality, better health outcomes, and increased access compared with usual behavioral and physical health care (Koff, Jones, Cashman, Voelkel, & Vandivier, 2009; Pomerantz, Cole, Watts, & Weeks, 2008; Reiss-Brennan et al., 2016). Integrated care is also a way of containing costs in health care when compared with usual care models. For instance, integrated care can reduce costs by 40% for older adults (Olsson, Hansson, Ekman, & Karlsson, 2009), meanwhile it can reduce cost for quality mental health care among those with severe mental health illness (Karow et al., 2012). With such outcomes, integrated care has the potential to help alleviate ethnoracial mental health service disparities.

In fact, health care integration can help to reduce health care disparities between non-Hispanic and Hispanic individuals. Bridges and colleagues (2014) provide the initial

findings of Hispanic outcomes from receiving integrated care. They found that Hispanics and non-Hispanics receiving integrated services had comparable utilization rates. They also found that both groups had comparable outcomes from receiving integrated care. That is, both groups experienced significantly better physical and mental health outcomes from receiving integrated care.

Due to these positive outcomes from integrated care, the ACA included provisions that bolstered the funding of integrated care grants. The Substance Abuse and Mental Health Services Administration (SAMHSA) initiated the Primary and Behavioral Health Care Integration (PBHCI) with the aim of increasing quality and access of services to those with comorbid behavioral and physical health issues (SAMHSA, 2015). The first cohort of PBHCI grantees included 13 health care organizations in 2009 that each received $500,000 to implement the core features of the program (Scharf et al., 2014). In 2014, the ACA allocated another $105.8 million to the PBHCI block grant program to help expand its impact on health care integration (SAMHSA, 2017). The ACA also assigned $11 billion to the Community Health Centers Fund, which intended to increase the provision of integrated care at community health centers (Sommers, Gawande, & Baicker, 2017).

Aside from direct funding, the ACA also changed the way that health care organizations could receive reimbursements from health insurance companies. The ACA created bundled payments for people experiencing severe mental health disorders. With these bundled payments, organizations could reimburse same-day care received from multiple providers, which they were unable to do before the ACA (Mechanic, 2012).

The grants and new forms of payments in the ACA could substantially increase the provision of integrated care at mental health care HSOs. This greater provision of integrated care could, in turn, help to address Hispanics' lack of access to care and help to meet the gap in health outcomes between Hispanics and non-Hispanic whites.

Meso-level Factors

At the meso-level, organizations play a role in barring and facilitating Hispanics' use of affordable and quality care. For instance, health safety net (HSN) organizations have historically made up for the shortcomings in the health care system (Melo, 2017). Additionally, although Hispanics are less likely to seek mental health care, HSOs provide services to a large percentage of Hispanics. These organizational factors provide promising avenues to increase Hispanics' access to mental health care.

The health safety net. The HSN is made up of health care organizations that provide care to individuals without regard to their ability to pay. The health safety net includes community health centers, emergency services, and organizations that accept Medicaid. Low-income and uninsured Hispanics are relegated to use HSN organizations to receive important health care, especially when they are unable to receive affordable care from other sources (Melo, 2017).

The ACA increased the funding of community health centers with the aim of better addressing health service disparities (Castañeda & Mulligan, 2017). The ACA created funding programs, like the Community Health Centers Fund, which assigned $11 billion to community health centers. These funds were meant to be used to help increase

the infrastructure and staff at community health centers (Sommers, Gawande, & Baicker, 2017). It was believed that the increase of funding would improve the health safety net's capacity to address health care access for the most vulnerable populations. Since Hispanics make up a quarter of the client population at community health centers, it is possible that this funding had a substantial impact on Hispanics' access to care (Cole, Wright, Wilson, Galárraga, & Trivedi, 2018).

Emergency services became part of the HSN in 1986 under the Emergency Medical Treatment and Labor Act (EMTALA). With this policy change, health care organizations were mandated to provide emergency services to all clients, regardless of their ability to pay. However, these services can be costly to hospitals and can deter Hispanics from seeking care from traditional mental health specialists (Chen et al., 2015).

To date, it is not known whether the increase in funding of the health safety net since the implementation of the ACA has effected Hispanic's access to care.

Hispanic-serving organizations. The HSO concept was created to describe educational institutions whose student enrollment composed of at least 25% Hispanic students (Johnson, Conrad, & Perna, 2006). The concept emerged in the 1980s to identify educational institutions that enrolled a large percentage of Hispanics. The purpose of the concept was to create support through legislation and evidence-based practice for institutions that served Hispanic students (Santiago, 2006).

One study concentrating on HSOs examined spatial access to social services. This study used a measure that classified Hispanic immigrant-serving organizations as those with a clientele that consisted of at least 25% Hispanics (Roth & Allard, 2016). The authors named organizations that did not serve at least 25% Hispanic immigrant clients

mainstream organizations (MOs). The study found that immigrant-serving organizations provided greater access to social services, such as health services, when compared to Hispanics who lived in areas without Hispanic-Serving Institutions.

Recent studies with HSOs in the health care system have found less favorable outcomes. Among older adult clients, HSOs were more likely to have readmissions for heart disorders 30 days after discharge than MOs (Rodriguez, Joynt, López, Saldaña, & Jha, 2011). On various indicators, HSOs also performed worse and had lower quality than MO hospitals (Creanga et al., 2014; Jha et al., 2011). General social service HSOs are also less likely to provide substance and mental health services than other organizations (Roth & Allard, 2016). These findings point to the lower quality of HSOs and their lesser capacity to provide access to behavioral care when compared to MOs.

Although research with HSOs has increased, little is known about the services provided in mental health care HSOs. Specifically, it is unknown whether the provisions to increase the funding of community health centers and integrated care under the ACA had the same impact on HSOs and MOs. Since hospitals that serve a high proportion of Hispanic clients receive the worst quality ratings when compared with lower Hispanic proportion hospitals, this increased funding could help to address many of the disparities between these two groups of organizations (Jha et al., 2008; 2011).

The current literature uses two techniques to assess whether an organization is Hispanic-serving or mainstream. The first way is to measure the percentage of Hispanic-clients in the organization and the second is to assess whether the organization has a mission of working with Hispanic clients (Roth & Allard, 2016). Both of these methods are acceptable, yet using both is favorable. Since this dissertation uses national de-

identified data without the organizations missions, I could not assess whether the organizations had a mission of working with Hispanics. Therefore, I used the percentages of Hispanic clients to assess the HSO and MO labels.

The Present Dissertation

This dissertation includes three studies that examine how macro (the ACA and integrated care funding) and meso level factors (the HSN and HSOs label) effect 1) the characteristics of mental health care HSOs, 2) Hispanic admissions at mental health care organizations, and 3) the provision of integrated care. The following sections present the methods and findings for these three studies.

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Chapter II. Characteristics of Hispanic-Serving Mental Health Care Organizations in the US

Abstract

Hispanics' lower access to mental health services has been well-established. Less is known about the structural characteristics of the organizations in which Hispanics do receive mental health care, especially since the implementation of the Affordable Care Act. Using the 2014 National Mental Health Services Survey this study explored how mental health organizations clustered around the proportion of Hispanics served, the setting from which they operate, their revenue source, their treatment focus, and whether they were in Medicaid expansion states. Latent class analysis suggested Hispanics are most likely to receive mental health care from community mental health centers and non-profit hospitals. Our findings suggest that the defunding of community mental health centers would overwhelmingly affect Hispanics, further increasing ethnic minority disparities in the US health care system.

Keywords: Hispanics, mental health care, the Affordable Care Act, organizational characteristics, community mental health centers

Introduction

Hispanics are less likely than other ethnoracial groups in the United States (US) to have access to quality mental health care, even when controlling for the stage of mental health episodes and need (Alegría et al., 2008; Cook et al., 2014). This lack of mental health care access has been linked to adverse physical health outcomes. For instance, Hispanics with psychiatric disorders face greater odds of developing physical health issues, such cardiovascular diseases (Cabassa, Lewis-Fernández, Wang, & Blanco, 2017). Thus, the lack of timely mental health care can have detrimental effects on Hispanics' overall functioning. While Hispanics' underuse of mental health services has received a fair amount of attention (Cabassa, Zayas, & Hansen, 2006), less is known about the structural characteristics of the organizations in which Hispanics do receive psychiatric care. This question motivates our study.

The Clustering of Hispanics at Mental Health Care Organizations

Health care systems cluster around structural characteristics (Mays, Scutchfield, Bhandari, & Smith, 2010). Some of these characteristics, such as the setting in which the organization operates and its revenue source (i.e. for-profit vs. non-profit) may be particularly attractive to Hispanics seeking mental health care. For instance, community health centers and publicly operated organizations are more likely than for-profit organizations to accept Medicaid. Relatedly, hospitals with a higher percentage of Medicaid clients have been shown to have higher rates of low-income Hispanics and those without health insurance than hospitals with low percentages of Medicaid clients (Jha, Orav, Zheng, & Epstein, 2008; Rhoads et al., 2013; Topmiller, Zhen-Duan, Jacquez, & Vaughn, 2017).

Additionally, Hispanics are more likely to seek care from organizations that already care for a high percentage of Hispanics. Hispanics, particularly immigrants and those that are less acculturated, tend to draw from their social networks when in need of information about health care (Martinez & Carter-pokras, 2006). These networks tend to connect Hispanics to organizations that already provide care to co-ethnic individuals (Villatoro, Dixo, & Mays, 2016).

In terms of the focus of care, Hispanics are more likely to seek mental health care from primary care physician than mental health care specialists (Bridges et al., 2014). These specialists are typically the first health care specialist individuals encounter when seeking mental health support (Satcher & Rachel, 2017). Although integrated behavioral care is capable of meeting the mental health needs of Hispanics, primary care organizations are Hispanics' most frequent access point to mental health care (Bridges, Andrews, & Deen, 2012). As a result, Hispanics may seek mental health care in settings that focus on general health, rather than integrated health care systems. Furthermore, Hispanic-serving organizations (HSO), those that provide to a large percentage of Hispanic clients, are less likely to provide mental health care than those with lower proportions of Hispanics (Roth & Allard, 2016). Thus, the organizations where Hispanics cluster are less likely to be focused on mental health care.

The Affordable Care Act and Hispanics' Use of Mental Health Care

Health care coverage inequities play a role in dictating mental health care organizational characteristics. Hispanics are more likely than other groups in the US to lack health insurance (Artiga, 2013). The increased public health insurance coverage may help to resolve these inequities. To democratize access to coverage and ameliorate

striking health disparities, the US passed in 2010 the Patient Protection and Affordable Care Act (ACA). Making health insurance affordable was the cornerstone of the legislation. One of the mechanisms to achieve this goal was the expansion of Medicaid eligibility to working-age adults under the age of 65 with incomes up to 138% of the federal poverty level (Blumenthal & Collins, 2014).

By policy design, the ACA excluded undocumented immigrants and provided restricted coverage options to short-term legal permanent residents. Nevertheless, the enactment of the ACA was very promising for native-born Hispanics, and long-term authorized Hispanic immigrants. However, in 2012 the Supreme Court made the expansion of Medicaid eligibility optional for states (Gostin, 2012). After Medicaid expansion came to effect in January 1, 2014, the uninsured rates for Hispanics decreased in expansion states from 36% to 23% (Doty, Blumenthal, & Collins, 2014). In comparison, Hispanics in non-expansion states were significantly less likely to have Medicaid and any source of insurance than those in expansion states (Lipton, Decker, & Sommers, 2017).

The increased percentage of Hispanics with health insurance may impact the proportion of Hispanics at mental health organizations in the expansion states. Since the implementation of the ACA, Hispanics have been less likely to delay care and more likely to have a physician visit (Alcalá, Chen, Langellier, Roby, & Ortega, 2017; Chen, Vargas-Bustamante, Mortensen, & Ortega, 2016). Additionally, there have been significant increases in Hispanic mental health care use post-ACA implementation (Creedon & Cook, 2016). These changes to Hispanic access to care have been more prominent in expansion states than in the non-expansion states. For instance, Hispanics in

the expansion states were less likely to delay care than those in the non-expansion states (Sommers, Baicker, & Epstein, 2012). Therefore, mental health care organizations in the expansion states may have seen an upsurge of Hispanic clients in 2014.

The Current Study

A great amount has been written about the structural characteristics of Hispanic-serving hospitals (Creanga et al., 2014; Jha et al., 2008; Rodriguez, Joynt, López, Saldaña, & Jha, 2011). Less is known, however, about the structural characteristics of mental health organizations which disproportionately provide psychiatric care to Hispanics in the US. To address this gap in the literature, this study uses national data to explore how mental health care organizations cluster around the proportion of Hispanics they serve and structural characteristics. The structural characteristics within this study include the organization's settings, revenue source, treatment focus, and whether the organizations are in states that adopted the expansion of Medicaid.

Methods

Data and Study Sample

This study used data from the 2014 National Mental Health Service Survey (N-MHSS) (Substance Abuse and Mental Health Services Administration, 2014). The N-MHSS is an annual survey of the structural characteristics of mental health care organizations in the US. While the first wave was collected in 2010, our study uses data from the 2014 wave because it is the year when the provisions of the Affordable Care Act (ACA) were fully implemented nationally. The 2014 wave was collected from April, 2014 to January, 2015. The organizations were asked to respond to the questionnaire according to the makeup of their organizations in the month of April. Military treatment

centers, residential treatment centers without a primary focus on mental health services, individual practices and small group practices not licensed as mental health center or clinic, and jails and prisons were excluded from the sample. The survey only collected information from organizations within the Substance Abuse and Mental Health Serviced Administration database of licensed mental health organizations, thus small practices and other organizations without licenses were excluded during the collection process. The survey response rate for the eligible organizations was 88.1%.

Our final sample comprised of 9,572 mental health organizations that provided outpatient services and reported their Hispanic client proportions in the 50 states in the US. We excluded organizations within the District of Colombia, American Samoa, Guam, Puerto Rico, the Virgin Islands due to small samples and differences in health care policies in these areas. Since the data was publically available and de-identified, the authors' institutional IRB decided to exempt the study from review.

