

The University of San Francisco

USF Scholarship: a digital repository @ Gleeson Library | Geschke Center

Master's Projects and Capstones

All Theses, Dissertations, Capstones and
Projects

8-11-2023

Certified Community Behavioral Health (CCBHC) Outpatient Redesign for Behavioral Health Care

Fatmata Kula Jah

University of San Francisco, fatmatakulaj@gmail.com

Follow this and additional works at: <https://repository.usfca.edu/capstone>



Part of the [Other Public Health Commons](#), and the [Public Health Education and Promotion Commons](#)

Recommended Citation

Jah, Fatmata Kula, "Certified Community Behavioral Health (CCBHC) Outpatient Redesign for Behavioral Health Care" (2023). *Master's Projects and Capstones*. 1619.

<https://repository.usfca.edu/capstone/1619>

This Project/Capstone - Global access is brought to you for free and open access by the All Theses, Dissertations, Capstones and Projects at USF Scholarship: a digital repository @ Gleeson Library | Geschke Center. It has been accepted for inclusion in Master's Projects and Capstones by an authorized administrator of USF Scholarship: a digital repository @ Gleeson Library | Geschke Center. For more information, please contact repository@usfca.edu.

Certified Community Behavioral Health Clinics (CCBHCs) Outpatient Redesign for Behavioral Health Care

A Capstone / ILEX Project submitted in partial fulfillment of the requirement for the degree of Master of Public Health, with a concentration in Health Policy and Leadership

School of Nursing and Health Professions

MPH-683-H2 Integrated Learning Experience (ILEX)

University of San Francisco

Prof. Marissa Montano (Kraynak)

August 4, 2023

By

Fatmata Kula Jah

Table of Contents

Abstract	2
Introduction	3
i. Behavioral Health Disorders: Scale and Scope	5
ii. What are CCBHCs?	6
iii. CCBHC Payment Model: PPS Rate	9
iv. Alternative Payment Rate for CCBHCs	11
v. Gaps in the CCBHC Model	15
Background	18
Literature Review	20
a. The Prevalence of behavioral health disorders	20
b. Workforce capacity	21
c. Global burden of disease: Communicable vs. Non-Communicable	22
d. Opioid epidemic	24
e. Technological innovation	26
Methodology	28
Recommendations	29
Implications	33
Conclusion and Suggestions for future research	36
References & Resources	38
Tables	16, 37
Appendices	42-44

Abstract

The purpose of this study is to utilize key components of the Certified Community Behavioral Health Clinic (CCBHC) model that have been implemented by states to create an outpatient redesign model for behavioral health. This research will create a redesign of the behavioral health care model for outpatient clinics using key aspects of the CCBHC model and will utilize a stepwise implementation approach. The redesign model will be cost-effective in the future by aiming to meet the needs of Medicare and Medicaid members. Among such targeted needs include reducing hospitalizations, increasing availability, and access to high-quality integrated healthcare services, among other components (PAMA, 2014). This was accomplished by recommending greater use of, and comprehensive integration of, Peer Support Specialists within the current behavioral health continuum of care by increasing funding for the CCBHC demonstration program through legislative expansion by using Medicaid eligibility. This will enable CCBHCs to fulfill their mandate of providing care for everyone in spite of their insurance status (SAMHSA, 2023). The comprehensive use of Peer Support Specialists should be expanded through legislation, giving policymakers more time to examine CCBHCs' effects on provider and patient outcomes. The CCBHC demonstrations in the initial eight states (Minnesota, New York, Missouri, Pennsylvania, New Jersey, Nevada, Oklahoma, and Oregon) (HHS, 2017), would be extended for an additional two years under the Excellence in Mental Health and Addiction Treatment Expansion Act (S. 824/H.R. 1767) (Brown et al., 2023). However, effective strategies must be incorporated to ensure sufficient availability of support and resources for mental health issues and substance use disorders (SUDs). To expand individuals' levels of access to care, CCBHCs should incorporate technology to improve the

levels of availability and accessibility of individuals to timely intervention, recovery, and care.

Notably, the incorporation of technology can enhance access to care, especially when considering the impact of Covid-19 pandemic (Shalini, L. et al., 2021). This will utilize same-day scheduling where providers offer services on the same-day beyond the clinic locations, and develop coordination with other community service providers. Incorporating enhanced technology is both an important and integral element in enhancing the socioecological conditions for optimal outcomes for treatment, such as access to, and ease of information sharing and coordination during care, but also observing the evolving role of technology in matters related to behavioral health (Shalini, L. et al., 2021). In addition, the stratification approach of the PPS payment rate structure suggests the cost-effective potential of identifying high-risk individuals prevention measures would help CCBHCs achieve service equity in low- and middle-income settings (Islek, D. et. al., 2020).

This research took into consideration the importance of states redesigning outpatient behavioral health care aimed at improving access and quality of cost-effective service delivery for Medicare and Medicaid members. Although the CCBHC model is just one approach that has been implemented by several states to improve behavioral health service delivery, this redesigned model may need to be modified to better fit the needs of Medicare and Medicaid members of individual states due to individual state needs and available resources.

Introduction

Too often, in many communities within the United States, law enforcement has become the unofficial crisis responders in matters related to mental and behavioral health. Sometimes, with devastating consequences for the individual in crisis. Law enforcement has been

unofficially handed over the mental health “crisis system” by default, in the absence of mental health professional response teams and a shortage of mental health providers (Hill, T.J. & Widgery, A., 2022). This current crisis approach not only delivers minimal mental health and substance use disorder (SUD) treatments for some people in mental crisis, other people with mental health and SUDs end up in multiple readmissions, incarcerations, homelessness, early death, and suicide (SAMHSA, 2020), (Hill, T.J. & Widgery, A., 2022). Mental health is defined by the American Public Health Association (APHA) and Centers for Disease Control and Prevention (CDC) as “a state of well-being wherein the individual realizes their ability to cope with normal stresses of life, achieve productive and fruitful work, and can make a contribution to their community.” The CDC defines mental health as “a person’s emotional, psychological, and social well-being.” This affects not only how we think, feel, act, relate to others, and handle stress, but also how we make healthy choices (CDC, 2023). In other words, every single individual has mental health that they need to nurture and maintain (Stanieri, G., 2022). The significant difference is how you react to or handle a stressful situation, and its impact on your overall health and well-being (Stanieri, G., 2022). Mental health disorders cover a broad range of diagnoses and include schizophrenia, anxiety, and major depressive disorders, autistic disorders, among others (NIMH, 2021). On the other hand, behavioral health includes emotions and behaviors that affect an individual’s overall well-being (SAMHSA, 2023). Oftentimes, behavioral health refers not only to the prevention and diagnosis but also, to the treatment of mental health disorders (AMA, 2022). The World Health Organization (WHO) considers mental health an essential component of our overall health (Stanieri, G., 2022). Unfortunately, the unprecedented surge in mental health and substance use disorders as a result of increased social

media and physical and social isolation, grief, and trauma related to the Covid-19 pandemic disproportionately impacted communities that were already under-resourced (SAMHSA, 2023).

i. Behavioral Health Disorders: Scale and Scope

Mental health cost is one of the greatest public health challenges in the United States (U.S.) (Insel, T.R., 2008). About one-quarter of adults in the U.S. have reported a mental health diagnosis including depression, anxiety, or emotional distress (Tikkanen et al., 2020). In the U.S. about 20% of its population has experienced some form of mental illness, which has considerably increased post-COVID-19 pandemic, and also due to the significant rise in social media (Tikkanen et al., 2020). Within the current mental health landscape, when compared to other high-income countries such as Sweden and the Netherlands, the U.S. ranks as one of the highest, with some of the worst outcomes related to mental health (Tikkanen et al., 2020). Among these outcomes, the U.S. scored the highest in worst outcome with suicide rates, and drug-related deaths as its second-highest (Tikkanen et al., 2020). Although U.S. adults openly and willingly talk about mental health issues and seek professional help, they are burdened by emotional distress associated with socio-economic challenges, lack of access to mental health services, and lack of affordability to seek much-needed healthcare (Tikkanen et al., 2020). According to Tikkanen et al, the U.S. has a relatively low supply of mental health workers such as psychologists and psychiatrists, and only one-third of primary care practices within the U.S. have a mental health professional, when compared to more than 90% in the Netherlands and Sweden (Tikkanen et al., 2020). Given the above scenarios, it is needless to conclude that the U.S. healthcare system is inadequate in handling its current mental health burden (Tikkanen et al., 2020). Most times, incidents of mental illness occur in historically low-income communities already faced with significant disparities including the impact of the Covid-19 Pandemic

(Rapfogel, N., 2022). that are disproportionate to their social determinants of health i.e. in relation to the conditions and environments where they were born, live, learn, play, work, worship, and age. These factors impact not just how this population functions, but also their quality-of-life outcomes and risks (Rapfogel, N., 2022).