Study Measures

The organization setting captures the facility in which the mental health services are embedded. This measure was constructed from the following question: "Which ONE category BEST describes this facility, at this location?" Responses were categorized into: 1) hospitals, 2) community mental health centers, 3) residential treatment, and 4) other. Hospital settings included psychiatric hospitals, inpatient psychiatric units of general hospitals, outpatient organizations, and Veterans Administration health organizations. The other category included organizations included organizations that were not hospitals, community mental health centers, or residential treatment centers.

The N-MHSS survey collects information on the proportion of ethnoracial minority clients served at each organization. We used this information to create a Hispanic proportions variable, which measured the percent of Hispanics served at the organizations. The original coding of these proportions was coded in 10% intervals from 0 to 50% and then in 25% interval from 50 to 100%. We retained this coding in this analysis to be able to maintain the variability in the sample.

An organization's revenue source was measured using the question "Is this facility operated by:" Organizations could choose among three mutually-exclusive options. The first option includes private non-profit organizations. The second option accounts for private-for-profit organizations. The third option comprises public organizations, such as those operated by the federal government, the state, and the local government.

We used four items from the N-MHSS to capture the types of payments accepted at the organizations. A measure of free treatment was included from the question, "Does this facility offer treatment at no charge to clients who cannot afford to pay?" Additionally, private health insurance, Medicare, and Medicaid options for payment were included from the question, "Which of the following types of client payments, insurance, or funding are accepted by this facility for mental health treatment services?" Organizations could choose more than one type of payment.

Each organization that took part in the N-MHSS indicated their treatment focus from the question: "What is the primary treatment focus of this facility, at this location?" Responses included mental health treatment, integrated mental health and substance abuse treatment, general health care, or other services.

To capture the potential impact of the Medicaid expansion, we considered whether the organizations included in our sample were located in the Medicaid expansion states. We used data from the Kaiser Family Foundation on Medicaid expansion by states in 2014 for this purpose (Kaiser Family Foundation, 2018). Medicaid expansion was coded as a dichotomous variable, where states that adopted the expansion were coded as 1, meanwhile non-expansion states were coded 0.

Statistical Analysis

We conducted descriptive analyses using Stata 14 SE to describe the characteristics of the mental health organizations. Additionally, to categorize the organizations into latent groups, we performed latent class analyses (LCA) using Mplus statistical software, version 8. LCA is a technique used to identify class membership according to observed categorical variables (McCutcheon, 1987). This technique is used to detect clusters of respondents who replied similarly to a set of variables. In this analysis, we used LCA to cluster mental health organizations into groups of with similar responses to the variables in the present study.

We used goodness-of-fit indices to compare models with 2 to 6 classes. We used these indices to identify the best fitting model. To this end, the well-established fit indices Akaike's Information Criterion (AIC), Bayesian Information Criterion (BIC), and entropy were used. Lower levels of AIC and BIC indicate better fitting models. In terms of entropy, levels closer to 1.00 are favorable (Heredia-Ponce, Irigoyen-Camacho, & Sánchez-García, 2017; Kendzor, Caughy, & Owen, 2012). In the final analysis, only the coefficients for the best fitting model are presented.

We originally hypothesized that the organizations would cluster into two (Hispanic and mainstream organizations) or four classes (expansion state Hispanic-serving organizations, non-expansion state Hispanic-serving organizations, expansion state mainstream organizations, non-expansion state organizations). As we conducted the fit indices, we included the five and six classes models to compare whether the model we chose was the best fitting model.

Results

Sample Characteristics

Table 1 shows the characteristics of the mental health organizations included in the analyses. More than half of the organizations were in hospital settings (55.6%), meanwhile nearly half reported not serving Hispanic clients (44.2%). Additionally, among those organizations that worked with Hispanics, most did not surpass 10% of the total population served. Concerning the source of revenue, two-thirds of were privately owned non-profit organizations (64%).

According to the payments accepted, almost all of the organizations accepted Medicaid (88.7%), private health insurance (79.7%), and Medicare (70.4%). Meanwhile, a little more than half of organizations provided services free of charge (53.7%). Moving onto treatment, most organizations focused on mental health (63.1%), followed by a combination of integrated care of mental health and substance abuse (31.5%). Finally, the organizations were evenly situated within (47.3%) and outside (52.7%) expansion states.

Table 1. Descriptive Statistics of Mental Health Care Organizations

	N	%
Setting		
Hospital	5,324	55.6%
CMHC	3,055	31.9%
Residential treatment	530	5.6%
Other	663	6.9%
Latino clientele		
None	3,718	44.2%
1 to 10%	3,185	30.8%
11 to 20%	900	10.4%
21 to 30%	448	5.1%
31 to 40%	337	3.4%
41 to 50%	202	2.1%
51 to 75%	271	2.3%
76 to 100%	202	1.7%
Revenue source		
Private for-profit organization	1,500	15.7%
Private non-profit organization	6,133	64%
Public agency or department	1,939	20.3%
Payments taken		
No charge	5,139	53.7%
Private health insurance	7,631	79.7%
Medicaid	8,491	88.7%
Medicare	6,735	70.4%
Treatment focus		
Mental health	6,036	63.1%
Mental health & substance use	3,014	31.5%
General health	262	2.7%
Other focus	260	2.7%
Medicaid expansion		
Yes	4,532	47.3%
No	5,040	52.7%

Note. CMHCs = Community mental health centers

Goodness-of-fit Indices

Table 2 reports the goodness-of-fit indices for the five models compared in our analyses. According to entropy, the four-classes model has the greatest delineation among groups. The entropy increases from the 2 to 4 classes models and then decreases afterwards. The AIC and BIC decrease throughout all the models, which indicates that the models with a larger number of classes are better fitting. However, we decided to use the four classes model because it had the highest entropy of all the models. Therefore, we present only the coefficients for the four-classes model in table 3.

Table 2. Model Class Goodness-of-fit Indices for 2, 3, 4, 5, and 6 Classes Solutions

	Two Classes Model	Three Classes Model	Four Classes Model	Five Classes Model	Six Classes Model
AIC	129516.977	128268.015	127418.842	126812.778	126549.120
BIC	129810.807	128712.344	128013.670	127558.104	127444.945
Entropy	0.601	0.624	0.715	0.680	0.635

Model Coefficients

We report only the coefficients of the four-classes model in table 3, which we identified as the best-fitting model. The first latent class, the Hispanic-serving community mental health centers, is the largest group (N = 5,567) and included mental health organizations clustered in hospitals ($\rho = 0.48$) and community mental health centers ($\rho = 0.45$). The overall proportion of organizations that serve Hispanics in this class is relatively high (64%), although most Hispanics ($\rho = 0.41$) concentrate within the 1% to 10% interval. Concerning revenue source, most organizations identified as private non-profit ($\rho = 0.72$) and a moderate proportion ($\rho = 0.35$) accepted no charge for the provision of services. The main treatment focus of these organizations was mental health

(ρ = 0.60), with a smaller proportion providing services for a combination of mental health and substance use issues (ρ = 0.36). Finally, mental health organizations in this class were evenly situated in expansion (ρ = 0.47) and non-expansion states (ρ = 0.53).

The second largest group (N=2,229), Hispanic-serving hospitals, mostly concentrated in hospitals (ρ = 0.53). While the overall proportion of Hispanic clients served in these organizations did not differ from the first group (65%), Hispanics in this class were most likely to cluster in larger intervals (i.e. 11% to 20% and 76% to 100%) than in any other group. Concerning revenue, most organizations were privately owned and non-profit (ρ = 0.76) and most often accepted private health insurance (ρ = 0.60) and Medicare (ρ = 0.67) as payments for their services. They overwhelmingly focused on mental health services (ρ = 0.77) and were situated outside states that opted for expanding Medicaid (ρ = 0.29).

Organizations in the third class (N=1495), the mainstream private hospitals, had the greatest probability of being embedded in a hospital (ρ = 0.77) and being a private for-profit organization (ρ = 0.65). Most of these organizations did not have Hispanic as clients (ρ = 0.53), and they had a lower probability of having Hispanic clients constitute between 1% to 10% of their total client proportions (ρ = 0.30). In terms of payments taken, this group of organizations were most likely to provide services at no charge (ρ = 0.77). Similar to the second group, the main focus of these organizations was mental health (ρ = 0.60). This class had the greatest probability of all classes to operate within an expansion state (ρ = 0.67).

The final group identified was the 281 mainstream public hospitals. Interestingly, this class had the least probability of having Hispanics as clients (ρ = 0.66). These

organizations were also the most likely to accept Medicaid ($\rho = 0.97$) and Medicare ($\rho = 0.85$) as payments, and to be hospitals ($\rho = 0.90$) that focused on general health ($\rho = 0.39$). Finally, most organizations operated from hospitals ($\rho = 0.90$) and were evenly distributed within and outside expansion states ($\rho = 0.54$).

Table 3. Latent Class Analysis of Mental Health Care Organization Characteristics

	Hispanic-serving CMHCs: (N=5567)	Hispanic-serving Hospitals: (N=2229)	Mainstream Private Hospitals: (N=1495)	Mainstream Public Hospitals: (N=281)
	ρ	ρ	ρ	ρ
Setting				
Hospital	0.48	0.52	0.77	0.90
CMHC	0.45	0.24	0.09	0.05
Residential treatment	0.03	0.12	0.05	0.04
Other	0.04	0.12	0.09	0.01
Hispanic clientele				
None	0.36	0.35	0.53	0.66
1 to 10%	0.41	0.24	0.30	0.23
11 to 20%	0.10	0.10	0.09	0.07
21 to 30%	0.04	0.08	0.03	0.02
31 to 40%	0.03	0.06	0.02	0.01
41 to 50%	0.02	0.05	0.01	0.01
51 to 75%	0.02	0.07	0.01	0.00
76 to 100%	0.02	0.05	0.01	0.00
Revenue source				
Private for-profit organization	0.03	0.09	0.65	0.00
Private non-profit organization	0.72	0.76	0.35	0.00
Public agency or department	0.25	0.15	0.00	1.00
Payments taken				
No charge	0.35	0.41	0.75	0.32
Private health insurance	0.03	0.60	0.08	0.32
Medicaid	0.01	0.17	0.14	0.97
Medicare	0.04	0.67	0.36	0.85
Treatment focus				
Mental health	0.60	0.77	0.60	0.22
Mental health & substance use	0.36	0.15	0.37	0.35
General health	0.03	0.01	0.01	0.39
Other focus	0.01	0.07	0.02	0.04
Medicaid expansion	0.47	0.29	0.67	0.54

Note. CMHCs = Community mental health centers

Discussion

It is well-documented that Hispanics face structural barriers to psychiatric care in the US (Cabassa et al., 2017). Less is known about the organizational characteristics that facilitate their access to care. Our study examined how outpatient mental health organizations differed nationally, shortly after the enactment of the ACA, according to the proportion of Hispanic clients they serve and their structural characteristics. Our findings supported the hypothesis that mental health organizations can be grouped into classes according to their structural characteristics (Mays et al., 2010).

We identified four classes of mental health organizations. Our groupings suggest that two types of organizations had the highest probability of serving Hispanic clients. Consistent with the literature, these were non-profit mental health care organizations embedded in community mental health centers and hospitals. Community mental health centers often serve as a safety net for Hispanics who may be uninsured or insured through public coverage(Guendelman & Wagner, 2000). Additionally, Hispanics use community health centers at a rate of 5.5 times more than non-Hispanic whites (Smedley, Stith, & Nelson, 2003).[33]

In line with prior research, the second type of organizations with the highest concentration of Hispanics were non-profit hospitals that took private health insurance and Medicare. Hispanic clients with mental health disorders tend to seek health care in hospitals with available primary care services, possibly because they experience greater amounts of physical symptoms from their disorder (Bridges et al., 2012). To offset the costs of providing care to uninsured clients and with Medicaid coverage, these

organizations tend to rely on payments from Medicare and private health insurance (Chen et al., 2015; Cunningham, Rudowitz, Young, Garfield, & Foutz, 2016).

Additionally, we identified two types of organizations with lower probabilities of having Hispanic clients: mainstream private for-profit hospitals, and mainstream public hospitals. Since this data was collected in 2014, shortly after the full implementation of the ACA, our findings should be examined within the context of this major policy change. Contrary to prior literature, public health care organizations in Medicaid expansion states, class 4 in our analyses, were the least likely organizations to have a high proportion of Hispanic clients (Joseph & Marrow, 2017). A potential explanation is that with greater access to Medicaid and subsidized private health insurance (Sommers, Gunja, Finegold, & Musco, 2015), Hispanics in expansion states had a larger array of choices for health care(Lasser et al., 2016). Rather than seeking health care only in mental health organizations that provided care at no charge, Hispanics in expansion states could choose among other organizations that accepted their newly acquired health insurance.

Relatedly, the lack of clustering in expansion states may suggests that Hispanics used higher quality services after the expansion. In a study examining hospital quality and Hispanic client proportions, Hispanics were more likely to cluster in the worst hospitals (Jha, Orav, & Epstein, 2011; Jha et al., 2008). However, with the expansion of Medicaid funds and the establishment of Marketplaces for subsidized insurance, people were able to better quality care (Haeder, Weimer, & Mukamel, 2015).

Contrary to our expectations, class 3 (mainstream private hospitals) included private for-profit organizations that provided services at no charge. It seems

counterintuitive that for-profit organizations in our study provided services at no charge since, unlike most non-profit organizations, these organizations heavily rely on fees to increase revenue, rather than federal funding. However, private hospitals have been providing uncompensated care to uninsured clients for decades (Atkinson, Helms, & Needleman, 1997). Private hospitals may be best positioned to provide care at no charge because of the higher rates they can charge their larger pool of private health insured clients. The higher payment received from private health insurance may help to curb the large increase of uncompensated care in areas with growing Hispanic populations (Chen et al., 2015).

Limitations

There are limitations within this study that are of concern. First, due to the nature of cross-sectional data, this study cannot make causal inferences that explain why organizations' characteristics cluster in certain way. Secondly, we included a diverse group of clients into one overall "Hispanic" group. While Hispanics differ on their immigration status, nativity, country of origin, and experiences in the US, there may be a shared experience in the places they seek care. These shared experiences may be due to the structural factors, such as policies and location, that explain where Hispanics seek care(Guzman, Woods-Giscombe, & Beeber, 2015). Although we examined the ACA expansion in 2014, various states have expanded Medicaid after the initial expansion date. Thus, future studies may need to understand how the expansion over time also affects the clustering of Hispanics at mental health care organizations.

Conclusion

Prior to this study, little was known about the national characteristics of mental health organizations where Hispanics receive care. Our findings show that four classes of mental health care organization can be identified in terms of their Hispanic client population, revenue source, payments taken, organization setting, treatment focus, and according to the expansion of Medicaid services in their state. The largest group of mental health organizations identified consisted of Hispanic-serving community mental health centers. The implications of our findings are timely. Federal funding for community health centers expired in September 2017. Soon after, the House of Representatives proposed a plan that would fund community health center for two years. The plan has not been accepted and is currently in deliberation. As a result, one of the largest providers of mental health care to Hispanics in the US is under threat. Community health centers could be facing 70% cutbacks if the federal funds are not reapplied (National Association of Community Health Centers, 2018). Our findings suggest that defunding community health centers would affect lower-income Hispanics overwhelmingly, further increasing disparities in health care access in the US.

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Chapter III. After Obamacare: The Impact of the Health Safety Net on the Mental Health Care of Hispanics

Abstract

This study assessed whether the Affordable Care Act (ACA) and the health safety net were associated with Hispanic admissions at mental health organizations. Organizational responses from the 2010, 2014, and 2016 waves of the National Mental Health Service Survey were merged to examine the effects of the ACA and the health safety net on Hispanic admissions over time. Findings showed that there was an increase in Hispanic admissions post-ACA (2014). However, two-years post implementation (2016), Hispanic admission rates were lower than the rates observed during the pre-ACA implementation (2010). Despite this decrease, the health safety net organizations continued to serve more Hispanic clients than other organizations. This study presents the first results on the impact of the ACA on Hispanic mental health admissions.

Keywords: Mental health care, Affordable Care Act, Hispanics, Health safety net, Community health centers

Introduction

Even after controlling for mental health needs, Hispanics have lower use of mental health services than non-Hispanic whites (Alegría et al., 2008; Cook et al., 2014). The 2010 Patient Protection and Affordable Care Act (ACA) is a major health reform that intended to address these issues with access to care. Specifically, under the ACA, safety net health care organization received greater funding to help address ethnoracial minority service disparities.

Although the ACA aimed to address issues with access, there has been little attention to the impact of this health care reform on Hispanic mental health access. Further, it is unknown how health safety net organizations address Hispanic mental health service disparities and whether Hispanics will continue to seek mental health care from health safety net organizations (Ortega, Rodriguez, & Bustamente, 2015). Our aim for this paper was to examine whether Hispanic client admissions have increased at mental health organizations since the enactment of the ACA. Additionally, we aimed to assess how health safety net organizations affected Hispanic admissions.

The Impact of Obamacare on Health Safety Net Organizations and Hispanics' Health Care

Hispanics were the largest group without health insurance before the enactment of the ACA in 2010 (Artiga, 2013). Uninsured Hispanics were reluctant to seek health care, including mental health services (Alegría et al., 2007).

The ACA aimed to address these inequities on health care access by increasing (1) access to health insurance coverage and (2) the funding of health safety net (HSN) organizations that focused on the health care of underserved populations.

Expanding eligibility to public coverage, also known as Medicaid, was one of the strategies to increase access to health coverage under the ACA. Medicaid eligibility increased to 138% of the Federal Poverty Level (Musumeci, Rudowitz, Hinton, Antonisse, & Hall, 2018). Additionally, for the first time, economically qualifying non-disabled adults without dependent children were eligible for public health coverage (Kaiser Family Foundation, 2012).

While all states were expected to adhere to these provisions, on June 2012 the US Supreme Court made Medicaid expansion optional for states (Jacobs & Callaghan, 2013). By January 2014, when the Medicaid expansion took effect, only 25 states had decided to adopt the expansion (Kaiser Family Foundation, 2017). This created a patchwork of public coverage across the country.

Increasing the funding of HSN organizations that focused on the health care of underserved populations was another strategy included in the ACA to address disparities in access to health care. The health safety net is comprised of community health centers, and similar organizations, that provide access to health care to lower-income populations, regardless of documentation status, insurance coverage, or ability to pay. As a result, they are heavily used by lower-income Hispanics (Health Resources and Services Administration, 2014; Melo, 2017; Samson et al., 2016).

To support the HSN, the ACA constituted the Community Health Centers Fund with an initial budget of $11 billion over a period of 5 years. One of the goals of the Community Health Centers Fund was to lessen the use of costlier HSN services, such as emergency psychiatric services. Emergency psychiatric services became an important part of the HSN under the 1986 Emergency Medical Treatment and Labor Act

(EMTALA). Under this legislation, emergency personal were required to provide services to underserved individuals, such as undocumented Hispanics, regardless of coverage or migratory status. The increased funding of community health centers aimed to reduce the use of emergency services, which is a costly and inefficient option for addressing mental health problems (Sommers, Gawande, & Baicker, 2017).

To decrease the use of emergency psychiatric services among lower-income populations, the ACA allocated $50 million initially to the integration of behavioral and general health care in community health centers in 2010 (Druss & Mauer, 2010).

Integrated care is a collaborative approach for providing combined general and behavioral health care within health care organizations (Brennan et al., 2009). Integrated care is important in addressing mental health disparities among Hispanics, since many clients with chronic physical diseases also present with chronic mental health issues (Gerrity, 2014). For instance, Hispanics diagnosed with diabetes are significantly more likely to experience depression than the general population (Olvera, Fisher-Hoch, Williamson, Vatcheva, & McCormick, 2016).

Some Hispanics hold negative views about seeking mental health care. Additionally, two thirds of primary care physicians face difficulties referring Hispanic clients due to the limited number of mental health specialists (Cunningham, 2009). Integrated care settings address barriers in seeking a usual place for mental health care, transportation, and overlapping treatment (Mechanic & Olfson, 2016). This form of care has been shown to also decrease the use of acute care, such as emergency psychiatric services (Reiss-Brennan et al., 2016), and to dispel misconceptions and help to address both mental and general health issues (Cabassa, Hansen, Palinkas, & Ell, 2008).

The Current Study

One in every four people that used HSN organizations identified as Hispanic (Cole, Wright, Wilson, Galárraga, & Trivedi, 2018). Especially important are the increase of services provided to undocumented Hispanics with chronic conditions (Melo, 2017). After the health care reform, Hispanics were significantly less likely to delay care and more likely to visit a physician than their non-Hispanic white counterparts (Chen, Vargas-Bustamante, Mortensen, & Ortega, 2016). Particularly in expansion states where Hispanics had higher rates of health insurance coverage (Doty, Rasmussen, & Collins, 2014) and greater access to health care than their counterparts in non-expansion states (Sommers, Gunja, Finegold, & Musco, 2015).

However, some of the gains to health care stemming from the ACA were short-lived. Researchers found no significant increase in Hispanic health care visits from 2015 to 2016 (Sommers, Maylone, Blendon, Orav, & Epstein, 2017). Additionally, longer waiting times were detected two years after the enactment of the ACA in expansion states, which were not evident right after the expansion took place (Sommers, Maylone, et al., 2017).

Less is known about the impact of the ACA on the mental health care of lower-income Hispanics, which is precisely the focus of this study. Prior to the ACA, individuals with severe mental health needs were significantly less likely to have health insurance than the general population (McAlpine & Mechanic, 2000). Yet, it is estimated that nearly 3.7 million new individuals with severe mental health issues obtained health insurance after the enactment of the ACA, resulting in 1.15 million more of these individuals being admitted to mental health organizations (Garfield, Zuvekas, Lave, &

Donohue, 2011). Although the Mental Health Parity and Addiction Equity Act of 2008 (MHPAEA) established that group health plans could not create lower benefit limits to mental health services than they did for general health services, private health insurers continued to offer reduced benefits for these mental health services. The ACA broadened the MHPAEA to include private health insurance plans (Centers for Medicare and Medicaid Services, 2018), and established mental health services as one of the 10 essential service categories that all insurance plans need to cover (Mechanic & Olfson, 2016). It is unknown if these changes to mental health policies will impact Hispanics' access to mental health services.

We used a nationally representative sample of mental health organization in the US to a) explore whether Hispanics' use of mental health services increased after the ACA, b) assess whether Medicaid expansion was associated with an increase in Hispanics' use of mental health services, and c) investigate what characteristics of the HSN organizations (accepts Medicaid payments, offers emergency psychiatric services, integrated health care, and whether it is classified as a community health center) were associated with Hispanics' use of mental health services.

Methods

Sample

Data was drawn from the National Mental Health Services Survey (N-MHSS). The N-MHSS is a publically available national census, which collects data from mental health organizations in the US and its territories. Individual practice and small groups without a mental health care organization license were excluded from the sample. These organizations were excluded from the sample because non-licensed organizations were

not included in Substance Abuse and Mental Health Services Administration's (SAMHSA), the N-MHSS managing organization, database of mental health care organizations. Also, mental health care organizations that primarily provided mental health care to incarcerated clients are excluded from the survey. Data includes the structural, client, and service characteristics of the organizations for the month of April of the corresponding yearly wave (SAMHSA, 2014, 2016, 2017).

Surveys were administered every other year during the month of April from 2010 to 2014; and then annually afterwards to directors of the mental health organization using paper, web-based, and telephone-assisted questionnaires.

This study uses the 2010, 2014, and 2016 waves of the N-MHSS. These are the only waves that collected information on Hispanic clients. Concerning sample and response rate, 91% of 12,186 eligible organizations responded to the survey in 2010, 88% of 16,687 eligible organizations responded in 2014, and 91% of 13,983 eligible organizations responded in 2016.

Case identification numbers for organizations were not made publically available. A repeated cross-sectional approach is an accepted solution to create datasets from waves of data with cases that are not uniquely identified (Lebo & Weber, 2015). We followed this approach to merge responses from the 2010, 2014, and 2016 waves of the N-MHSS.

To capture Hispanics' use of services, we excluded organizations that did not answer the question on the proportion of Hispanic clients. We also excluded organizations in the US territories because they are governed by different sets of policies. In total, we excluded 8,411 out of the combined 35,722 organizations from the 2010,

2014, and 2016 waves of the N-MHSS. Our final sample included 27,311 outpatient mental health organizations that served Hispanic clients within the 50 US states.

Dependent Variables

Hispanic Outpatient Admissions. Our outcomes of interest included two measures of Hispanic admissions rates. The first dependent variable (Hispanic client admissions) captured the total number of Hispanic clients admitted into outpatient services annually. Categories ranged from 0 (none), 5 (40 to 50), to 12 (more than 1500). The second dependent variable (Hispanic client proportions) measured the percentage of total clients that identified as Hispanics annually. Categories ranged from 0 (none) to 7 (76%-100%), with a midpoint of 4 (more than 30% to 40%).

These variables captured whether Hispanics increased the use of mental health services post-ACA. The ACA aimed to increase access to health care for underserved populations by increasing funding for Health Safety Net organizations and for mental health services tailored to these populations, such as integrated care. Therefore, we used the overall Hispanic client admissions variable to assess how the overall admissions of Hispanic clients changed after the ACA.

The actions under the ACA were expected to have a disproportionately positive affect on Hispanics' access to health care (Ortega, Rodriguez, & Vargas Bustamante, 2015). Thus, we included the Hispanic proportions variable to assess whether the ACA increased the percentage of Hispanic clients at mental health care organizations. Since other ethnoracial groups may have increased their use of mental health care over time, the Hispanic client proportions variable shows whether Hispanics increased their use of mental health care at higher rates than non-Hispanic clients.

Predictors

Medicaid Expansion. We merged data from the Kaiser Family Foundation (2017) with our dataset to create a variable that captured Medicaid expansion by state. The Kaiser Family Foundation data indicates both the states that have adopted the expansion as well as the year it was adopted. Mental health organizations located in non-expansion states where coded as (0), while those located in expansion states where coded as (1). Similar measures have been created for research examining health care outcomes between expansion and non-expansion states (e.g. Ostrow, Steinwachs, Leaf, & Naeger, 2017).

Health Safety Net. To capture whether organizations belonged to the HSN we included the following four variables: (1) Accepts Medicaid payments (0) = "Medicaid not accepted", (1) = "Medicaid accepted"; (2) Provides emergency psychiatric services (0) = "No", (1) = "Yes"; (3) Is the organization a community mental health center? (0) = "No", (1) = "Yes"; and (4) Does it provide integrated primary care? (0) = "No", (1) = "Yes"

Control Variables. We adjusted for both organization and state characteristics. At the organizational level, we controlled for organization size by including a variable that captured how many outpatient clients were served. This variable ranged from 0 (none) to 12 (more than 1500) and had a midpoint of 7 (76 to 100). We also included the proportion of youth (17 and under years of age), adult (between 18 and 64 years old), older adult (65 years and older), and female clients served by the organizations. These variables were independent of each other.

An organization's ability to serve Hispanic clients is partially dependent on the size of the Hispanic population within the region. Thus, we also included a continuous variable that captured the percent of Hispanics living in the state at each wave of the data. The percent of Hispanics living in the state was derived from the U.S. Census Bureau's population estimates (U.S. Census Bureau, 2017).

Analyses

We conducted univariate and multivariate analyses for this study in Stata, Data Analysis and Statistical Software version 15.1. The sample characteristics were stratified by year and reported in raw numbers and percentages.