In 1965, the U.S. instituted Medicare and Medicaid programs within the Department of Health and Human Services (HHS) as part of the Social Security Amendments, a bill that was signed into law by President Lyndon B. Johnson. These programs ensured that the poor, elderly, and disabled persons had health insurance coverage, including access to providers (Bauchner, H., 2015). Together, these programs transformed the U.S. healthcare system (Bauchner, H., 2015) in their crucial roles, both in expanding health coverage and also increasing access to healthcare services for millions of Americans. The Affordable Care Act (ACA) of 2010, introduced almost 50 years later, has a similar set of services although its intention is to ensure that all Americans have access to health insurance coverage (Bauchner, H., 2015). Notwithstanding the expanded healthcare coverage through the ACA, it is still difficult for most Americans with mental health and substance use disorders (SUDs) to navigate the U.S. healthcare system for appropriate services due to systemic and structural barriers (CHCF, 2023). Typically, individuals have had to contact numerous agencies for different types and levels of care (CHCF, 2023). Consequently, both policymakers and funders continue their exploration of how to address the increasing unmet needs of Medicare and Medicaid members with behavioral and SUD disorders (CHCF, 2023). To this end, Certified Community Behavioral Health Clinics (CCBHCs) have emerged as the ideal model aimed at improving both access and quality of healthcare for behavioral health disorders (CHCF, 2023).

ii. What are CCBHCs?

CCBHCs are specially-designated clinics or facilities that address comprehensive behavioral and SUDs (National Council for Mental Wellbeing, 2023). This model is designed to improve the service delivery of behavioral health and SUD services in communities within the U.S. Created through Section 223 of the Protecting Access to Medicare Act (PAMA) in 2014. It was based on the Excellence in Mental Health Act (EMHA) demonstration program, a two-year initiative with expanded mental health and substance use services within communities and rural areas, regardless of clients' status or ability to pay (CHCF, 2023). In addition, EMHA focused particularly on veterans, Native American tribes, and other underserved populations (HHS, 2017). CCBHCs comprise nonprofit organizations, local government agencies, and tribal organizations that offer a wide array of behavioral health services for populations that have complex needs (Becker, C., 2022).

EMHA also created a new payment system defined by criteria requiring service delivery from prevention through crisis across the behavioral health continuum of care (CHCF, 2023). CCBHCs are integrated and comprehensive behavioral and SUDs service delivery systems that utilize a sustainably-financed model (CHCF, 2023). CCBHCs are certified by states and must meet standards that ensure access to not only integrated care but also evidence-based SUDs and mental health services that include 24/7 crisis response as well as medication-assisted treatment (MAT) (CHCF, 2023). The CCBHC demonstrations vary from one state to the next based on the individual states' needs and available resources (SAMHSA, 2023). The Substance Abuse and Mental Health Administration (SAMHSA) established in 1992, is the federal agency within the U.S. Department of Health and Human Services (HHS) tasked with leading public health efforts on advancing behavioral health (SAMHSA, 2023). SAMHSA established program requirements targeting both nonprofits and government agencies that work in behavioral health but want to

become CCBHCs (CHCF, 2023). In addition, CCBHCs are required to meet stringent criteria related specifically to staffing, availability, and accessibility of services, care coordination, scope of services, quality and other reporting, and organizational authority, governance, and accreditation (SAMHSA, 2023). Furthermore, CCBHCs receive flexible funding which supports the spending costs of service expansion within communities (National Council for Mental Wellbeing, 2023).

The CCBHC model was implemented as a demonstration program in eight initial states including Minnesota, New York, Missouri, New Jersey, Nevada, Oklahoma, Oregon, and Pennsylvania (SAMHSA, 2023). The quality objectives of the CCBHC model place renewed focus on a person-centered or individual-centered approach, including the delivery of quality care (CHCF, 2023). This has transformed healthcare systems through the provision of integrated and comprehensive mental health and substance use disorders (SUDs) services that are centered on the needs and preferences of the individual and their families (SAMHSA, 2023). It established healthcare service delivery within a coordinated and integrated system that ranged from chemical, mental, to physical health with uniform, measurable ways to assess value and cost (National Council for Mental Wellbeing, 2023). Establishing partnerships was a safety net to avoid a crisis situation that would potentially lower emergency room visits, lessen law enforcement involvement, and lessen family burden (National Council for Mental Wellbeing, 2023). CCBHCs provide nine core services either directly or through formal partnerships (*See Figure:1*). They include crisis care, outpatient mental health and substance use disorder, person- and family-centered treatment planning, community-based mental health care for veterans, peer, family support and counselor services, targeted case management, outpatient primary care

screening and monitoring, psychiatric rehabilitation services, and screening, diagnosis and risk assessment.

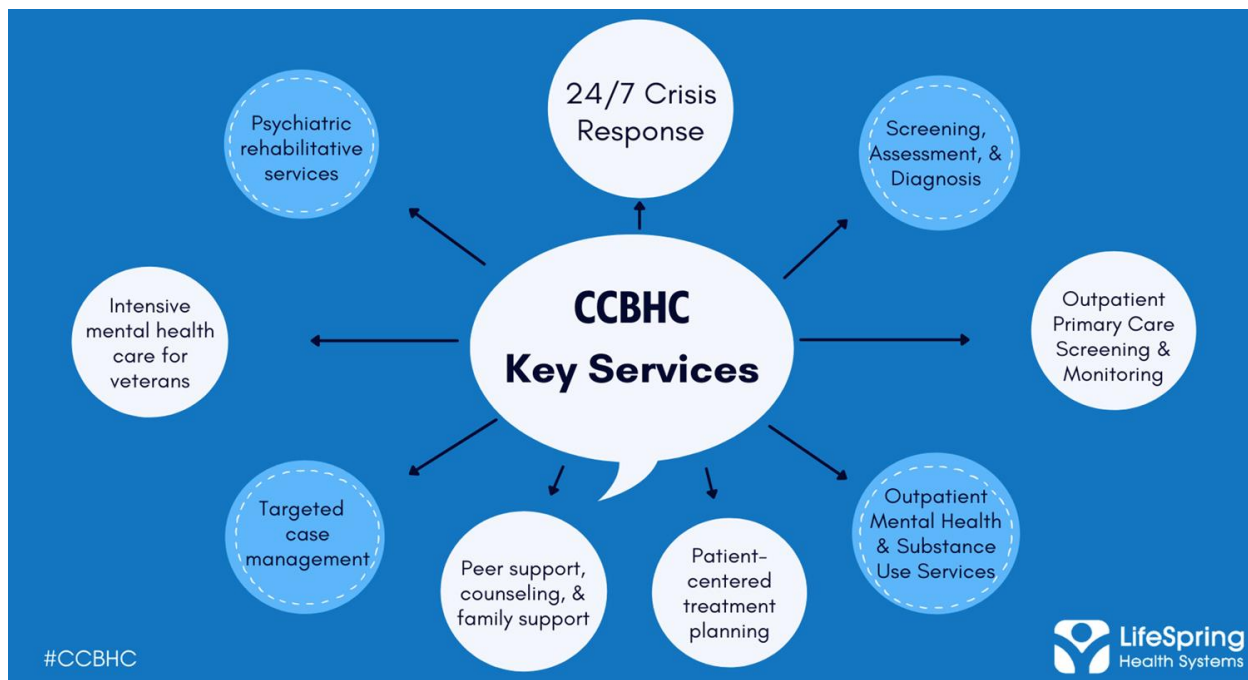


Figure 1: Nine Core Services Provided by CCBHCs Directly or Through Partnerships

(Source: Keeney, B., 2022)

iii. CCBHC Payment Model: Prospective Payment System (PPS) Rate

Different funding mechanisms apply to CCBHCs developed under SAMHSA and those that were created by Medicare. Medicaid funds the demonstration while participating states support their CCBHCs through enhanced reimbursements (Becker, C., 2022). SAMHSA grant-funded states receive \$2 million annually that is paid directly to clinics and states that receive Medicaid demonstration funds are not eligible to apply for SAMHSA grants (Becker, C., 2022).

CCBHCs receive funding either through demonstration grants from the Substance Abuse and Mental Health Services Administration (SAMHSA)-administered CCBHC Expansion (CCBHC-E Grants), or through independent state programs which are separate from the Section 223 CCBHC Medicaid demonstration program (SAMHSA, 2023). Under the demonstration program, clinics receive funding through a PPS rate from Medicaid and services would be covered as ongoing (CFCH, 2023). Under the Expansion grants, grant funding from SAMHSA goes directly to individual clinics, and clinics from any state can apply as long as they meet the CCBHC criteria (CHCF, 2023). Under independent state programs, states that do not participate in the Medicaid demonstration program have the option to implement a statewide CCBHC program using a Medicaid State Plan Amendment or waiver (CHCF, 2023). In California, all CCBHCs receive expansion grants from SAMHSA, although expansion grantees generally do not receive a PPS rate (CHCF, 2023). Even though states may have greater flexibility under the waiver model, they receive less federal funding, as evident with Kansas and Texas, which have both established independent CCBHC implementation programs (CHCF, 2023).

The PPS is categorized into PPS-1 (the daily rate), and PPS-2 (the monthly rate) - both of which were designed for financial alignment improvement while providing high-quality, patient-focused care (National Council for Mental Wellbeing, 2023). The CCBHC PPS rate is designed to provide predictable and stable funding for CCBHCs. Under this model, CCBHCs receive payment for the services they provide to Medicare and Medicaid beneficiaries, either daily or monthly, and the PPS payment model is based on a comprehensive cost assessment of the required services under the CCBHC model (CHCF, 2023).

PPS supports the costs of clinics for expanding services and increasing clients, while simultaneously increasing the flexibility of clinics to deliver care that is patient-focused

(National Council for Mental Wellbeing, 2023). Currently, ten states are participating in the demonstration and are receiving enhanced federal match funding, while 15 other states have received planning grants that could enable them to join the demonstration program (CFCH, 2023). This payment system mirrors Federally Qualified Health Centers (FQHCs), with an aim to support effective care and stability in clinics (CHCF, 2023). SAMHSA is the U.S. agency within the Department of Health and Human Services (HHS) that advances behavioral health efforts and, administers CCBHC funds (CHCF, 2023). The payment structures for CCBHCs may vary depending on the state and the specific reimbursement mechanisms implemented. Furthermore, some states may combine elements of both the PPS and cost-based reimbursement models, or implement other innovative approaches to support CCBHCs.

iv a. Alternative Payment Rate for CCBHCs

Cost-Based Reimbursement is an alternative payment model for CCBHCs that is utilized by some states (HRSA, 2022). Under this model, CCBHCs are reimbursed based on the actual costs incurred in providing services. The reimbursement is typically subject to a predetermined rate or fee schedule, which may in turn be negotiated between the CCBHC and the payer, such as Medicaid or a managed care organization (MCO). Under this payment structure, the CCBHC submits documentation of its costs, and reimbursement is based on allowable expenses, such as direct service costs, administrative costs, and other allowable overhead expenses. This method improves program accessibility by decreasing patients' out-of-pocket payments. The rate is meant to compensate CCBHCs for their estimated cost of treatment. It is decided by the Centers for Medicare & Medicaid Services (CMS) which provides states with technical support in determining Prospective Payment System (PPS) rates. Azar et al. (2018) acknowledged that CCBHCs cannot reject services based on a person's residency or inability to pay. Individuals

who qualified for Medicaid fee-for-service (FFS) managed care or both are eligible for CCBHC services. Section 223 demands that crisis management services be provided and accessible 24 hours a day, seven days a week. CCBHCs must provide drug abuse treatment and mental health services across the individual's lifetime, either directly or via formal partnerships with other high-quality providers known as designated cooperating organizations (DCOs). Services must integrate a minimal set of evidence-based practices (EBPs) specified by states based on community needs to participate in the demonstration program. Some states also proposed additional evidence-based practices (EBPs) that their CCBHCs may use. The goal of these payment structures is to provide predictable and sustainable funding for CCBHCs, thereby ensuring their ability to deliver a comprehensive range of services, integrate care, as well as improve access and quality of behavioral health care. However, it must be noted that payment structures for CCBHCs may vary by state and are subject to individual state policies, Medicaid programs, and other funding mechanisms.

Alternative payment structures that may be explored by states to support CCBHCs become sustainable and effective in their aim to align payment with value, quality, and outcomes (AHA, 2023). The implementation of alternative payment structures may require collaboration and agreement among state Medicaid agencies, payers, CCBHCs, and other stakeholders. Ultimately, states have the flexibility to design payment structures that best align with their individual goals, resources, and local healthcare landscape. However, this research would like to caution that due to the limited availability of data on the specific outcomes and success rates of alternative payment structures for CCBHCs, the successful implementation, or failure, cannot be fully verified. The implementation and evaluation of these alternative payment structures are still

relatively new and they vary by state and context. As a result, it is challenging to provide a comprehensive assessment of their success or failure.

The CCBHC model has been shown to improve access to care, increase the quality of care, and also increase the use of evidence-based practices (National Council for Mental Wellbeing, 2023) (*See figure 2*). In addition, this model has been shown to reduce costs through a more integrated and coordinated healthcare system resulting in fewer readmissions, and fewer emergency room visits. As a result, it has been adopted by several other states beyond the initial eight that were in the demonstration program. As of September 2022, there are a total of 36 states that have implemented the CCBHC Certification Criteria Model (SAMHSA, 2023). These states include Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Kentucky, Florida, Georgia, Wyoming, Utah, Virginia, Washington, Wisconsin, Pennsylvania, etc., to name but a few. Each of these states has implemented the CCBHC model specific to the needs and resources of that state (SAMHSA, 2023), which may prompt additional requirements or modifications. Consequently, specific parts of the adopted CCBHC model may vary. Nonetheless, all participating states are required to meet the certification criteria that were established by EMHA, (2014). As of March 2023, more than 500 CCBHCs operate across 46 states, including Washington D.C, Guam, and Puerto Rico (National Council for Mental Wellbeing, 2023).

Missouri Data Snapshot: Increased Access in Number of Individuals Served by CCBHC

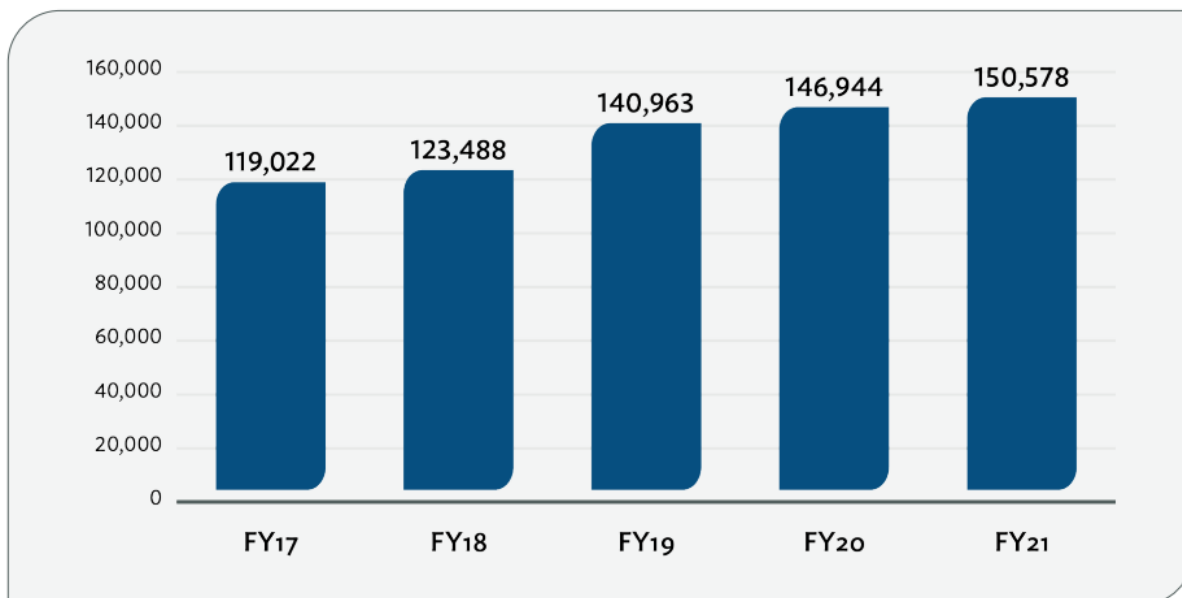


Figure 2: Missouri Data Snapshot: Increased Access in Number of Individuals Served by CCBHCs (Source: National Council for Mental Wellbeing, 2023)

From the baseline to the fourth year of the CCBHC demonstration program, Missouri reported a 27% increase in client care access, due to the adoption of same-day/next day scheduling (See figure 2). In addition, Missouri saw increased service of armed forces and veterans by almost 41% from the baseline to the fourth year (National Council for Mental Wellbeing, 2023).

Increased collaboration as well as outreach efforts in Oregon have enabled CCBHCs to increase service delivery to populations that would have otherwise been underserved. From 2016 to 2018, there was a 17% increase in the number of persons with severe and continued mental health illness by almost three times that of non-CCBHCs when compared to 6% increase for non-CCBHCs within the same period (National Council for Mental Wellbeing, 2023). In 2018, Oregon reported 41% of Medicaid clients diagnosed with serious and persistent mental illness benefitted the most from the CCBHC demonstration (National Council for Mental Wellbeing, 2023). In addition, there were reports of cost offsets due to reduced emergency department and

inpatient visits among CCBHC demonstration sites (National Council for Mental Wellbeing, 2023).

Despite its effectiveness in increasing accessibility of individuals to mental health services and reducing costs, the CCBHCs' key policy elements are not uniformly applied across all state levels, undermining equity in achieving a healthy nation. This ultimately creates disparities in the quality of care and outcomes. As a result of the mobile crisis services and lifespan requirements, coupled with the flexibility by states to implement these integrated services, the models vary from state to state based on states' specific needs and resources (SAMHSA, 2023). This further impacts the quality of care and health outcomes. Some states were found to have not provided adequate care since behavioral and mental health services were not equally applied across healthcare settings, including psychiatric rehabilitation and intensive community-based services for veterans, thereby creating inequities (Breslau et al., 2017). Such practices indicated disparities in the availability of data for CCBHCs' evaluation and variability in Medicaid claim data (Breslau et al., 2017). These disparities contradict the CCBHC policy's main objective, which is that of improving quality, availability, affordability, and access to community-based behavioral health care.

v. Gaps in the CCBHC Model

While the CCBHC model has shown promise in improving access to and quality of behavioral health care, several gaps and challenges still exist. Although these gaps may vary across different states and implementation contexts, some common challenges include:

<ul style="list-style-type: none"> ● Workforce and staffing 	<p>Many CCBHCs are challenged by workforce shortages, recruiting, and retaining qualified healthcare staff such as psychiatrists, therapists, and peer support specialists, etc.</p> <p>The shortage of qualified/trained mental health professionals and limited reimbursement rates can challenge the ability of CCBHCs to meet the demand for services including timely care (Shalev, D. et al., 2020)</p>
<ul style="list-style-type: none"> ● Data infrastructure and reporting using enhanced technology 	<p>Effective data collection and effective reporting systems through advanced technological utilization are crucial for evaluating outcomes, measuring performance, and ensuring accountability, especially when challenged by low literacy among target populations. Such challenges can create implementation barriers to tracking robust data infrastructure and systems and reporting on consistent key performance measures (Waldo, K., 2021), (Chen, X. et al, 2018).</p>
<ul style="list-style-type: none"> ● Fee-for-service transition 	<p>This challenge can be complex when transitioning from traditional fee-for-service</p>

	<p>reimbursement to value-based payment models. CCBHCs may encounter potential challenges in their billing and payment systems to translate to outcomes and quality measures when aligned with value-based care (Ndumele, C.D., et al., 2019).</p>
--	--

To adequately address these existing gaps, ongoing attention, and collaboration are required among stakeholders such as policymakers, payers, providers, and advocacy organizations. In order to ensure the optimization of CCBHCs goal of meeting the needs of individuals with behavioral health conditions, it is necessary to embark on continuous monitoring, feedback mechanisms, and strategic adaptations. Most of the identified gaps within the CCBHC model can be enhanced through technology incorporation and increased clinic funding.