We conducted two sets of ordered logistic regression models to estimate the impact of the ACA on Hispanics use of mental health services before (2010), after (2014), and two-years post ACA (2016). The first set of regressions examined a) whether Hispanic admissions increased from 2010 to 2016, and b) whether being in an expansion state and being a health safety net organization were associated with an increase in Hispanic admissions from 2010 to 2016.

The safety net variables 1) integrated care, and 2) community mental health center, were only included in the 2014 and 2016 waves of the N-MHSS. We conducted a second set of regressions that assessed how these variables were associated with Hispanic use outpatient mental health organizations after controlling for the other variables in the study.

Additionally, we included interaction terms in each model between the Medicaid expansion and the HSN variables to investigate whether the relationship between the

HSN variables and Hispanic admissions was different in expansion than in the non-expansion states.

In line with prior analysis on the impact of the ACA on Hispanic general health care access, we included an interaction term between the HSN variables and the year the data was collected to examine whether the effects of the HSN variables on Hispanic admission was different before and after the ACA (Alcalá, Chen, Langellier, Roby, & Ortega, 2017). A significant interaction term would suggest that the relationship between the HSN variables and Hispanic admissions changed over time.

We used two separate models for the interaction terms and main effects. Model 1 included all of the main effects of the predictors. Model 2 included the predictors and interaction terms. Tables 5 and 6 present the coefficients for the predictors from the model 1 and the interaction coefficients from model 2.

Results

Characteristics of the Sample

Table 4 presents the characteristics for the organizations in the study by the year the data was collected. The overall sample included 27,311 outpatient-providing mental health organizations. Of those organizations, 7,826 were included in 2010, 9,857 were in 2014, and 9,628 were included 2016. The overall Hispanic client admissions increased in 2010 (M = 1.8, SD = 2.6) to 2014 (M = 2.0, SD = 2.8). However, the Hispanic client admissions returned back to the 2010 rates in 2016 (M = 1.8, SD = 2.7). Similarly, the percentage of Hispanic clients increased from 2010 (M = 1.1, SD = 1.6) to 2014 (M = 1.2, SD = 1.7), but gains were lost in 2016 (M = 1.1, SD = 1.6). Over half of all organizations were in expansion states in 2010 (57.4%), 2014 (55.4%), and 2016 (64.9%).

In terms of the HSN variables, most organizations (90.8%) accepted Medicaid payments throughout all the waves included in the sample. Less than half of the organizations provided emergency psychiatric services (41.8% in the 2010 wave; 34.5% in the 2014 wave; 33.2% in the 2016 wave).

Integrated primary care and the community mental health centers variables were only reported in the 2014 and 2016 waves. Within those waves, only 31.0% of mental health organizations in 2014, and 27.1% in 2016 were community mental health centers. Similarly, only 23.4% of mental health organization in 2014, and 25.1% in 2016 provided integrated primary care services.

In regards to the control variables, most mental health organizations had 76 to 100 clients ($M = 7.4$, $SD = 2.9$). On average, organizations had around 21% to 30% youth in 2010 ($M = 2.9$, $SD = 2.5$), 2014 ($M = 2.9$, $SD = 2.6$), and 2016 ($M = 2.9$, $SD = 2.5$). Adult clients made up the largest age group at 41% to 50% of the total clients in organizations throughout all waves included in the study. Older adults made up the smallest share of the age groups at the organizations. Older adult clients represented 1 to 10% of the organization populations between 2010 to 2016 ($M = 1.1$, $SD = 1.3$). According to the sex of the client population, female clients made up around a half (41 to 50%) of the client population in 2010 ($M = 5.2$, $SD = 1.2$), 2014 ($M =5.2$, $SD = 1.3$), and 2016 ($M =5.2$, $SD = 1.3$).

In terms of the state characteristics, Hispanics on average made up 13.7% ($SD = 11.8$) in 2010, 13.7% in 2014 ($SD = 10.8$), and 14.1% in 2016 ($SD = 11.3$) of the population in the states.

Table 4. Organization Sample Characteristics Stratified by Year

	Total (N = 27,311)		2010 (N = 7,826)		2014 (N = 9,857)		2016 (N = 9,628)	
Variables	n	% M(SD)	n	% M(SD)[a]	n	% M(SD)	n	% M (SD)
Hispanic client admissions	27,140	1.9 (2.7)	7,826	1.8 (2.6)	9,857	2.0 (2.8)	9,457	1.8 (2.7)
Hispanic client proportions	27,140	1.2 (1.6)	7,826	1.1 (1.6)	9,857	1.2 (1.7)	9,457	1.1 (1.6)
Medicaid expansion								
Expansion state	16,201	59.3	4,495	57.4	5,461	55.4	6,245	64.9
Non-expansion state	11,110	40.7	3,331	42.6	4,396	44.6	3,383	35.1
Medicaid accepted								
Yes	23,520	90.8	6,198	90.6	8,750	90.8	8,572	90.9
No	2,385	9.2	647	9.5	887	9.2	854	9.1
Emergency psychiatric services								
Yes	9,404	35.9	2,834	41.8	3,373	34.5	3,197	33.2
No	16,783	64.1	3,954	58.2	6,401	65.5	6,428	66.8
Community mental health center								
Yes	5,662	29.1	–	–	3,049	31.0	2,613	27.1
No	13,823	70.9	–	–	6,808	69.0	7,015	72.9
Integrated primary care								
Yes	4,714	24.2	–	–	2,279	23.4	2,417	25.1
No	14,797	75.8	–	–	7,467	76.6	7,207	74.9
Organization size	27,140	7.4 (2.9)	7,826	7.5 (2.9)	9,857	7.4 (2.9)	9,457	7.5 (2.9)
% Youth clients	27,140	2.9 (2.5)	7,826	2.9 (2.5)	9,857	2.9 (2.6)	9,457	2.9 (2.5)
% Adult clients	27,140	5.2 (2.3)	7,826	5.3 (2.3)	9,857	5.2 (2.3)	9,457	5.2 (2.3)
% Older adult clients	27,140	1.1 (1.3)	7,826	1.0 (1.2)	9,857	1.1 (1.3)	9,457	1.2 (1.3)
% Female clients	27,140	5.2 (1.3)	7,826	5.2 (1.2)	9,857	5.2 (1.3)	9,457	5.2 (1.3)
% Hispanics in state	27,311	13.85 (1.3)	7,826	13.7 (11.8)	9,857	13.7 (10.8)	9,628	14.1 (11.3)

Note. This table reports percentages for nominal variables and means and standard deviations for ordinal variables.

The Impact of the Affordable Care Act on Hispanic Use of Mental Health Care

Table 5 presents the results from the regression analyses. Model 1 show that there was a slight increase in Hispanic client admission in 2014 (OR = 1.07, $p < 0.05$). Conversely, there was a significant decrease in the overall number of Hispanic clients in 2016 (OR = 0.85, $p < 0.001$). Specifically, organizations in 2016 had 15% lower odds of serving Hispanic clients than in 2010. According to the findings on the Medicaid expansion, organizations in the expansion states had 17% greater odds of having increased Hispanic admissions

In regards to the HSN variables, organizations that accepted Medicaid payments had increased odds of Hispanic client admissions (OR = 1.68, $p < 0.001$). Conversely, organizations that provided emergency psychiatric services had 5.4% lower odds of serving Hispanic client (OR = 0.95, $p < 0.05$).

Based on the results from the interaction terms, organizations in the expansion states that accepted Medicaid payments had higher odds of having Hispanic clients admitted (OR = 1.33, $p < 0.01$). We did not find a significant relationship between the interaction with time and Hispanic client admissions. In other words, the effect of accepting Medicaid payments on Hispanic client admissions was constant the 3 waves in this study.

Model 2 displays the findings using the percentage of Hispanic clients at the mental health organizations. Our results show that organizations in 2014 had 10% higher odds than in 2010 of having a high proportion of Hispanic clients (OR = 1.10, $p < 0.01$). Meanwhile, there was a significant decrease in the proportion of Hispanic clients in 2016 (OR = 0.84, $p < 0.001$). That is, organizations in 2016 had 16% odds of having lower

percentages of Hispanic clients than in 2010. Regarding the Medicaid expansion, organizations in the expansion states had 1.19 greater odds of having increased Hispanic admissions ($p < 0.001$).

Among the HSN variables included in 2010, organizations that accepted Medicaid had 1.61 increased odds of serving higher percentages of Hispanic clients ($p < 0.001$). Organizations with emergency psychiatric services had 10% lower odds of serving a higher percentage of Hispanic clients (OR = 0.90, $p < 0.001$).

The results from the Medicaid expansion interaction analyses showed that organizations in expansion states with emergency psychiatric services had lower proportions of Hispanics (OR = 0.82, $p < 0.001$). Organizations in expansion states with emergency psychiatric services had 18% lower odds of serving a high proportion of Hispanic clients. We also found that Medicaid accepting organizations in 2016 had significantly greater proportions of Hispanic clients than pre-ACA (OR = 1.27, $p < 0.05$).

Table 5. Ordered Logistic Regression Between Health Safety-net Variables and Hispanic Client Admissions from 2010 to 2016

	Hispanic client admissions (N = 25,606)			Hispanic client proportions (N = 25,606)		
	OR	95% CI	p-value	OR	95% CI	p-value
Year						
2010	Reference			Reference		
2014	1.07	1.01–1.14	0.017	1.10	1.04–1.16	0.002
2016	0.85	0.80–0.90	<0.001	0.84	0.79–0.89	<0.001
Medicaid expansion	1.17	1.12–1.23	<0.001	1.19	1.14–1.25	<0.001
Medicaid accepted	1.68	1.54–1.84	<0.001	1.61	1.47–1.77	<0.001
Emergency psychiatric services	0.95	1.08–1.19	0.028	0.90	0.90–0.94	<0.001
Organization size	1.36	1.35–1.38	<0.001	1.14	1.13–1.15	<0.001
% Hispanics in state	1.06	1.05–1.06	<0.001	1.07	1.06–1.07	<0.001
% Youth clients	1.02	1.00–1.05	0.018	1.06	1.04–1.08	<0.001
% Adult clients	0.98	0.96–1.00	0.102	0.99	0.97–1.01	0.473
% Older adult clients	0.85	0.83–0.87	<0.001	0.86	0.84–0.89	<0.001
% Female clients	0.97	0.99–1.03	0.012	0.96	0.97–1.01	<0.001
Medicaid expansion x Medicaid accepted	1.33	1.11–1.59	0.002	1.15	0.96–1.37	0.132
Medicaid expansion x emergency services	0.91	0.82–1.00	0.056	0.82	0.74–0.90	<0.001
Medicaid expansion x year						
Medicaid Expansion x 2014	1.04	0.92–1.17	0.545	1.02	0.91–1.15	0.691
Medicaid Expansion x 2016	1.00	0.88–1.13	0.976	0.96	0.85–1.08	0.501
Medicaid accepted						
Medicaid accepted x 2014	0.99	0.80–1.22	0.895	0.99	0.80–1.23	0.946
Medicaid accepted x 2016	1.20	0.96–1.50	0.112	1.27	1.02–1.59	0.035
Emergency psychiatric services x year						
Emergency psychiatric services x 2014	1.03	0.92–1.16	0.612	1.04	0.92–1.18	0.507
Emergency psychiatric services x 2016	1.00	0.88–1.13	0.987	1.01	0.89–1.14	0.863

Note. Main effects and interaction terms were tested in two separate models.

The Impact of Community Mental Health Centers and Integrated Care on Hispanic Admissions

Table 6 shows the results of the analysis between all of the HSN variables and Hispanic use of mental health care post-ACA (2014–2016). Results show Hispanic client admissions decreased from 2014 to 2016 (OR = 0.80, $p < 0.001$). Organizations in 2016 had 20% lower odds than in 2014 of serving Hispanic clients.

Turning to the HSN variables, organizations that were in the expansion states (OR = 1.18, $p < 0.001$) and accepted Medicaid payments (OR = 1.61, $p < 0.001$) had higher odds of having admitted Hispanic clients. On the contrary, organizations that provided emergency psychiatric services had lower odds of serving Hispanic clients (OR = 0.92, $p < 0.01$). Of the two HSN variables included in the 2014 and 2016 N-MHSS dataset, only the community mental health centers label was significantly associated with Hispanic client admissions. Specifically, community mental health centers had 20% higher odds of Hispanic client admissions ($p < 0.001$).

According to the interaction analyses, the interaction between expansion and accepting Medicaid payments was significant. Specifically, organizations in expansion states that accepted Medicaid had 1.36 times higher odds of admitting Hispanic clients ($p < 0.01$). In terms of time, integrated primary care in 2016 was significantly more likely to serve Hispanic clients (OR = 1.17, $p < 0.05$).

The second model reports the analysis between the year the data was collected (2014 or 2016) and the proportion of Hispanic clients served. Similar to the first model, organizations in 2016 had lower odds of having higher Hispanic client admissions (OR =

0.77, $p < 0.001$). Further, the expansion states had higher odds of serving a high proportion of Hispanics (OR = 1.20, $p < 0.05$).

The second model also shows the relationship between the HSN variables and Hispanic client proportions. Based on this analysis, organizations that accepted Medicaid (OR = 1.56, $p < 0.001$) and community mental health centers (OR = 1.23, $p < 0.001$) had higher odds of serving a high proportion of Hispanics. In contrast, organizations that provided emergency psychiatric services (OR = 0.87, $p < 0.001$) and integrated care (OR = 0.93, $p < 0.05$) had lower odds of serving high proportions of Hispanic clients.

Based on the interaction terms, Medicaid accepting organizations in 2016 had higher odds of serving a high proportion of Hispanic clients (OR = 1.27, $p < 0.05$). Also, organizations that provided integrated primary care in 2016 had 17% greater odds of serving a high proportion of Hispanic clients (OR = 1.17, $p < 0.05$).