The goal of this study is to adopt aspects of the CCBHC model (without duplicating it), and create an outpatient behavioral health redesign model which will prove to be cost-effective in the future by comprehensively integrating Peer Support Specialists in the behavioral health continuum of care, enhance utilization of technology, and utilize a stepwise payment implementation approach. This study aims to meet the outpatient healthcare needs of Medicare and Medicaid members, such as reducing hospitalizations and increasing affordability of, and access to behavioral health, among other components.

Background

The World Health Organization (WHO) considers mental health an essential component of our general health and defines it as “a state of well-being in which a person can fulfill themselves, overcome the daily tensions of life, work productively, and contribute to the life of one’s community” (Stranieri, G., 2022). Causal factors impacting our mental health may include multiple individual, social, and structural social determinants which may combine to either protect or undermine our mental health and shift our position on the mental health continuum (CDC, 2023). It is also known that mental health is largely influenced by the environment, the economy, etc., as well as by genetic predisposition from our parents (genetic patrimony) and by our individual experiences (Stranieri, G., 2022). Unfortunately, due to the significant impact of social media, the Covid-19 pandemic, and other social determinants of health, mental health, and substance use disorders contributed to the overall global burden of disease (GBD) shifting from communicable to non-communicable (from 80-83% in high-income countries (HIC)) (GBD, 2010). Consequently, policymakers and funders were forced to explore behavioral healthcare models which would integrate physical and behavioral healthcare across the continuum of care, while improving chronic health outcomes (Becker, C., 20220). The CCBHC model emerged as the preferred new approach to address existing gaps, coordinate care, as well as streamline both physical and behavioral health services (Becker, C., 20220).

CCBHCs have transformed healthcare systems through the delivery of integrated and comprehensive mental health and substance use disorder (SUD) services that are centered on the needs and preferences of the individual and their families (SAMHSA, 2023). Although some states might exercise discretion to implement criteria that depict their needs, they may not adequately address mental health and substance use disorders. Consequently, this creates a lack of equal application of the six key elements across all state CCBHCs. For instance, studies

indicate significant disparities in the availability of data that could inform the CCBHCs'

evaluation and variability in Medicaid claim data (Breslau et al., 2017). According to Siegwarth et al. (2020), states did not provide adequate services, especially intensive community-based mental health services for armed forces and veterans and primary care screening and monitoring (See Figure 2).

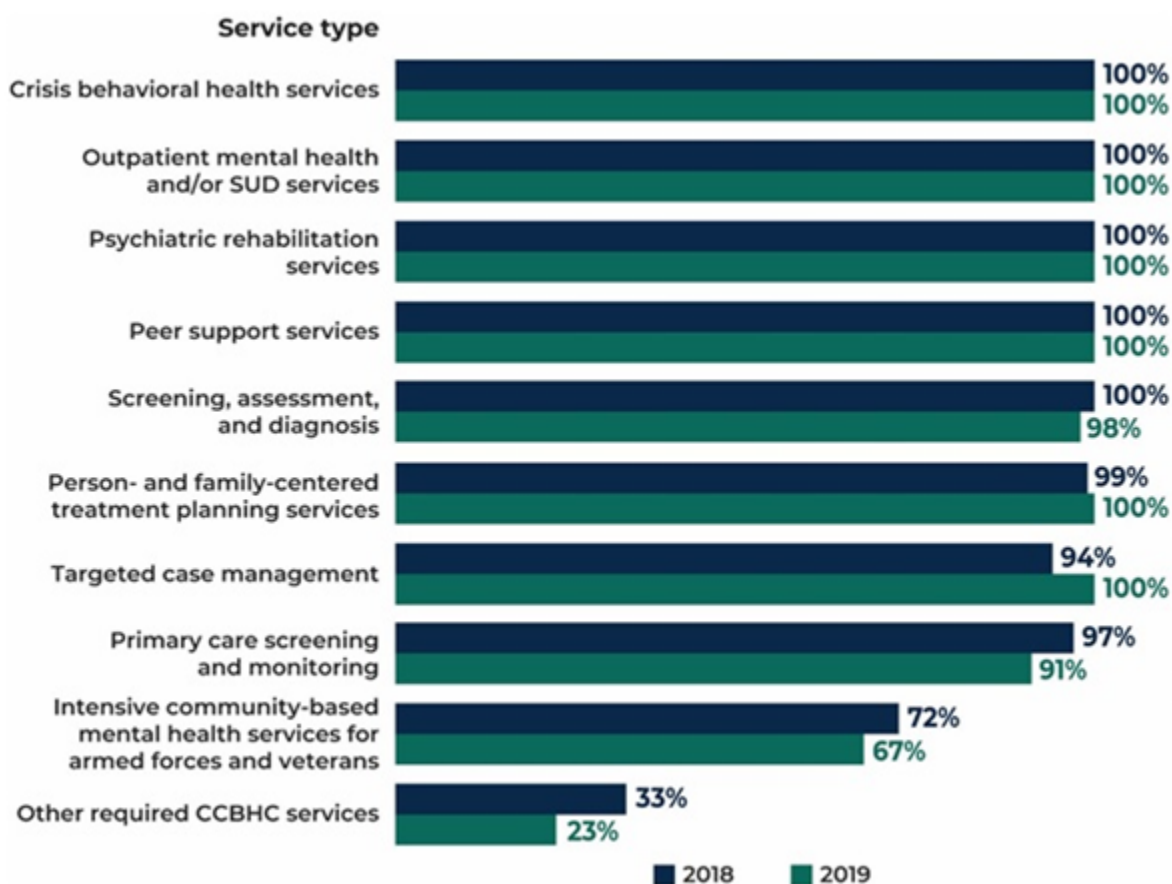


Figure 3: Proportion of CCBHCs that Provided Each Type of Service Either Directly or Through a DCO (Source: Siegwarth et al., 2020)

Keywords: Certified Community Behavioral Health Clinic, Community, mental health services, funding, technology, Global Burden of Disease, Substance Use disorder, addictive disorder

Several CCBHCs did not provide psychiatric rehabilitation services. Psychiatric rehabilitation services supported employment, housing, and education. The proportion of CCBHCs offering peer support services for families was 83% as of 2019 (Siegwarth et al., 2020). However, this value increased from 2018, representing 73% of CCBHCs offering peer support services. The lack of incorporation of some services indicates policy gaps that need to be implemented to ensure optimal achievement of Certified Community Behavioral Health Clinic (CCBHC) policy objectives that involve enhancing access to mental healthcare services.

Literature Review

a. The prevalence of behavioral health disorders

Mental health costs are considered one of the United States' greatest public policy challenges with an estimated 6.2% spent on health care for mental health disorders (Insel, T.R., 2008). Unlike other medical disorders, the full economic costs of mental and behavioral disorders have not been accurately captured by health cost analysis, given that there are more "indirect" than "direct" costs of care associated with mental disorders. Indirect costs can range anywhere from a reduced supply of labor and/or public income to incarceration or homelessness (Insel, T.R., 2008). Direct costs could include clinic visits, medication, hospitalization, etc. Some research studies have estimated a conservative per capita loss in earnings at \$193.2 billion in earnings each year due to its association with the impact of severe mental disorders (Insel, T.R., 2008). Mental disorders include schizophrenia, anxiety disorders, major depressive disorders, autistic disorder, and disruptive behavioral disorders such as conduct disorder and attention-deficit hyperactivity disorder (ADHD). Substance use disorders (SUDs) include dependence on opioids, cocaine, cannabis, amphetamine, and alcohol use disorders including alcohol

dependence and fetal alcohol syndrome. Neurological disorders include dementia, epilepsy and migraine (Charlson et al., 2016).

b. Workforce capacity

Too often, in many communities within the United States, law enforcement has become the unofficial crisis responders in matters related to mental and behavioral health. Sometimes these interactions result in devastating consequences for the individual in crisis, given the absence of adequately trained behavioral health professionals/specialists to respond to such crises. Most times, they occur in communities that face significant disparities in terms of social determinants of health i.e., the conditions and environments where they were born, live, learn, play, work, worship, and age. These factors impact how this population functions and their quality-of-life outcomes and risks. According to the Centers for Disease Control and Prevention (CDC), 20% of people in the US experience some form of mental illness, which has increased, mostly due to the Covid pandemic and the rise in social media (CDC, 2023). The current crisis approach not only delivers minimal mental health and SUDs treatment for some people, others end up in multiple readmissions, incarcerations, homelessness, early death, and suicide (Substance Abuse and Mental Health Services Administration (SAMHSA, 2020)).

Obtaining CCBHC accreditation and financing has a considerable influence on a company's capacity to develop worker capacity, according to data from CCBHC survey respondents and interviewers. According to Foney et al. (2019), 100% of survey respondents recruited additional personnel to their clinics after becoming a CCBHC, with half indicating an average staffing increase of up to 10%. Most of the reported employment appears to have been generated by original clinics plus expansion CCBHCs (benefiting from the PPS rate). Most of

both categories reported personnel increases of up to 10%. However, 13% of the original, including extension CCBHCs, recorded a +51% staffing gain since establishing a CCBHC (vs. 0% of expansion-only CCBHCs), and 14% experienced staffing increases between 26% and 50%. The absence of reliable funding is the biggest obstacle to the long-term viability of CCBHCs. Larger payment and reimbursement issues (such as the restriction of eligibility for Medicaid expansion), a dearth of qualified behavioral health professionals, and obstacles to data collection and exchange are some other difficulties. To help guide future policy and finance recommendations, more research should be done on the difference between the funding methods used by the Expansion Grantees (no prospective payment system (PPS) rate) and the original CCBHC demonstration model (PPS rate).

Peer support programs are typically integrated into other behavioral therapy offered by local hospital settings. Brooks Holliday, S.B. et al. (2023), acknowledged that while not all physicians offer peer support specialist services as part of their emergency continuum, many have highlighted that peer support staff are incorporated into other local services related to behavioral health. In a study, some jurisdictions have peer-run groups engaging in outreach, community projects, and crisis assessment (Brooks Holliday, S.B. et al., 2023). Other interviewees mentioned having peers participating in post-crisis response follow-up or mental health staff training. Most interviewees from organizations that do not already use peer support personnel in their crisis continuum recognized the value of hiring peers, and many expressed plans to integrate a peer support specialist model in their emergency mental health care services continuum (Brooks Holliday, S.B. et al., 2023).

c. Global Burden of Disease: Communicable vs. non-communicable disease

In 2016, the prevalence of mental and addictive disorders has been estimated to have impacted more than 1 billion people globally (Rehm, J. & Shield, K.D., 2019). According to Rehm, J. & Shield, K.D. (2019), the overall burden of disease associated with mental and addictive disorders was estimated at 7% of “all global burden of disease” in an assessment using the disability-adjusted life year (DALY), with 19% living out their years in disability (Rehm, J. & Shield, K.D., 2019).

The global burden of disease is the overall impact of various health conditions and risk factors on the health of populations worldwide (GBD, 2010). Depression was identified as the most significant of mental health disorders, and this impacts more women than men. These disorders have significant impacts on not only individuals and their families, it also adversely impacts communities, both locally and globally. Mental health disorders affect an individual’s ability to maintain relationships, their ability to work productively and contribute to the economic needs of their families and communities. This lack of productivity can impact workforce productivity with resultant economic losses at the individual and community levels. Untreated mental health disorders can contribute to public safety issues such as homelessness, SUD, and involvement in the criminal justice system. When individuals with mental health disorders are not adequately treated, community safety may be compromised, which also could negatively impact the economy. The global burden of mental health disorders including depression, can directly affect the demand for behavioral services being provided by CCBHCs. As prevalence of these conditions increase globally, CCBHCs may experience a higher volume of patients seeking mental health and SUD healthcare. SUD was found to be more prevalent among men (Rehm, J. & Shield, K.D., 2019), which can contribute to an increase in the demand for CCBHC services.

Another key finding from the Global Burden of Disease Study 2010 (GBD 2010) highlights the transition of health from communicable to non-communicable diseases. This reinforces the understanding of how significant the impacts of mental, neurological, and addictive disorders can have on the health of populations (Murray et al., 2012; Whiteford et al., 2013). In 2010, this transition was evident in the proportion of disease burden which decreased from 36% in 1990 to 49% in 2010 from communicable to noncommunicable diseases, especially in low- and middle-income countries (LMICs) (Murray et al., 2012). In comparison, the Institute for Health Metrics Evaluation (IHME), 2013 estimated that the proportion of communicable vs. non-communicable diseases increased from 80% to 83% respectively in high-income countries (HICs). The global burden of disease can exacerbate health inequities and disparities which could disproportionately affect vulnerable and underserved populations, and impact public health emergencies (GBD, 2010).

d. Opioid epidemic

In the United States alone, the opioid epidemic kills an average of 130 people per day (HHS, 2019), and cost the country an estimated \$504 billion in 2015 (Council of Economic Advisers, 2017). Consequently, CCBHCs may experience an increase in individuals seeking mental health services, given the exacerbation of traumatic events caused by disasters, or even the COVID-19 pandemic aftermath. There has been a resultant increase in chronic stress, opioids, and other addictive disorders experienced by community members. There are also higher mortality risks in populations with a range of mental health disorders at a standardized mortality ratio (SMR) of 14.7 for opioid use disorders (Chesney et al, 2014), with many of these deaths preventable (Diop et al., 2005; Jette & Trevathan, 2014).

In addition, a prevalence in comorbidities and multimorbidity, whereby individuals suffer from multiple physical and behavioral health disorders, could prove challenging for CCBHCs. Recognizing the impact of mental health disorders on communities, both locally and globally, highlights the need for comprehensive and integrated approaches to mental health care. Promoting mental health awareness, reducing stigma, and expanding access to mental health services are essential to creating healthier and more resilient communities. Collectively, community-based initiatives, peer support programs, and collaborative efforts among stakeholders are critical in addressing the multifaceted impacts of mental health. In order to adequately target these needs, CCBHCs are required, and they need to be prepared to address these complexities by offering integrated care aimed at improving overall health outcomes.

Although the majority of premature deaths are caused by chronic physical diseases such as ischemic heart disease (IHD), stroke, type II diabetes, cancer, etc., self-harm has been identified as an important cause of death in spite of there being other causes for lower life expectancy in people with mental disorders (Chang et al., 2011). Certain risk factors that contribute to premature deaths among populations with mental, behavioral, and neurological disorders include dementia (an independent risk factor), physical impairment, inactivity, as well as medical comorbidities (increased risk) (Park et al., 2014). The CCBHCs contribute to improving mental health outcomes and overall well-being in the face of global challenges through integrated care, early intervention, and preventive services. In addition, because the medical community has often siloed the behavioral health needs of such disadvantaged communities, their overall primary care needs often go unaddressed. Given the above prevalence at national & global levels as a response to the recognition of several challenges in the behavioral

health care system, and the need to improve access and quality of behavioral health services, the CCBHC model was created (SAMHSA, 2023).

e. Technological innovation

The enhanced application of technological innovation through a centralized CCBHC service delivery system only keeps Medicare and Medicaid members apprised of their health status, provides easy access to medical records, it keeps individuals and communities informed and engaged. Providers are also able to establish population health management (SAMHSA, 2023). The use of telehealth as a stop-gap transformative digital mechanism employed by CCBHCs would further enhance their service delivery overall outcomes. Projections of increased incidences of co-occurring mental and substance use disorders (SUDs) in healthcare settings (e.g., the prevalence of SUDs among people with serious mental illness) and SUD settings, initiatives, and providers, will require integrated skills and follow-up support to assist current groups with co-occurring disorders. Although the current Certified Community Behavioral Health Clinic (CCBHC) provisions effectively enhance the quality of care provided to community members, there is potential for improvement. Breslau et al. (2018) acknowledged that the proposed design parameters are adaptable, allowing for significant customizing of the approaches to the assessment budget while focusing on a set of basic components that would offer data for congressional reports. The review can be efficient, utilizing current data to the greatest extent possible to decrease costs, timely, and relevant to the complicated modern policy context. The evaluation results will offer a solid foundation for the required reports to Congress and the final recommendations to maintain, cease, or modify the model.

However, certain new data collection activities will be necessary to investigate significant issues affecting model implementation over time through the use of enhanced technology. In addition, rural areas and small cities that are not easily accessible may be offered opportunities to access their medical records electronically due to improved/enhanced technological innovation.

Minkoff and Covell (2021) recognized that integrated care, which embodies "no wrong door," can enhance access, care centered around the individual and their families, and equity, as well as increase the availability of treatment for both mental health and substance use issues for this vast, diverse, and high-risk group. One of the policies of the ACA was its provision of the "No Wrong Door" policy. The aim of the "No Wrong Door" policy was to enable individuals seeking healthcare coverage to complete an application that determines what health and social services program they or their families are eligible for. Although this was a simple concept for individuals to fill out an application that would be used by the government to align their health needs with needed health programs, it opened a labyrinth of navigation complexities within the healthcare system. It was almost revolutionary.

Methodology

This study used a qualitative methodology. The data for research was collected from secondary research data sources. The data was collected from renowned sources including peer-reviewed articles from PubMed, Fusion, Ebsco, Google Scholarly; and gray literature. Some keywords include *Certified Community Behavioral Health Clinic, Community, mental health services, funding, technology, Global Burden of Disease, addictions; digital health; Substance Use disorder, addictive disorder, health economics; digital mental health; e-health; e-mental health; mHealth; policy; review; tele; virtual care. Additional keywords include: stepwise [All*

Running Head: Certified Community Behavioral Health (CCBHC) Outpatient Redesign for Behavioral Health Care

Fields] AND ("prospective payment system"[MeSH Terms] OR ("prospective"[All Fields] AND "payment"[All Fields] AND "system"[All Fields]) OR "prospective payment system"[All Fields]). These search terms produced 1751 results that were narrowed down to 4 result items using search terms: *prospective payment system ccbhc; pps, stratified sampling*, in PubMed.