Table 6. Ordered Logistic Regression Between Health Safety-net Variables and Hispanic Client Admissions from 2014 to 2016

	Hispanic client admissions (N = 18,737)			Hispanic client proportions (N = 18,737)		
	OR	95% CI	p-value	OR	95% CI	p-value
Year						
2014		Reference			Reference	
2016	0.80	0.76–0.85	<0.001	0.77	0.73–0.82	<0.001
Medicaid expansion	1.18	1.12–1.25	<0.001	1.20	1.13–1.27	<0.001
Medicaid accepted	1.61	1.45–1.79	<0.001	1.56	1.40–1.74	<0.001
Emergency psychiatric services	0.92	0.87–0.98	0.009	0.87	0.82–0.93	<0.001
Community mental health centers	1.20	1.13–1.28	<0.001	1.23	1.16–1.31	<0.001
Integrated primary care	0.96	0.90–1.02	0.158	0.93	0.87–0.99	0.016
Organization size	1.35	1.33–1.36	<0.001	1.14	1.13–1.15	<0.001
% Youth clients	1.01	0.99–1.03	0.395	1.05	1.02–1.07	<0.001
% Adult clients	0.97	0.95–1.00	0.018	0.98	0.96–1.01	0.144
% Older adult clients	0.84	0.82–0.87	<0.001	0.86	0.84–0.89	<0.001
% Female clients	0.98	0.96–1.01	0.137	0.97	0.95–0.99	0.012
% Hispanics in state	1.05	1.05–1.06	<0.001	1.06	1.06–1.07	<0.001
Medicaid expansion x Medicaid accepted	1.36	1.10–1.67	0.005	1.14	0.93–1.41	0.213
Medicaid expansion x emergency services	0.95	0.84–1.07	0.403	0.90	0.80–1.02	0.086
Medicaid expansion x community mental health center	1.08	0.96–1.22	0.215	1.03	0.93–1.41	0.672
Medicaid expansion x integrated primary care	0.95	0.83–1.09	0.487	1.14	0.93–1.41	0.213
Medicaid expansion x year						
Expansion x 2016	0.97	0.86–1.08	0.543	0.94	0.84–1.05	0.277
Medicaid accepted x year						
Medicaid accepted x 2016	1.20	0.97–1.47	0.091	1.27	1.03–1.55	0.027
Emergency psychiatric services x year						
Emergency psychiatric services x 2016	0.92	0.82–1.04	0.189	0.92	0.82–1.04	0.178
Community mental health centers x year						
Community mental health centers x 2016	1.06	0.94–1.20	0.322	1.08	0.96–1.21	0.222
Integrated primary care x year						
Integrated primary care x 2016	1.17	1.02–1.34	0.022	1.17	1.02–1.34	0.026

Note. Main effects and interaction terms were tested in two separate models.

Discussion

Our study examined whether Obamacare decreased health care disparities among Hispanics by increasing their access to mental health services. Findings show that, while it did, the gains were short-lived. We found an increase in Hispanics' outpatient admissions for mental health care the year the ACA was fully implemented (2014). However, two-years post implementation (2016), the overall number and proportion of Hispanic admissions decreased to levels significantly below those observed prior to the reform. This finding is consistent with literature showing that two-years post-ACA Hispanics were less likely to visit a physician than before the reform (Sommers, Maylone, et al., 2017).

An explanation could be that Hispanics do not use mental health organizations because of the increased waiting times after the ACA. Kentucky is an example of this phenomenon. In this expansion state, people reported delays in care two years post-ACA implementation (Sommers, Maylone, et al., 2017). Certain Hispanics subgroups are more affected by these waiting times. For instance, Hispanics with limited English proficiency experience delayed care because of the limited amount of Spanish-speaking mental health professionals available to meet their needs (Ortega et al., 2015). Also, Mexican and Central Americans have been subjected to delayed care compared to other Hispanic subgroups (Alcalá et al., 2017). Since Mexican and Central American immigrants constitute the largest proportion of undocumented groups in the US (Passel & Cohn, 2017), these groups may be seeking care from safety net organizations that are being overloaded since the expansion of Medicaid coverage. It could also be that Hispanics

from these countries, specifically those who are still uninsured, may delay care because they are unable to afford the fees (Nguyen & Sommers, 2016).

Despite the decrease in Hispanic admissions two-years post implementation, the safety net mental health organizations continued to serve more Hispanic clients than non-HSN organizations throughout each wave of our data. For instance, organizations that accepted Medicaid payments had significantly greater Hispanic admissions. When time was taken into consideration, Medicaid accepting organizations were more likely to serve high proportion Hispanic clients in 2016 than in 2010. Prior literature shows that from 2013 to 2016 there has been a 5% increase in Medicaid-coverage among Hispanic individuals (Artiga, Foutz, Cornachione, & Garfield, 2016). Perhaps Hispanics who received Medicaid health insurance after the ACA were able to seek mental health care from the organizations that accept Medicaid payments.

Our results also showed that organizations in the expansion states that accepted Medicaid payments were more likely to serve Hispanic clients. Since the Medicaid expansion, the uninsured rate for Hispanic adults in expansion rates decreased from 35% to 17%, meanwhile there were no significant changes in the non-expansion states (Doty et al., 2014). In expansion states, most of the gains in health insurance coverage were due to the increases in Medicaid eligibility (Sommers et al., 2016). Hence, newly insured Hispanic clients were able to seek care from safety net mental health organizations that accepted Medicaid payments in the expansion states.

Community mental health centers are the HSN benefactors of increased funding under the Community Health Centers Funds of the ACA. Community mental health centers in our study had higher Hispanic proportions and admissions. In line with our

findings, community mental health centers provide services that buffer the negative impacts of health policies on Hispanic populations (Castañeda & Mulligan, 2017). Thus, there should be continued focus on expanding community mental health centers capacity to provide services to a high proportion of Hispanic clients.

Integrated primary care was associated with a higher proportion of Hispanic clients. Integrating primary care with mental health services can address issues Hispanic clients may face when seeking mental health care. In particular, integrated care helps to address issues with transportation and specialty service referrals for Hispanics who present with comorbid mental and general health disorders (Corrigan, Pickett, Batia, & Michaels, 2014; Mechanic & Olfson, 2016). Integrated primary care has also been shown to be a cost-effective solution to addressing mental health issues among Hispanic clients. Specifically, integrated primary care has been shown to have better mental health outcomes and similar costs as divided forms of care (Woltmann et al., 2012).

Surprisingly, the findings of this study show that mental health care organizations with emergency psychiatric services were less likely to serve Hispanic clients. These finding are contrary to prior research, which shows that Hispanics use emergency psychiatric services at higher rates than non-Hispanic whites (Chow, Jaffee, & Snowden, 2003). These divergent findings could be explained by our outcome variable, which measures Hispanic outpatient admissions. Hispanic admission in these organizations may have been lower because of the larger proportion of Hispanics admitted to inpatient care. This is the situation for undocumented Hispanics who, under the ACA and the EMTALA, are only able to seek care when their mental health issues become severe enough to receive inpatient care. Without better options for health insurance coverage,

these individuals may continue to use emergency psychiatric services to meet their needs (Joseph, 2017).

Limitations

There are limitations in this study that should be considered. Although Hispanic respondents are typically grouped together in health services disparities research, the ACA impacted Hispanics from distinct nationalities differently (Alcalá et al., 2017). However, since the N-MHSS did not ask about nationality, we could not separate Hispanic client admissions by subgroups. We were also limited by the way that the N-MHSS asked about Hispanic proportions and overall admissions in the dataset. Instead of maintaining the original coding of our outcome variable, we could have created an ordinal or binary variable with fewer responses. However, if we were to use these alternative forms of coding the outcomes variables, we would have not been able to accurately measure the variation from one year to the next. Therefore, we decided to maintain the original coding of these items. A third limitation of this study came from our use of repeated cross-sectional data. Due to the cross-sectional nature of the data, we cannot completely identify causality between the variables in this study. Additionally, we cannot say that the changes we identified are not due to attrition and new entrants into the sample. Finally, we were not able to measure the impact of community mental health centers and integrated primary care before the ACA because our data did not include these items in 2010.

Despite these limitations, there are strengths from this study that should be considered. First, this study used national data from mental health organizations around the US, which has not been used before to examine the change in Hispanic admissions

before and after the ACA. Secondly, our use of mental health organizations data is a novel approach to measuring mental health disparities. Using mental health data may be a better indicator of how many Hispanics are using mental health services because it uses records rather than population estimates. Additionally, this study is unique in that it is one of few studies that have examined health care access beyond 2015 (Sommers, Maylone, et al., 2017).

Finally, the two methods we used to measure Hispanic admissions at mental health organizations have their own strengths. The first measure, Hispanic admissions, allowed us to examine raw changes in the number of Hispanic clients. The second measure, Hispanic proportions, allowed us to examine whether Hispanic client percentages changed in comparison to the rest of the client population. We found consistent results using both forms, which may indicate these relationships are robust. It may also be that Hispanics have increased admission at certain organizations, such as the safety net mental health organizations.

Conclusions

The current study demonstrates the importance of the HSN to Hispanic mental health care access. The ACA has provisions that increase the pool of insured Hispanics and increased the funding of HSN organizations. However, our study finds that Hispanic admissions at mental health organizations decreased over time. Despite the decrease in the national number of Hispanic admissions, the HSN organizations continued to serve a greater number of Hispanic clients than non-safety net organizations. Hence, the safety net mental health organizations help to offset the negative impacts of this health care policy.

This study also alludes to the access barriers that continue to date. For instance, there needs to be a greater emphasis on disseminating information to Hispanic communities, specifically those who were not eligible before the Medicaid expansion. One such way of increasing knowledge about the ACA and health insurance would be to increase community health workers. These workers use their cultural and linguistic knowledge to help explain Medicaid eligibility and direct Hispanics to mental health care services (Islam et al., 2015).

During this time of uncertainty, with the potential rollbacks of the ACA, it is possible that many of the gains from the ACA could be lost. For example, the U.S. Senate passed a tax bill in December 2017 that included a provision to repeal the ACA's individual mandate in 2019. The individual mandate was included to ensure that healthy individuals could help defray the costs from those with greater health needs. Due to this legislation, more than 4 million people will lose health insurance coverage in 2019 (Hall, 2017). This type of legislation may create greater barriers for Hispanics when seeking care, which could mean that they may experience greater mental health disparities than before the enactment of the ACA. Although safety net mental health organizations may continue to defray the impact of these rollbacks, our study points to future issues with increased burden in caring for this group that has historically receive substantially less investment (Valdez, Padilla, & Valentine, 2013).

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Chapter IV. Obamacare and Health Care Integration: Predictors of Integrated Care at Hispanic-Serving Mental Health Care Organizations

Abstract

Hispanics are less likely to receive mental health care than non-Hispanic whites. Yet once they seek health services, they are more likely to receive care from Hispanic-serving organizations, which care for a large proportion of Hispanic clients. It has been shown that these hospitals have low quality and health outcomes. Fortunately, integrated care has been shown to address Hispanic mental health service access and quality. Additionally, under the ACA, there has been an increase in the funding of integrated care at community mental health centers. We utilized organizational responses from the 2014 and 2016 waves of the National Mental Health Service survey to assess whether 1) Hispanic-serving organizations (HSOs) provided integrated care at higher rates than mainstream organizations (MOs); and 2) the Medicaid expansion and community mental health center factors predicted integrated care at HSOs and MOs since the ACA implementation. The findings show that MOs had greater odds of providing integrated care than the HSOs. However, the Medicaid and community mental health center factors played a role in decreasing the disparity in integrated care seen between HSOs and MOs.

Keywords: Hispanics, Integrated care, Affordable Care Act, Community health centers, Hispanic-serving organizations

Introduction

Hispanic mental health service disparities are a substantial issue in the United States. Hispanics have lower access to and are more likely to drop out of mental health care than non-Hispanic whites (Cook et al., 2014; Olfson, Mojtabai, Sampson, Hwang, & Kessler, 2009). Even when they seek mental health care, the quality of care they receive is lower than the quality of care for non-Hispanic whites and other ethnoracial minorities (Young, Klap, Sherbourne, & Wells, 2001). Due to these disparities, Hispanics are more likely to seek mental health care from primary care physicians (Bridges, Andrews, & Deen, 2012). Moreover, the hospitals Hispanics typically seek care from have some of the worst health outcomes and quality (Jha, Orav, & Epstein, 2011). Since these Hispanic-serving organizations (HSOs) provide care to large proportions of Hispanics, their provision of quality care can help to address Hispanic mental health disparities.

The Patient Protection and Affordable Care Act (ACA) of 2010 put forth integrated care as a promising solution to address Hispanic mental health service disparities (Croft & Parish, 2013). The ACA's increased funding of community mental health centers and the provision of integrated care is encouraging, since integrated care has been shown to increase referrals, utilization, and health outcomes among Hispanics (Bridges et al., 2014). However, little is known about whether the ACA has increased the provision of integrated care, especially at organizations with a high proportion of Hispanic clients. The aim of this paper was to assess whether integrated care has increased at HSOs since the enactment of the ACA and whether the increased funding has impacted these organizations at the same rate as mainstream organizations (MOs).

Integrated Care and Hispanic Mental Health

Physical and behavioral health are closely related, with many Hispanics experiencing comorbidity in both. In fact, Hispanics with physical health conditions are more likely to experience mental health issues than Hispanics without physical health issues. For instance, Hispanics with cardiovascular disease have 77% higher odds of experiencing depression than Hispanics without this health issue (Wassertheil-Smoller et al., 2014). Similarly, Hispanics with arthritis and diabetes have higher rates of anxiety and depression than the general population (Murphy, Sacks, Brady, Hootman, & Chapman, 2012; Olvera, Fisher-Hoch, Williamson, Vatcheva, & McCormick, 2016).