Gray literature refers to information obtained from official reports, policy literature, government documents, and white papers. Gray literature is important in research and they facilitate the reduction of publication bias and enhance the credibility of the research results (Kousha et al., 2022). The research articles were evaluated using the inclusion and exclusion criteria. The inclusion criteria for the study involved studies conducted within the past five years, those conducted within the context of the United States, and those from official government resources. Qualitative research method means it is multi-method in focus; it involves an interpretive, naturalistic approach to its subject matter. This research collected non-numerical data (non-statistical, semi-structural, or unstructured data) in order to gain insight. It relies on already collected data.

Recommendations

1. Stratify CCBHC Prospective Payment System (PPS)

The CCBHC Prospective Payment System (PPS) guidance (a clinic-specific encounter fee) requires states to claim federal matching funds for translation/interpretation service costs as either administrative expense or medical assistance-related cost, regardless of whether the costs are based on a daily rate (PPS-1: one payment per client for any day in which the client receives at least one service) or monthly (PPS-2: One payment per client for any month in which the client receives at least one service). The PPS should be stratified by population complexity with

higher rates recommended for higher-complexity members and lower rates to be applied to the general population. This stepwise / stratification implementation of the PPS would help bridge the gap in disparities and inequities toward achieving a healthy nation in relation to quality of care and outcomes (Khamis, N. et al.,2020). Such effective strategies that help guide future policy and finance must be incorporated to ensure sufficient availability of support and resources for mental health issues and substance use disorders among members, irrespective of racial, ethnic, religious, sexual, and gender orientation. Furthermore, this strategy could also help ease eligibility restrictions for Medicaid expansion due to larger payment and reimbursement challenges. In this regard, more research is required on the difference between the funding methods used by the Expansion Grantees (no prospective payment system (PPS) rate) and the original CCBHC demonstration model (PPS rate).

2. Comprehensive integration and expansion of Peer Support Specialists through an increase in Medicaid funding for the CCBHC Model

The use of Peer Support Specialists in a CCBHC offers numerous advantages that can significantly enhance the overall quality and effectiveness of the clinic's services. Peer Support Specialists are individuals with lived experience of mental health and substance abuse challenges. They have received specialized training to provide support and assistance to others facing similar issues. They can empathize and bond with others facing similar issues and can build trust and create hope for these individuals through sharing personal stories. They can provide hope for rehabilitation and recovery among their clients. In addition, they serve as role models, who are non-judgmental over their clients' struggles and fears. Peer Support Specialists can enhance engagement and retention in treatment through their shared support of treatment plans while helping individuals with mental health disorders navigate the complex healthcare

systems (SAMHSA, 2023). They could also serve as advocates for clients, ensuring that their services are needed. Peer Support Specialists can serve as a bridge between formal mental health services and the community. Moreover, Peer Support Specialists are cost-effective when compared to licensed healthcare professionals such as psychiatrists, social workers, or community health workers (CHWs) (SAMHSA, 2023). Even though they are not licensed, Peer Support Specialists receive specialized training that helps give them an added advantage by extending the treatment of their clients beyond clinical settings into rehabilitation and recovery. They can tailor their support to meet individual needs and preferences, thereby promoting a more holistic approach to care delivery. Their role contributes to a more person-centered and comprehensive approach to behavioral health care.

An increase in funding for the comprehensive integration of Peer Support Specialists in CCBHCs would enable an expansion of their peer support services, and also empower CCBHCs to employ more Peer Support Specialists. Clinics will then be able to reach a larger number of clients and provide more personalized and empathetic support for individuals seeking behavioral health services (SAMHSA, 2023). The comprehensive integration of Peer Support Specialists through an increase in Medicaid funding will help reduce barriers to care and improve access to individuals seeking mental health care. This can significantly improve outcomes. They bring a unique perspective to the treatment plans while taking the individuals' concerns, needs and preferences into consideration. This approach has the potential to reduce hospitalizations and readmissions, as well as reduce stigma and discrimination. Furthermore, the comprehensive integration of Peer Support Specialists through an increase in Medicaid funding helps to enhance workforce development and promote job creation, community engagement.

There is no specific federal law or policy that exclusively supports the utilization of CCBHC peer support specialists. However, several broader policies and laws promote the integration of peer support specialists into behavioral health care settings, including CCBHCs. These policies aim to recognize the value of peer support services and enhance their utilization as part of comprehensive behavioral health care. Some of the key policies and laws supporting the utilization of peer support specialists include:

1. Medicaid Reimbursement: CMS guidance allows states to claim Medicaid for peer support services (under certain circumstances)
2. States can adopt Medicaid billing codes & reimbursement mechanisms for peer support specialists through utilization incentives
3. EMHA - Excellence in Mental Health Act (created the CCBHC demonstration program) supports & emphasizes peer support utilization, although it does not mandate it.
4. SAMHSA's Recovery Support Strategic Initiative & Peer Support aim to expand peer support service utilization
5. State-specific Legislation & Initiatives – many state laws that allow peer support specialist certification, training, supervision, & reimbursement, etc.

In the early years of the demonstration project and the development era, CCBHCs have demonstrated encouraging preliminary outcomes concerning improvements in staffing and service delivery for people with behavioral health needs. CCBHCs that serve a higher percentage of people without health insurance and are in states that failed to expand eligibility for Medicaid have voiced worry about how they would be able to fulfill their mandate to provide care to everyone in spite of insurance status without sustainable funding. To this end, the initiative should be expanded through legislation, giving policymakers more time to examine CCBHCs' effects on provider and patient outcomes. The demonstration in the initial eight states would be

extended for two additional years under the Excellence in Mental Health and Addiction Treatment Expansion Act (S. 824/H.R. 1767) (Brown et al., 2023).

3. Increase uptake of Information Technology

To expand the levels of access of individuals to care, CCBHCs should incorporate technology to improve the levels of accessibility of individuals to care. Notably, the technology incorporation can enhance access to care by implementing same-day scheduling where providers offer services such as same-day scheduling beyond the clinic locations and develop coordination with other community service providers. Incorporating technology is an important element in enhancing the socioecological conditions for enhancing optimal outcomes for treatment, such as ease of information sharing and coordination during care. According to the socioecological model, there should be wide networking among individuals within the community.

At the community level, technology can change community perceptions regarding mental health SUDs. This strategy is important in enhancing the level of support community members offer in enhancing the success of the change interventions. Technology can also facilitate an increase in the levels of knowledge among practitioners and the community in general. An informed health professional workforce is important in providing effective services during behavioral treatment. Foney et al. (2019) emphasized that organizations should assess various needs among health practitioners, including training and educational requirements, to enhance the quality of services by enhancing their capacity to use telehealth regarding technology adoption of electronic medical care during health. Increased adoption of health information technology is typically aided by the increase in grant funding and the PPS reimbursement structure. Despite the enhanced adaptation of technology, a continuing need for additional

funding and technical support to bring CCBHCs more in line with the capabilities of healthcare providers to facilitate enhanced information exchange can enhance the accessibility of individuals to technology (Foney et al., 2019). The additional funding includes \$54,850 to facilitate the adaptation of technology within the CCBHCs.

Implications of Interventions to Public Health

1. Increasing Medicaid funding for the comprehensive integration of Peer Support Specialists has several implications for the healthcare system and will impact the accessibility of mental health and SUD services by populations at risk. To begin with, increased Medicaid funding would enhance the availability of Peer Support Specialists in CCBHC and other healthcare settings. This would also reduce barriers to care and promote early intervention. With their unique perspective, Peer Support Specialists bring empathy and non-judgment, which can help in treatment and clients' understanding of the care they receive. Their participation helps to improve the overall health and well-being of clients due to CCBHC's person-centered approach. Their full integration enhances community engagement and integration, and improves workforce development and job creation. They contribute to stigma reduction, reduction in health disparities and above all, they are cost-effective. Peer Support Specialists play a significant role in enhancing quality care that impacts clients' overall positive outcomes. This helps reduce hospitalizations and emergency room visits.

2. A stratified PPS payment rate will offer Medicaid and Medicare beneficiaries with behavioral disorders an efficient and effective service delivery that is geared toward improved outcomes. Not only does a stratified PPS consider the severity and complexity of the needs of individuals with behavioral disorders, but it will also tailor reimbursement rates that reflect each patient's

level of required care. A stratified PPS payment rate promotes high-quality, individualized care that incentivizes a comprehensive array of services while ensuring equitable resource allocation based on the severity of the behavioral needs of the individual. A stratified PPS approach will contribute to the overall CCBHC effectiveness in addressing complex behavioral health challenges, while ultimately improving client outcomes.

Increasing Medicaid funding levels for the CCBHC policy through the redesign of the funding policy is an important factor in enhancing the effectiveness of the CCBHCs which, in turn, enhances the behavioral health levels of the community. This strategy will help to cover the gaps in accessibility to care by individuals such as veterans and those Medicaid and Medicare clients who are residents in remote areas.