When Hispanics experience comorbid physical and behavioral health issues, primary care physicians are typically the first line of defense. Primary care physicians provide comprehensive care and refer clients to specialty care behavioral health services when they need more specific care. Gaps in the connection between primary care and specialty care for mental health make it difficult to provide appropriate care when needed. Primary care physicians may feel comfortable referring clients to specialist for other health problems; however, the connection to behavioral care may not be present. Clients may also not make their mental health problem known and even experience other barriers, such as cost and transportation, when seeking care after a referral (Satcher & Rachel, 2017). Additionally, most primary care physicians report having difficulty referring their Hispanic clients to behavioral health services (Cunningham, 2009).

Integrating care, which can address the higher comorbidity of chronic health and mental health among Hispanics, is a practical way of increasing mental health access (Corrigan, Pickett, Batia, & Michaels, 2014; Huang, Fong, Duong, & Quach, 2016).

Although Hispanics may have stigma towards seeking behavioral health services, the integration of care can help to normalize mental health services for Hispanics (Cabassa, Hansen, Palinkas, & Ell, 2008). Additionally, collocating behavioral mental health services within primary care settings can help to address barriers to referral, transportation, and the time lost from transitioning between services (Lanesskog & Piedra, 2016).

In terms of the effectiveness, integrated care has been shown to decrease Hispanic health disparities. Bridges and colleagues (2014) reported initial findings showing the comparative outcomes of integrated care between Hispanics and non-Hispanic whites. The findings from this study indicated that Hispanic and non-Hispanic whites both experienced significantly lower behavioral and health symptoms after receiving integrated care. Both groups reported high satisfaction from receiving integrated behavioral care. They also found that both groups had similar rates of integrated care utilization. Thus, these findings show that integrated care can help to reduce Hispanic health inequities in utilizations, health outcomes, and satisfaction of care.

The Affordable Care Act and Integrated Care

Integrated care is a collaborative model of collocating physical and behavioral health in one organization (Brennan et al., 2009). Rather than simply collocating these specialists in one setting, integrated care promotes the collaboration between behavioral and physical health specialists. When an organization decides to integrate care, these providers must learn and be trained to play different roles within this new collaborative system (Huang, Fong, Duong, & Quach, 2016). Thus, integrating care can be costly and time-consuming.

Some organizations may not be able to pay for the initial increased cost of integrating care. Organizations with limited funding and staff may be unable to put forth the funding and time into hiring, cross-training, and co-locating services if they do not have the funds available (Lanesskog & Piedra, 2016). Hispanic-serving organization (HSO), organizations that care for a large proportion of Hispanic clients, may be less likely to transition into integrated care. HSOs differ from mainstream organizations (MOs) because they are set in Hispanic communities, which historically have received less investment than other communities (Valdez, Padilla, & Valentine, 2013). Thus, they may not receive the funding to transition to integrated services.

Even if an HSO chooses to incorporate integrated services into their organizations, there are various obstacles that make it difficult for them to bill for these services. Payment systems are not structured to help pay for integrated care because some health insurers do not allow for health care organizations to bill for more than one service per day (Duarte, 2016). For instance, State Medicaid Plans can choose to not pay for behavioral and primary care services that are provided on the same day (McKinney, Kidney, Xu, Lardiere, & Schwartz, 2010). This fragmented system makes it difficult for organizations to bill for integrated services. Many organizations choose to not bill Medicaid or other health insurers, instead finding alternative ways to pay for these integrated services (Auxier, Farley, & Seifert, 2011).

Billing systems for integrated services have begun to change, especially under the ACA. The ACA is a major health care reform policy that expanded the eligibility for public health insurance plans, such as Medicaid, and increased funding for health safety net organizations. Although in 2010 all of the US states were mandated to take part in the

ACA, on June 2012 the US Supreme Court gave the states the option to expand their Medicaid eligibility (Jacobs & Callaghan, 2013). By the implementation of the ACA in 2014, only 25 states had decided to adopt the expansion (Kaiser Family Foundation, 2017). This discrepancy in the Medicaid expansion created a division, where organizations in Medicaid expansion states benefitted more from the Medicaid payments than non-expansion states (Camilleri, 2018; P. Corrigan et al., 2017; Lindrooth, Perraillon, Hardy, & Tung, 2018; Sharma, Dresden, Powell, Kang, & Feinglass, 2017).

Under the ACA, mental health care organizations have the option to use restructured Medicaid payments to pay for integrated care. For instance, organizations are able to charge Medicaid bundled payments, such as episode-based payments, for a package of services when clients experience behavioral and physical acute health problems (Mechanic, 2011). This form of payment allocates the expected cost of receiving various forms of care into one bundled payment (Center for Medicare and Medicaid Services, 2018). Bundled payments allow health care organizations to receive reimbursement for integrated care services, which was not available prior to the implementation of the ACA.

To further increase the integration of primary and behavioral services, the ACA also allocated $105.8 million to the Health Resources and Services Administration. The purpose of these block grants was to assist in providing comprehensive care to adults and children with serious physical and behavioral health issues at community health centers (Substance Abuse and Mental Health Services Administration [SAMHSA], 2017). Additionally, the ACA also created an $11 billion Community Health Centers Fund to help increase the staff and infrastructure of community health centers (Sommers,

Gawande, & Baicker, 2017). The aim of this funding was to increase community health centers' capacity to provide integrated care (Druss & Mauer, 2010).

The Current Study

Although the ACA has increased funding to facilitate the integration of primary and behavioral care, it is unknown whether HSOs have received these grants at the same rates as MOs. Integrated care can help to address many Hispanic mental health service disparities (Bridges et al., 2014). Yet, HSOs are rated the worst hospitals and are less likely to provide mental health services than MOs (Jha et al., 2011; Roth & Allard, 2016). Additionally, it is unknown if funding stream factors have the same impact on the provision of integrated care at HSOs as MOs.

Given that Hispanics have comparable and positive health outcomes from integrated care when compared to non-Hispanic whites, the aims of this paper were to assess whether 1) HSOs provide integrated care at higher rates than MOs, 2) Medicaid (Medicaid payments accepted and Medicaid expansion) and community health center (community health centers and community health service grants) factors are associated with integrated care at HSOs and MOs, 3) the Medicaid expansion and time variables moderate these relationships.

Methods

Design

This study used organizational data from the National Mental Health Services Survey (N-MHSS). The N-MHSS, a publically available national survey of mental health organizations in the US, was collected annually since 2014. The N-MHSS used paper, web-based, and telephone-assisted questionnaires to gather client, structure, and service

characteristics in April of data collection year. The sample excluded Department of Defense, military treatment facilities, jails or prisons, residential treatment facilities without specialty mental health treatment, and individual and small group practices not licensed as a mental health clinic or center (SAMHSA, 2016, 2017). Individual and small group practices not licensed were excluded because they were not counted in SAMHSA's database of mental health care organizations.

Sample

The sample for this study was drawn from the 2014 and 2016 waves of the N-MHSS. We used these two waves in this study because they were the only post-ACA implementation waves publically available that reported the ethnoracial breakdown of their client population. Unique case identification numbers were not made publically available for the organizations in the data. Thus, we used a repeated cross-sectional design to combine multiple years into one dataset. Repeated cross-sectional design is a well-known method used to combine multiple waves of a dataset when data are not uniquely identifiable (Lebo & Weber, 2015)

In order to compare the HSOs to mainstream organizations (MOs), the final sample included the 19,314 organizations that reported their Hispanic client proportions. We excluded organization in the US territories and organizations that did not report their Hispanic client percentages. Of the final combined sample, 9,857 were from the 2014 wave and 9,457 were from the 2016 wave.

Dependent Variables

Integrated care. We used two outcome measures to gauge whether integrated care was provided at the mental health organization in the sample. Integrated care can be

the integration of physical care or substance use treatment with mental health care. We call the integration of substance use treatment "integrated behavioral treatment" and the integration of physical care "integrated primary care."

The first outcome variable reported the provision of integrated behavioral care. Organizations were asked to report whether they provided dual substance use and substance use diagnosis treatment. Organizations that reported they provided these services were coded as (1) integrated behavioral care provided, meanwhile those that reported they did not provide these services were coded (0) integrated behavioral care not provided.

The second outcome variable measured the provision of integrated primary care. Organizations were asked in the questionnaire to report whether they provided integrated primary care. Organizations that reported they provided these services were coded as (1) integrated primary care provided, meanwhile those that reported they did not provide these services were coded (0) integrated primary care not provided.

Predictors

Medicaid. Two measures were included to measure the impact of Medicaid on the provision of integrated care. The first variable measured whether the organizations (1) Medicaid payments accepted or (0) Medicaid payments not accepted.

Consistent with previous research on the impact of the Medicaid expansion, we included a variable that measured the Medicaid expansion by states according to the year the data was collected. Data was gathered from the Kaiser Family Foundation's (2017) data on the status of the Medicaid expansion by state action. The data was transformed

into the Medicaid expansion variable, which reported whether organizations were in the (1) expansion or (0) non-expansion states.

Community mental health centers. We included two variables that measured the impact of community mental health centers on integrated care. The first variable reported whether the organizations were labeled community mental health centers. Organizations were grouped into (1) community mental health centers, and (0) others. To measure the impact of community mental health center funding, we included a variable that measured whether organizations (1) received or (0) did not receive community mental health block grants.

Control variables. We controlled for a set of client and organizational characteristics of the mental health organizations in the sample. We included an ownership variable that categorized organizations into (0) public/other, (1) private non-profit, and (2) private for-profit. We controlled for outpatient size, which asked about the number of clients served at the organization and ranged from 0 (none) to 12 (more than 1500), with a midpoint of 7 (76 to 100). In terms of the clients served at the organization, we controlled for the percent of youth (17 years or younger), adult (18 to 64 years of age), older adult (65 years and older), and female clients. These variables ranged from 0 (none) to 7 (More than 75% to 100%), with a midpoint of 3 (More than 20% to 30%).

Data Analysis

All univariate and multivariate analysis in this study were conducted in Stata, Statistical Software 15.1.

Hispanic-serving organizations (HSOs) are defined as organizations that provide services to a large proportion of Hispanic clients (Roth & Allard, 2016). Consistent with

prior literature on HSOs, organizations were divided into HSOs (21% or more Hispanic clients) and MOs (less than 21% Hispanic clients). Bivariate analysis of the organizational responses to the variables in this study were stratified using this HSO label. Chi-squared and p-values are presented to examine the difference in responses between HSOs and MOs.

Two sets of logistic multivariate regression analyses were conducted. The first set assessed the predictors for integrated behavioral care. The second set assessed the predictors for integrated primary care. Within each of these sets of regressions, one model was included to assess the predictors for HSOs, meanwhile a second was included to assess the predictors for MOs. The differences between the predictors for HSOs and MOs are later discussed.

In line with prior literature on the impact of the ACA on health service disparities, we included interaction terms to assess the impact of time and the Medicaid expansion in the relationship between the main predictors and integrated care (Alcalá, Chen, Langellier, Roby, & Ortega, 2017). That is, we examined whether the Medicaid and community mental health centers factors had statically different impacts on integrated care in the expansion and non-expansion states. We also assessed whether the impact of the Medicaid community mental health centers factors on integrated care increased over time.

We used two separate models for the interaction terms and main effects. The first model included all of the main effects of the predictors, meanwhile the second model included the predictors and interaction terms. Tables 8 and 9 present the coefficients for

the predictors from the main effect model and the interaction coefficients from the interaction terms model.

Results

Sample Characteristics

Table 7 reports the sample characteristics for the organizations in the study stratified by Hispanic-serving organizations (HSOs) and mainstream organizations (MOs). It also presents the bivariate analysis between the HSO label and the variables in this study. The full sample included 2,803 HSOs and 16,511 MOs.

The first aim of this paper was to assess the difference between the provision of integrated care at HSOs and MOs. MOs were significantly more likely to provide integrated behavioral care than HSOs, $\chi^2(1, N = 19{,}244) = 21.65$, $p < 0.001$. Specifically, 54.4% of HSOs provided integrated behavioral care, meanwhile 59.1% of MOs. However, integrated primary care was not significantly associated with the HSO label, $\chi^2(1, N = 19{,}205) = 0.36$, $p = 0.549$.

Turning to the impact of Medicaid, HSOs were significantly more likely to be in the expansion states, $\chi^2(1, N = 19{,}314) = 420.43$, $p < 0.001$. According to the results, 77.6% of HSOs were in expansion states compared to 57.0% of MOs. On the other hand, HSO organization did not accept Medicaid payments at higher rates than MOs, $\chi^2(1, N = 18{,}923) > 0.01$, $p = 0.978$.

In regards to the community mental health center variables, MOs were significantly more likely to be community mental health centers than HSOs, $\chi^2(1, N = 19{,}314) = 26.04$, $p < 0.001$. Specifically, 29.8% of MOs and 25.1% of HSOs were community mental health centers. Similarly, MOs were more likely to receive

community mental health block than HSOs, $\chi^2(1, N = 15{,}345) > 16.61$, $p < 0.001$. Specifically, 42.9% of MOs and 38.2% of HSOs.

According to the control variables, HSOs were larger and had more youth clients. Inversely, the MOs were more likely to have adult, older adult, and female clients. According to the ownership variable, HSOs had statistically different ownership rates than MOs.