3. According to Nilsen et al. (2020), technology adaptation policies significantly enhance the accessibility of community members to quality healthcare by increasing the need for compliance by care providers to incorporate eHealth innovations in the delivery of care. Incorporating technology adaptation policies plays a significant role in enhancing the efficiency of technology adaptation since current eHealth adaptation initiatives do not reach their full potential.

Proponents of the Certified Community Behavioral Health Clinic (CCBHC) expansion program use data that suggests the validity of this model's benefits in saving money and improving long-term outcomes. Opponents, however, use the new report from the Government Accountability Office (GAO) (2021), to highlight that the CCBHC program's effectiveness is unclear as a result of not only vague rules but also data limitations. States launched CCBHC demonstrations based on their specific needs which indicated a lack of consistency in the adaptation of required criteria among these states. The new GAO (2021) report claimed that the

ambiguity of certain rules and preliminary Medicaid demonstration analyses offered an incomplete picture of the model's effectiveness. For instance, unlike CCBHCs in the program who got higher Medicaid payments for integrated addiction and mental health services to both under- and uninsured members, (while meeting criteria requirements), providers in non-demonstration states, (even though they can also become CCBHCs by applying for specific SAMHSA grants), were provided a grant funding that was capped and not provided through Medicaid, which generally runs out after two years. In addition, the report stated that most clinics did not have baseline data available to measure progress since they had never reported quality measures. This could be problematic for future policy and financial decisions. Consequently, due to the absence of baseline data and uniform program design, the HHS has had difficulty assessing changes since demonstration states were not provided standardized billing codes and standardized billing code modifiers they had developed. This challenge continues to plague the HHS (GAO, 2021).

Addressing behavioral health issues within communities is crucial for the life span of the individual in distress, for the quality of life of that individual as well as the society they live in, and for the economy. The availability of mental health crisis response teams that comprise primarily behavioral health professionals trained specifically to deal with mental health crises, offers communities not only a more compassionate, empathetic, effective, and informed approach to addressing mental health crises, it also ensures that individuals in crises receive appropriate care and support. Moreover, it contributes to that distressed individual's overall safety and well-being. It also ensures public safety, and community trust between law enforcement and the populations they serve. This enhances public perception, engagement, and

human rights protections, given that professional responders are more attuned to respecting the rights and dignity of the distressed individual.

Conclusion

The current research provided significant evidence regarding the policy changes needed for the CCBHC redesign. According to research, clinics with CCBHC certification do not fully incorporate the six elements acknowledged under the healthcare policy, limiting the accessibility of the population needing healthcare services provided by CCBHC-certified clinics. Introducing technology will facilitate a reduction in the out-of-pocket costs associated with healthcare access and reduce the costs per person incurred by insurers and the national government in funding healthcare access. There should also be a redesign of the policies guiding reimbursement for healthcare costs that individuals incur. An increase in funding will increase the level of staffing available within Certified Community Behavioral Health Clinics (CCBHCs), which will positively influence the quality of services provided to the population in need of mental health or SUD services. Based on the evidence, an increased funding level improved staffing levels within the hospitals. However, incorporating increased funding needs multilevel participants according to the social-ecological models, which emphasize the importance of the interaction between individuals, organizations, the community, and policymakers in identifying optimal outcomes from the health intervention.

Suggestions for future research

1. Cost-benefit analysis of stratified PPS payment system to determine financial implications and assess the impact on CCBHC model and Medicaid
2. Impact of Peer Support Specialists – assess impact within CCBHCs on treatment engagement, recovery outcomes, and patient satisfaction; investigate their role in CCBHC care coordination, planning of care & impact on health policy

3. Long-term outcomes to understand sustained effects of CCBHCs – longitudinal studies to assess individuals’ mental & physical health, substance use, & overall well-being

Table 1: Projected budget for eHealth Implementation

eHealth Equipment	Projected costs (\$)
Computers	25000
Laptops	24000
Internet	2500
Subscriptions (Cloud)	1350
Training and Development	1000
Maintenance and other Operating Expenses	1000
Total	54,850

References

- American Hospital Association. (2023). Current & Emerging Payment Models. [Current & Emerging Payment Models | AHA](#)
- American Medical Association. (2022). What is behavioral health? What experts are saying about behavioral health. [What is behavioral health? | American Medical Association \(ama-assn.org\)](#)
- Albuquerque, U. P., De Medeiros, P. M., Ferreira Júnior, W. S., Da Silva, T. C., Da Silva, R. R., & Gonçalves-Souza, T. (2019). Social-ecological theory of maximization: Basic concepts and two initial models. *Biological Theory, 14*(2), 73-85. doi:10.1007/s13752-019-00316-8
- Azar, A., McCance-Kartz, E., & Vecchio, P. (2018). Certified Community Behavioral Health Clinics Demonstration Program. Retrieved from https://www.samhsa.gov/sites/default/files/ccbh_clinicdemonstrationprogram_081018.pdf
- Bauchner H., (2015). Medicare and Medicaid, the Affordable Care Act, and US Health Policy. *Jama-Journal of the American Medical Association. JAMA. Vol;*314(4):353–354. doi:10.1001/jama.2015.8587
- Berkowitz SA, Parashuram S, Rowan K, Andon L, Bass EB, Bellantoni M, ... Rothman PB, Brown (2018); Johns Hopkins Community Health Partnership (J-CHiP) Team. Association of a Care Coordination Model With Health Care Costs and Utilization: The Johns Hopkins Community Health Partnership (J-CHiP). doi: 10.1001/jamanetworkopen.2018.4273.
- Blasi PR, Mettert KD, Coleman K, Lewis C, Wagner E, Coghill MN, Dang T, Richards JE. (2022). Transitioning patients from outpatient mental health services to primary care: A rapid literature review. doi: 10.1177/26334895211041294.
- Breslau, J., Ashwood, J., Kase, C., Pincus, H., & Lovejoy, S. (2018). Evaluation design recommendations for the certified community behavioral health clinic demonstration program. doi:10.7249/rr1439
- Brooks Holliday, S., Matthews, S., Bialas, A., McBain, R. K., Cantor, J. H., Eberhart, N., & Breslau, J. (2023). A qualitative investigation of preparedness for the launch of 988: Implications for the continuum of emergency mental health care. *Administration and Policy in Mental Health and Mental Health Services Research*. doi:10.1007/s10488-023-01263-0
- Brown, J., Breslau, J., Siegwarth, A., Miller, R., Kase, C., Dunbar, M., ... Dey, J. (2020). Implementation and costs of the certified community behavioral health clinic demonstration. *Health Services Research, 55*(S1), 100-101. doi:10.1111/1475-6773.13473
- Brown, J. D., Stewart, K. A., Miller, R. L., Dehus, E., Rose, T., DeWitt, K., ... Jacobus-Kantor L. (2023). The certified community behavioral health clinic demonstration impacts emergency department visits and hospitalizations. *Psychiatric Services*. doi:10.1176/appi.ps.20220410
- California Health Care Foundation (CHCF). (2023). Certified Community Behavioral Health Clinics in California. Issue Brief CertifiedCommunityBHClincs

- Chen X, Hay J.L., Waters E.A., Kiviniemi M.T., Biddle C., Schofield E., Li Y., Kaphingst K., Orom H. (2018). Health Literacy and Use and Trust in Health Information. *J Health Commun.* 2018;23(8):724-734. doi: 10.1080/10810730.2018.1511658.
- Centers for Disease Control and Prevention. (2023). National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. <https://www.cdc.gov/mentalhealth/learn/index.htm>
- Centers for Medicare & Medicaid Services. (2021). CMS Action Plan to Enhance Prevention and Treatment for Opioid Use Disorder. Retrieved from <https://www.cms.gov/files/document/action-plan-behavioral-health-strategy.pdf>
- Colleen, B. (2022). The Value of Certified Community Behavioral Health Clinics. National Conference of State Legislators. [The Value of Certified Community Behavioral Health Clinics - National Conference of State Legislatures \(ncsl.org\)](https://www.ncsl.org/legislative-services/behavioral-health-clinics)
- Foney, D., Mace, S., & Boccanelli, A. (2019). Reaching the Quadruple Aim: Workforce and Service Delivery Within Certified Community Behavioral Health Clinics. *Reaching the Quadruple*. Retrieved from https://www.behavioralhealthworkforce.org/wp-content/uploads/2019/10/NC-CCBHC_Full-Report.pdf
- Health Affairs Blog. (2015). "Can safety-Net Hospital Systems Redesign Themselves To Achieve Financial Viability?". DOI: 10.1377/hblog20150316.045188
- Health Management Associates. (2017). HHS Selects Eight States to Participate in CCBHC Demonstration - Health Management Associates. <http://www.healthmanagement.com/blog/hhs-selects-eight-states-participate-ccbhc-demonstration/>
- Health Resources and Services Administration. (2022). Use of Funds: How does cost-based reimbursement relate to my Provider Relief Fund and/or ARP Rural payment? [Use of Funds: How does cost-based reimbursement relate to my Provider Relief Fund and/or ARP Rural payment? | HRSA](https://www.hrsa.gov/our-work/programs/provider-relief-fund/use-of-funds)
- Hill, T.J., & Widgery, A. (2022). Mental Health Emergencies, Law Enforcement and Deflection Pathways. National conference of State Legislatures. [https://www.Mental Health Emergencies, Law Enforcement and Deflection Pathways - National Conference of State Legislatures \(ncsl.org\)](https://www.ncsl.org/legislative-services/behavioral-health-clinics)
- Islek D, Weber MB, Ranjit Mohan A, et al. Cost-effectiveness of a Stepwise Approach vs Standard Care for Diabetes Prevention in India.(2020). *JAMA Netw Open.* 3(7):e207539. doi:10.1001/jamanetworkopen.2020.7539
- K., Thelwall, M., & Bickley, M. (2022). The high scholarly value of grey literature before and during COVID-19. *Scientometrics*, 127(6), 3489-3504. doi:10.1007/s11192-022-04398-3
- Lal S, Siafa L, Lee H, Adair CE. (2021). Priority Given to Technology in Government-Based Mental Health and Addictions Vision and Strategy Documents: Systematic Policy Review. *J Med Internet Res.*;23(5):e25547. doi: 10.2196/25547.
- Mark TL, Levit KR, Coffey RM, McKusick DR, Harwood HJ, King EC, Bouchery E., Ryan K: National Expenditures for Mental Health Services and Substance Abuse Treatment, 1993–2003: SAMHSA Publication SMA 07-4227.
- Minkoff, K., & Covell, N. H. (2022). Recommendations for integrated systems and services for people with co-occurring mental health and substance use conditions. *Psychiatric Services*, 73(6), 686-689. doi:10.1176/appi.ps.202000839