Table 7. Difference in Organization Sample Characteristics Stratified by Hispanic-Serving Organization Label

	Hispanic-serving organizations (N = 2,803)		Mainstream Organizations (N = 16,511)		*p*-values
Variables	n	% M(SD)[a]	n	% M(SD)	
Integrated behavioral care					0.000
Yes	1,520	54.4	9,725	59.1	
No	1,273	45.6	6,726	40.9	
Integrated primary care					0.549
Yes	619	22.2	3,734	22.7	
No	2,166	77.8	12,686	77.3	
Medicaid expansion					0.000
Expansion state	2,174	77.6	9,418	57.0	
Non-expansion state	629	22.4	7,093	43.0	
Medicaid payments accepted					0.978
Yes	2,501	91.0	14,706	90.9	
No	249	9.0	1,467	9.1	
Community mental health center					0.000
Yes	703	25.1	4,923	29.8	
No	2,100	74.9	11,588	70.2	
Community mental health block grants					0.000
Yes	845	38.2	5,630	42.9	
No	1,365	61.8	7,505	57.1	
Ownership					0.000
Public/other	537	19.2	3,312	20.1	
Private non-profit	1,970	70.3	10,398	63.0	
Private for-profit	296	10.5	2,801	16.9	
Organization size	2,803	7.7 (2.8)	16,511	7.4 (2.9)	0.000
% Youth clients	2,803	3.6 (2.8)	16,511	2.8 (2.5)	0.000
% Adult clients	2,803	4.5 (2.6)	16,511	5.3 (2.2)	0.000
% Older adult clients	2,803	0.9 (1.1)	16,511	1.2 (1.3)	0.000
% Female clients	2,803	5.1 (1.2)	16,511	5.2 (1.3)	0.000

Note. Percentages are presented for nominal variables and means and standard deviations for ordinal variables.

Integrated Behavioral Care

Table 8 presents the findings for the analysis between the predictors and integrated behavioral care. We observed a significant decrease in the provision of integrated behavioral care at HSOs (OR = 0.69, $p < 0.001$) and MOs (OR = 0.77, $p < 0.001$) in 2016. HSOs had 31% lower odds and MOs had 23% lower odds of providing integrated care in 2016 than in 2014.

The second aim of this paper was to assess the impact of Medicaid on integrated care at the HSOs and MOs. According to the analysis of Medicaid, HSOs that accepted Medicaid payments were more likely to provide integrated care than those that did not accept Medicaid payments (OR = 1.59, $p < 0.01$). Community mental health centers were significantly associated with the integration of behavioral care at HSOs (OR = 1.43, $p = 0.001$) and MOs (OR = 1.10, $p < 0.05$). According to the funding source, community mental health block grants were significantly related with integrated behavioral care at HSOs (OR = 1.60, $p < 0.001$) and MOs (OR = 1.75, $p < 0.001$).

Our final aim was to examine whether Medicaid expansion in the states and time moderated the relationship between the predictors and integrated care. We found a significant interaction between community mental health centers expansion in the states at MOs (OR = 0.84, $p < 0.05$). This finding indicates that MO community mental health centers in expansion states were significantly less likely to provide integrated behavioral care than in non-expansion states.

We also found that there was a significant decrease in the relationship between the Medicaid expansion and integrated behavioral health over time among the MOs (OR

= 0.84, $p < 0.05$). That is, MOs in the Medicaid expansion states had 16% lower odds of providing integrated care in 2016 than in 2014. On the other hand, there was an increase in integrated behavioral care in 2016 among the Hispanic-serving community mental health centers (OR = 1.62, $p < 0.05$). Specifically, Hispanic-serving community mental health centers had 62% greater odds of providing integrated care in 2016 than in 2014.

Table 8. Logistic Regression on Integrated Behavioral Health Stratified by Hispanic-Serving Organization Label from 2014 to 2016

	Hispanic-serving Organizations (N = 2,159)			Mainstream Organizations (N = 12,502)		
	OR	95% CI	p-value	OR	95% CI	p-value
Year						
2016	0.69	0.58–0.83	<0.001	0.77	0.72–0.83	<0.001
Medicaid expansion	0.99	0.78–1.24	0.898	0.93	0.86–1.00	0.062
Medicaid payments accepted	1.59	1.15–2.19	0.005	1.01	0.89–1.15	0.859
Community mental health center	1.43	1.15–1.78	0.001	1.10	1.01–1.20	0.032
Community mental health block grant	1.60	1.31–1.94	<0.001	1.75	1.61–1.90	<0.001
Ownership						
Private non-profit	1.30	1.01–1.66	0.044	0.85	0.77–0.94	0.002
Private for-profit	1.97	1.36–2.86	<0.001	1.45	1.27–1.66	<0.001
Organization size	1.04	1.00–1.08	0.061	1.05	1.03–1.06	<0.001
% Youth clients	0.90	0.83–0.98	0.014	1.00	0.97–1.03	0.971
% Adult clients	1.19	1.10–1.30	<0.001	1.20	1.16–1.24	<0.001
% Older adult clients	1.01	0.91–1.12	0.895	1.04	1.00–1.07	0.045
% Female clients	0.93	0.85–1.01	0.099	0.95	0.92–0.98	0.001
Medicaid expansion x Medicaid payments accepted	1.03	0.47–2.29	0.933	1.21	0.95–1.56	0.129
Medicaid expansion x CMHC	1.31	0.80–2.15	0.279	0.84	0.70–0.99	0.042
Medicaid expansion x CMHBG	1.15	0.73–1.83	0.542	1.05	0.89–1.24	0.563
Medicaid expansion x 2016	0.72	0.46–1.11	0.136	0.84	0.72–0.98	0.022
Medicaid payments accepted x 2016	0.60	0.32–1.14	0.117	0.86	0.67–1.19	0.237
CMHC x 2016	1.62	1.05–2.50	0.028	0.95	0.80–1.12	0.526
CMHBG x 2016	1.28	0.87–1.90	0.216	0.93	0.79–1.09	0.376

Note. Main effects and interaction terms were tested in two separate models. Year: 2010 is the reference category. Ownership: public departments is the reference categories. CMHC = Community mental health center, CMHBG = Community mental health block grant

Integrated Primary Care

Table 9 presents the findings for the analysis between the predictors and integrated primary care. According to the findings over time, there was an increase in integrated primary care within the HSOs, however it was just outside of the level of significance (OR = 1.23, $p > 0.05$). Meanwhile, there was no significant relationship between time and integrated care among the MOs (OR = 0.98, $p > 0.05$).

Turning to the second aim of this paper, Medicaid expansion was not statistically associated with integrated primary care for HSOs (OR = 0.89, $p > 0.05$) or MOs (OR = 1.00, $p > 0.05$). However, MOs that accepted Medicaid payments were significantly less likely to provide integrated primary care (OR = 0.59, $p < 0.001$). In terms of the community mental health center variables, only mainstream community mental health centers were significantly less likely to provide integrated primary care (OR = 0.86, $p < 0.01$). However, both HSOs (OR = 1.97, $p < 0.001$) and MOs (OR = 1.26, $p < 0.001$) with community mental health block grants were more likely to provide integrated primary care.

Our final aim was to assess whether expansion in the state and time moderated the relationship between the predictors and integrated primary care. According to the results, the interaction term between Medicaid expansion in the state and Medicaid payments accepted had the greatest odds of providing integrated care. Specifically, HSOs in the expansion states that accepted Medicaid payments were more likely to provide integrated primary care (OR = 3.25, $p < 0.05$). Meanwhile, MOs that received community mental health block grants in the Medicaid expansion states had greater odds of providing

primary care (OR = 1.35, $p < 0.01$). Turning to the interaction terms with time, HSOs that received community mental health block grants had greater odds of providing integrated primary care in 2016 than in 2014 (OR = 1.66, $p < 0.05$).

Table 9. Logistic Regression on Integrated Primary Care Stratified by Hispanic-Serving Organization Label from 2014 to 2016

	Hispanic-serving organizations (N = 2,173)			Mainstream organizations (N = 12,944)		
	OR	95% CI	p-value	OR	95% CI	p-value
Year						
2016	1.23	0.99–1.53	0.068	0.98	0.90–1.07	0.674
Medicaid expansion	0.89	0.68–1.16	0.371	1.00	0.91–1.10	0.983
Medicaid payments accepted	1.10	0.72–1.69	0.664	0.59	0.51–0.69	<0.001
Community mental health centers	1.02	0.80–1.31	0.861	0.86	0.78–0.95	0.003
Community mental health block grant	1.97	1.57–2.49	<0.001	1.26	1.14–1.39	<0.001
Ownership						
Private non-profit	0.77	0.59–1.02	0.068	0.63	0.57–0.70	<0.001
Private for-profit	0.67	0.44–1.04	0.074	0.49	0.42–0.57	<0.001
Organization size	1.10	1.05–1.15	<0.001	1.08	1.07–1.10	<0.001
% Youth clients	0.91	0.83–1.00	0.052	0.90	0.87–0.93	<0.001
% Adult clients	1.16	1.04–1.29	0.009	1.04	0.99–1.08	0.107
% Older adult clients	1.16	1.04–1.31	0.009	1.14	1.09–1.18	<0.001
% Female clients	0.85	0.77–0.95	0.002	0.85	0.82–0.88	<0.001
Medicaid expansion x Medicaid payments accepted	3.25	1.24–8.53	0.017	0.83	0.62–1.09	0.182
Medicaid expansion x CMHC	1.30	0.74–2.28	0.367	0.87	0.71–1.07	0.187
Medicaid expansion x CMHBG	0.86	0.50–1.50	0.596	1.35	1.11–1.65	0.002
Medicaid Expansion x 2016	0.66	0.39–1.10	0.106	0.98	0.82–1.17	0.810
Medicaid payments accepted x 2016	0.90	0.38–2.12	0.807	0.98	0.74–1.30	0.889
CMHC x 2016	1.23	0.75–2.01	0.219	1.15	0.94–1.41	0.171
CMHBG x 2016	1.66	1.04–2.64	0.033	0.91	0.75–1.10	0.319

Note. Main effects and interaction terms were tested in two separate models. Year: 2010 is the reference category. Ownership: public departments is the reference categories. CMHC = Community mental health center, CMHBG = Community mental health block grant.

Discussion

This study examined whether HSOs had greater odds of providing integrated care than MOs, since the enactment of the ACA. Findings show HSOs had lower odds of providing integrated behavioral care than MOs post-ACA implementation. Research consistently shows there are health service disparities between HSOs and MOs (Creanga et al., 2014; Rodriguez, Joynt, López, Saldaña, & Jha, 2011). Specifically, less than one third of social service HSOs provide mental health and substance abuse services compared to half of all social service MOs (Roth & Allard, 2016). Additionally, Hispanic communities are significantly less likely to be near health care organizations that offer integrated care (Guerrero & Kao, 2013). The findings of the present study build on this literature to show the disparities in the provision of integrated care between HSOs and MOs have continued after the implementation of the ACA.

We also examined whether integrated care increased at mental health care organizations two-years after the implementation of the ACA. Contrary to what was expected, the provision of integrated behavioral care decreased at both the HSOs and MOs over time. The decrease in integrated behavioral health is striking. Research shows that substance use trends and deaths from misuse have increased over time (Atluri, Sudarshan, & Manchikanti, 2014; Hedegaard, Chen, & Warner, 2015; Jones, Logan, Gladden, & Bohm, 2015). Furthermore, the rates of marijuana use among Hispanic youth have significantly increased over time (Johnson et al., 2015; Marzell, Sahker, Pro, & Arndt, 2017). Thus, there is an increased need for integrated behavioral care in the US.

Integrated care could help to provide better access to behavioral care for the millions of Americans suffering from substance use disorders.

Despite the decrease in integrated behavioral care, this study found there was no significant difference in the provision of integrated primary care between HSOs and MOs. Additionally, there was no significant increase in integrated primary care over time for either group of organizations. Past initiatives to increase the provision of integrated care have been unsuccessful as well (Croft & Parish, 2013). Thus, it is possible that the changes imposed in the ACA have not increased the overall provision of integrated care. It is also possible that due to the high cost of caring for individuals with serious physical and behavioral health issues, health care organizations may choose to divert their funding away from integrated care (Druss & Mauer, 2010).

Although the provision of integrated care has not significantly increased over time, there are factors that we found to be associated with increased health care integration. Both HSO and MO community mental health centers had greater odds of providing behavioral integrated care. Of course, this is due to the fact that community mental health centers received various forms of funding to facilitate the integration of health care under the ACA (Croft & Parish, 2013). However, only MO community health centers had greater odds of providing integrated primary care. This points to the disparities in integrated care between HSOs and MOs community mental health centers.

We also found that community mental health block grants increased the provision of integrated care at both MOs and HSOs. Since community mental health centers care for underserved populations, the ACA increased the funding of community health centers with the aim of address health service disparities. These community mental health block

grants were created as demonstration projects to help assess the impact that greater funding for integration of care would have on health outcomes and access to care (Druss & Mauer, 2010). Although historically Hispanic communities have received substantially less investment (Valdez et al., 2013), our findings showed these demonstration projects increased the access to integrated care at HSOs at even higher rates than for MOs. Therefore, continuing this source of funding could further help address the systemic funding issues rooted within Hispanic health service disparities.

Medicaid played the strongest role in increasing the provision of integrated care among the HSOs. The interaction term between expansion state organizations and Medicaid payments was the strongest factor associated with the provision of integrated primary care in the HSOs. Research examining access to care shows that Hispanics have significantly greater access to health care and are more likely to have insurance in Medicaid expansion states than non-expansion states (Doty, Blumenthal, & Collins, 2014; Sommers, Gunja, Finegold, & Musco, 2015). Medicaid pays for over a quarter of mental health care in the United States and the new bundled payments under the ACA provide new funding opportunities for the integration of physical care in mental health care organization (Mechanic, 2012). These new forms of payment allow HSOs to reimburse evidence-based services shown to effectively integrated care services, such as comprehensive care management, transition care, and care coordination (Mechanic, 2012). Moreover, organizations in the Medicaid expansion states have financially benefitted more from the ACA than non-expansion states because of the larger pool of individuals with Medicaid (Lindrooth et al., 2018). Thus, these organizations benefit from being able to charge their larger pool of insured clients for integrated care services.

Community mental health center and block grants played a role in breaking down the disparities in the integration of care between HSOs and MOs over time. Specifically, community health centers have increased the integration of behavioral care at HSOs from 2014 to 2016. Likewise, community mental health block grants helped to increase the provision of integrated primary care at HSOs from 2014 to 2016. These interactions were not significant for MOs, which shows that the grants had a differential impact between the HSOs and MOs.

The funding for community mental health centers has increased each year, since the implementation of the ACA. Specifically, community mental health block grants have incrementally increased in funding from 2014-2016 (The U.S. Department of Health and Human Services, 2016). Additionally, The Community Health Centers Fund received a budget of $11 billion over a period of 5 years to increase the staff and infrastructure of community mental health centers in the US. Hence, the increased funding of community mental health centers and block grants are helping to close the gap between the provision of integrated care at HSOs and MSOs over time.

Limitations

There are limitations that need to be considered when interpreting the findings of this study. First, the use of repeated cross-sectional design means that we cannot draw causal conclusions from the findings because the mental health care organizations are not uniquely identified. Secondly, health care integration is not just the inclusion of behavioral and physical health care together; rather, it is a method where all of the integrated practitioners must be trained to work collaboratively within this new system

(Benuto & O'Donohue, 2016). Our use of integrated behavioral and primary care may not measure this more nuanced aspect of health care integration.

Conclusion

There is currently a paucity of research examining the health services disparities at HSOs (Santisteban, Vega, & Suarez-Morales, 2006). This study used national data on US mental health care organizations to build on this literature. Even though integrated care has been shown to have positive effects on Hispanic clients' access to care and health outcomes (Bridges et al., 2014), the findings of this study show that MOs are more likely to provide integrated care than HSOs. However, community mental health centers and the expansion of Medicaid have helped to decrease the disparity in the provision of integrated care between HSOs and MOs. There should be continued emphasis on funding community mental health centers and providing alternative forms of payments for integrated care. These two solutions help to offset the disparities in integrated care between HSOs and MSOs.

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Chapter V: Discussion

The present dissertation provides evidence that the ACA had a significant impact on the mental health organizations that care for Hispanics in the United States. To date, there has been limited research examining the effects of the ACA on Hispanic mental health care. This study takes one step further by emphasizing the impact that mental health organizations, particularly the health safety net, have on Hispanics' use of mental health care.

The three papers in this dissertation each provide distinctive stories about the impact of the ACA on Hispanics' access to behavioral health services. In the following sections, I summarize the findings from the three papers and provide implications.

Characteristics of Hispanic-Serving Organizations

The findings from the latent class analysis showed that four classes emerged from the proportion of Hispanic clients, structural characteristics, and the expansion of Medicaid in the state. Of those classes, two groups provided services to a high proportion of Hispanic clients. The largest of these two groups was comprised mostly of community health centers, meanwhile the second largest was comprised of non-profit hospitals. Both of these organizations are part of the health safety net. Low-income Hispanic clients who are unable to afford health care may cluster at these organizations because they provide services at a reduced price or free of charge.

Public health care organizations in the expansion states were the least likely to provide mental health services to Hispanic clients. Hispanics in expansion states are more likely to be insured after the ACA, meanwhile health coverage rates stayed the same for

their counterparts in non-expansion states (Doty, Rasmussen, & Collins, 2014). Rather than seeking care from public health care organizations, the increased number of Hispanics with health insurance in the expansion states may seek services from other organizations.

The for-profit organizations also did not provide services to a large percentage of Hispanic clients. It could be that these organizations are not favorable because they do not provide access to low-income Hispanics without health insurance. This is the case for undocumented Hispanics who must seek care at no charge when they experience health issues. Since the ACA did not include provisions for the coverage of these individuals, they are relegated to using the health safety net (Melo, 2017).

The Impact of the Affordable Care Act on Hispanic Service Use

To my knowledge, there is no research to date that examines the change in Hispanics' access to mental health since the ACA. Yet, there are reasons to believe that the outcomes could be nuanced. For instance, the ACA has increased Hispanics' access to general health care services. Since the implementation of the ACA, Hispanics are less likely to delay care, more likely to visit a physician, and more likely to have a personal physician (Chen, Vargas-Bustamante, Mortensen, & Ortega, 2016; Sommers, Gunja, Finegold, & Musco, 2015). However, the ACA has also increased other issues with access. For instance, waiting times have increased in expansion states since the ACA (Sommers, Maylone, Blendon, John Orav, & Epstein, 2017). Among Hispanics, Mexican and Central Americans experienced the largest increase in delayed care after the ACA (Alcalá, Chen, Langellier, Roby, & Ortega, 2017).

The findings from the second paper of this dissertation demonstrates the nuances in Hispanic mental health care access after the ACA. The findings of the initial expansion of the ACA showed that Hispanic admissions increased in 2014. Just two years after the implementation, Hispanic admissions decreased to numbers below what was seen before the ACA implementation. It is clear that there were inequalities in Hispanics' access to mental health services that were only observable 2 years after the ACA implementation.

The Impact of the Health Safety Net on Hispanic Service Use

Although I found there were decreases in Hispanic admissions in 2016, health safety net organizations were more likely to serve Hispanic clients than other organizations. Specifically, organizations that accepted Medicaid, community mental health centers, and those that provided integrated care were more likely to serve Hispanic clients. The results also revealed that the increased eligibility of public health insurance helped to address Hispanics' access to mental health care. That is, Medicaid accepting organizations were more likely to serve Hispanics after the implementation of the ACA and in expansion states. It is possible that these health safety net organizations saw an upsurge in Hispanic admissions because of the increase in publically insured Hispanics in expansion states after the implementation of the ACA. These findings suggest that the health safety net helps to offset some of the disparities in mental health care access.

The Impact of the Affordable Care Act on Integrated Care Services

Historically, Hispanic communities have been less likely to receive investment than non-Hispanic white communities (Valdez, Padilla, & Valentine, 2013). Yet, federal grant funding has been shown to increase the provision of behavioral health treatment (Lo Sasso & Byck, 2010). The aim of paper 3 was to examine whether HSOs received

federal funding for integrated care at the same rate as mainstream organizations (MOs) after the implementation of the ACA.

We measured the HSO label using the percentage of Hispanic clients served in the organization. Organizations with 21% or more Hispanics were labeled Hispanic-serving organizations, meanwhile all other organizations were labeled mainstream organizations. The missions of the organizations were not available in the dataset; thus, they were not used to assess the HSO label.

Community health centers are an essential agent in the provision of integrated care. For example, most community health centers (65%) provide integrated behavioral care (Lardiere, Jones, & Perez, 2011). Therefore, I also assessed whether the federal funding and community mental health centers factors increased integrated care at the same rate for HSOs and mainstream organizations.

The findings from paper 3 of the present dissertation showed that mental health HSOs were less likely to receive community mental health grants and to provide integrated care than mainstream MOs. Although there were disparities in the number of grants given to HSOs, HSOs converted these grants into integrated care at the same levels as MOs.

This study also showed that the ACA federal grants translate help to diminish the disparities in integrated care between HSOs and MOs over time. From 2014 to 2016, the increase in community mental health block grants significantly increased the integration of care at HSOs. Meanwhile, the grants did not have a significant effect on the provision of integrated care at MOs. Thus, these grants are helping to lessen the disparities in the provision of integrated care present in 2014. The findings of this study are important due

to the fact that integrated care can decrease disparities in access, quality, and behavioral and physical health outcomes between non-Hispanic whites and Hispanics (Bridges et al., 2014).

The Socio-Cultural Framework for Health Service Disparities

According to the Socio-Cultural Framework for Health Service Disparities (SCF-HD) failures at the micro, meso, and macro level of the health care system over time create health service disparities between ethnoracial minorities and non-Hispanic whites (Alegría, Pescosolido, Williams, & Canino, 2011). The macro level includes federal and state policies that, over time, negatively impact mental health service disparities. At the macro-level, this dissertation showed that the ACA introduced failures within the system, which may have exasperated mental health service disparities. This can be seen in the lower rates of Hispanics' use of mental health services in 2016 when compared with 2010. I also found that the number of integrated care grants to MOs after the ACA were much higher than numbers of grants HSOs received. This finding indicates that there were disparities in the grants between MOs and HSOs.

At the meso level, the lack of appropriately designed care to Hispanic populations could further perpetuate these disparities. The lower provision of integrated care at HSOs compared with MOs means that HSOs are not providing an appropriate form of care that has been shown to decrease Hispanic mental health service disparities (Bridges et al., 2014).

Despite these failures in the health care system, there were macro and meso level factors that helped to address health disparities over time. At the macro level, increased federal funding of the health safety net increased the integration of care at HSOs over

time, which was not seen in MOs. That means that Hispanic-serving organizations, a meso level factor, over time may be using the increased federal funding to help erase Hispanics' disparities in access to mental health services when compared with MOs. These findings from the third paper are in line with the findings from the second paper. That is, federal grants to the health safety helped to increase Hispanic's admissions to mental health care organizations. Specifically, organization with integrated care, that accepted Medicaid payments, and community mental health centers helped to increase the number and proportion of Hispanics at mental health care organizations.

The results of this dissertation help to support the SCF-HD's argument that health care system failures and cumulative disadvantage create Hispanic mental health service disparities. However, findings show that efforts to increase macro level funding is a mechanism that helps to address disparities. Specifically, increased funding to the health safety net and HSO over time help to alleviate inequities in access to care. Thus, future versions of the SCF-HD should include how addressing health care system failures at different levels can help to decrease health disparities over time.

Limitations

This dissertation contains a few limitations that need to be considered. First, the study is limited to the variables included in the US Census and N-MHSS dataset, which only allow for an examination of organization and state-level measures. Responses from individuals using services at these organizations would provide a fuller picture of the relationships in this study. For example, variables measuring the mental health of clients at each organization would have allowed for an analysis of mental health outcomes from increased access to these organizations. Secondly, the study does not account for county

and neighborhood differences within states. Thirdly, The N-MHSS asked organizations to provide the number of Hispanics at their organization in April of the corresponding survey year. Although the number of Hispanic clients in April may accurately depict organizations' client characteristics, it is also possible that the one-month responses may not accurately account for the fluctuations in Hispanics' use of services. Fourthly, the N-MHSS included Hispanics as one group. Future studies could use data that examines these differences between Hispanic subgroups. Finally, I measured HSOs using the composition of Hispanic clients at an organization rather than by the organization's mission to work with Hispanics. Rather than measuring an organizations' dedication to working with Hispanics, the HSO label simply measures their client ratio (Santiago, 2006). However, the N-MHSS did not include a measure for organizational missions. Due to this limitation, I was not able to measure whether these organizations had a mission to serve Hispanic clients.

The strengths of the study outweigh the limitations. This dissertation used national mental health organization data to show the impact of the ACA on Hispanic mental health care. To my knowledge, it also provides the initial results of the impact of the ACA on Hispanic mental health care use and integrated care at HSOs. Additionally, this study investigates a concept, HSO, that has not received substantial attention in the mental health service field.

Implications

Research should continue to assess the shortcomings of the ACA. The aim of the ACA was not to overhaul the health care system; rather, the purpose was to provides

patches to fix some of the problems (Sered, 2017). Therefore, many of the issues inherent in the US health care system remained in place.

The findings of this research also underscore the importance of funding the health safety net. However, the funding of community health centers has come into question recently. The Community Health Center Fund expired on September 30, 2017. The long-term funding of this source of revenue was used as a political bargaining tool to pass other policies of interest (Luthra, 2018). On March 23, 2018, Congress signed an extension to the program for the following two years. However, this temporary solution leaves the future of community health centers uncertain. The lack of long-term funding could mean that community health centers, the largest group of mental health care HSOs, could lose this funding stream in two years. Community health centers heavily rely on this funding stream. On average, 19% of community health centers' revenue comes from the Community Health Center Fund (KFF, 2018). A more long-term solution would help to address this uncertainty, especially due to community health centers' importance in addressing Hispanic mental health disparities.

The ACA is a major health care reform bill that has changed Americans' access to health insurance and, in turn, their access to affordable care. Recent policy changes that reduce coverage or make it difficult to get health insurance will harm the health of vulnerable populations (Sommers, Gawande, & Baicker, 2017).

Conclusion

It is important to know that the outcomes of the ACA are nuanced. The ACA has addressed some disparities, left some in place, and worsened other (Castañeda & Mulligan, 2017). This is exactly the findings from the three papers of this study. The

initial outcomes of the ACA showed that Hispanic admissions increased in the year of the implementation (2010). However, two years after, we found some declines in Hispanic admissions at mental health care organizations. These declines may be partially explained by increases in waiting times (Sommers et al., 2017). There were also mixed findings from the federal grants for integrated care. For instance, HSOs were less likely to have community health center grants and to provide integrated care than MOs. Nevertheless, the increase of funding to these grants over time translated into greater integrated care in HSO.

Although the ACA had mixed effects on mental health disparities, it was a promising response to the need for better access. Unfortunately, recently the Department of Justice (DOJ) reported that they would not defend the ACA's individual mandate in court (Keith, 2018). This is a substantial issue because the Justice Court typically defends federal laws in court (Baker, 2018). Under the Trump administration, the ACA's individual mandate is being considered unconstitutional. The rest of the ACA would likely stay intact if the individual mandate was struck down.

This major development shows the current administration's position on the ACA. If the Trump administration decided to make the DOJ discontinue defending the rest of the provisions, it could threaten to reverse many of the gains seen to date. Hispanics in particular could be negatively impacted from the repeal of this law. The impact of the federal grants reported in this study could be lost if the ACA were repealed. Thus, Hispanics' access to and quality of behavioral health care could decrease.

At the end of the day, the health safety net has played a large role in addressing mental health service disparities, even after the ACA. Community health centers admit

higher numbers of Hispanic clients and provide integrated care to Hispanics than other organizations. The grants to these organizations have also been translated into more appropriate care (i.e. integrated care). Additionally, organizations that take Medicaid payments have larger percentages of Hispanic clients and help reduce the use of emergency psychiatric services. It is evident that to better address Hispanic mental health disparities, there should be more emphasis on the funding of the health safety net organizations that serve Hispanics.

Human Subjects Review

The data used in this dissertation is publically available and de-identified. The proposed study has been granted exemption from the Boston College Institutional Review Board. The IRB protocol number for this study is 17.161.01e and the study is exempt under the 45 CFR 46.101 (b) 4 code.

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