- National Council for Mental Wellbeing. (2023). What is a CCBHC? Healthy Minds. Strong Communities. Retrieved from <https://www.thenationalcouncil.org/program/ccbhc-success-center/ccbhc-overview/Transforming-State-Behavioral-Health-Systems.pdf> (thenationalcouncil.org)
- National Health Expenditure. (2021). Centers for Medicare and Medicaid Services. [NHE Fact Sheet | CMS](#).
- Ndumele C.D., Elliott M.N., Haviland A.M., Burkhart Q., Orr N., Gaillot S., Cleary P.D. (2019). Differences in Hospitalizations Between Fee-for-Service and Medicare Advantage Beneficiaries. *Med Care*. 57(1):8-12. doi: 10.1097/MLR.0000000000001000.
- Nilsen, E. R., Stendal, K., & Gullstett, M. K. (2020). Implementation of eHealth technology in community health care: The complexity of stakeholder involvement. *BMC Health Services Research*, 20(1). doi:10.1186/s12913-020-05287-2
- Obadeji A, Oluwole LO, Kumolalo BF, Dada MU. Patterns of Substance Use Disorders and Associated Co-occurring Psychiatric Morbidity among Patients Seen at the Psychiatric Unit of a Tertiary Health Center. *Addict Health*. 2022 Jan;14(1):35-43. doi: 10.22122/ahj.v14i1.1275.
- Rapfogel, N., (2022). The Behavioral Health Care Affordability Problem. Center for American Progress. [The Behavioral Health Care Affordability Problem - Center for American Progress](#)
- Shalev D., Docherty M., Spaeth-Ruble B., Khauli N., Cheung S., Levenson J., Pincus H.A. (2020). Bridging the Behavioral Health Gap in Serious Illness Care: Challenges and Strategies for Workforce Development. *Am J Geriatr Psychiatry*. 28(4):448-462. doi: 10.1016/j.jagp.2019.09.003
- Siegwarth, J., Breslau, J., Brown, A., Miller, R., Kase, C., Dunbar, M., ... Dey, J. (2020). Implementation and costs of the certified community behavioral health clinic demonstration. *Health Services Research*, 55(S1), 100-101. doi:10.1111/1475-6773.13473
- Stranieri G. (2022). Mental Health in the 21st Century: "When the Other Becomes an Enemy". *Psychiatr Danub*. Sep;34(Suppl 8):198-200.
- Substance Abuse and Mental Health Services Administration. (2010-2022). Projections of National Expenditures for Treatments of Mental and Substance Use Disorders. HHS Publication No. SMA-14-4884.
- Substance Abuse and Mental Health Services Administration (SAMHSA). (2022). Certified community behavioral health clinics (CCBHCs). Retrieved from <https://www.samhsa.gov/certified-community-behavioral-health-clinics>
- “System Redesign for Value in Safety-Net Hospitals and Systems: Challenges and Implications | Agency for Healthcare Research and Quality.” *Home | Agency for Healthcare Research and Quality*, <https://www.ahrq.gov/practiceimprovement/systemredesignsafetynet/systemredesign-slides.html>. Accessed 2 Aug. 2023.
- Tikkanen, R., Fields, K., Williams II, R.D., Abrams, M.K., (2020). Mental Health Conditions and Substance Use: Comparing U.S. Needs and Treatment Capacity with Those in Other High-Income Countries. The Commonwealth Fund. Issue Briefs. [Mental Health and Substance Use in U.S. and 10 Other Countries | Commonwealth Fund](#)

- Tzagkarakis, S. I., & Kritas, D. (2022). Mixed research methods in political science and governance: Approaches and applications. *Quality & Quantity*, 57(S1), 39-53. doi:10.1007/s11135-022-01384-y
- U.S. Department of Health and Human Services. (2021). National Institute of Mental Health. National Institutes of Health. NIH Publication No. 21-MH-8015
- Waldo, K., (2021). GAO Finds Gaps in Data Led To Inability To Evaluate The CCBHC Program. McDermott+Consulting. [GAO Finds Gaps in Data Led to Inability to Evaluate the CCBHC Program - McDermott+Consulting \(mcdermottplus.com\)](#)
- Watkins, D. C. (2022). *Secondary data in mixed methods research*. SAGE Publications.
- World Health Organization. (2021). Mental Health Atlas 2020. [Mental Health ATLAS 2020 \(who.int\)](#)
- World Health Organization. (2021). Comprehensive Mental Health Action Plan 2013-2030. [Comprehensive Mental Health Action Plan 2013-2030 \(who.int\)](#)
- World Health Organization. (2023). Mental Health. Key Facts. www.who.int/en/news-room/fact-sheets
- World Health Organization. (2022). World Mental Health Report: Transforming Mental Health For All. [World mental health report: Transforming mental health for all \(who.int\)](#)

Additional Resources:

- [1. samhsa.gov](#)
- [2. ncdhhs.gov](#)
- [3. oas.samhsa.gov](#)
- [4. findtreatment.gov](#)
- [5. apa.org](#)
- [6. Whitehouse.gov](#)
- [7. cdc.gov](#)
- [8. Behavioral Health Services in Primary Care in Primary Care \(apa.org\)](#)

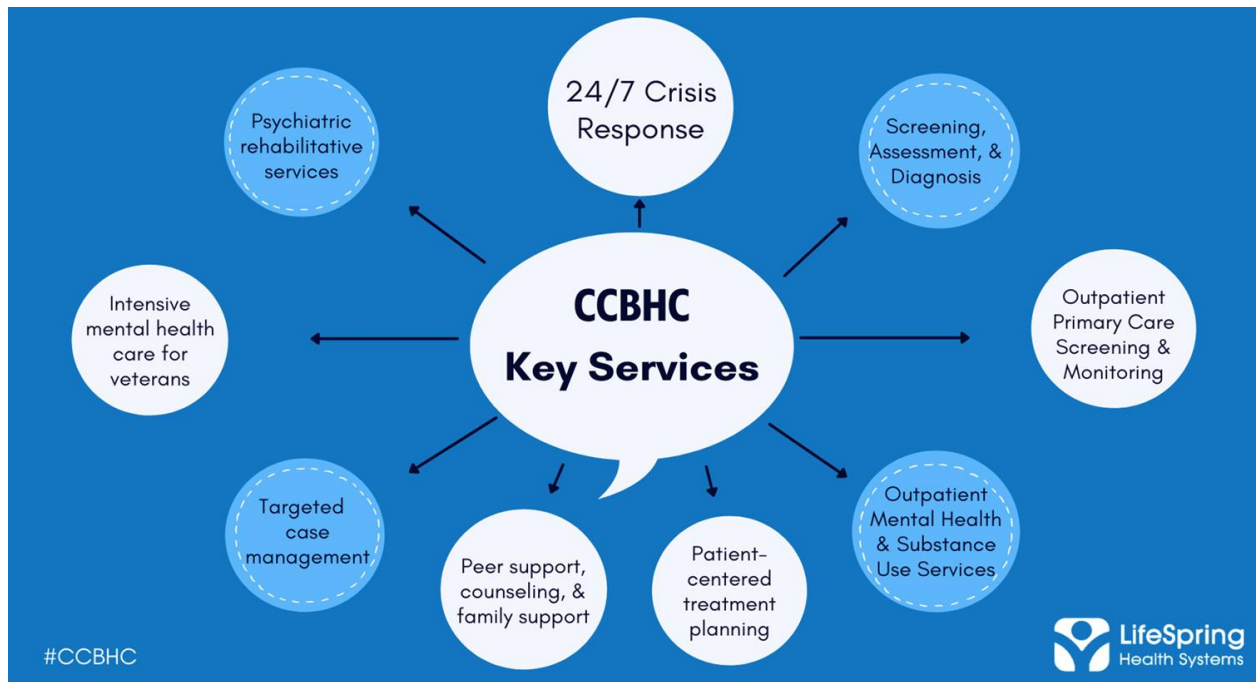
APPENDICES:

Figure 1: Nine Core Services Provided by CCBHCs Directly or Through Partnerships;

(Source: Keeney, B., 2022)

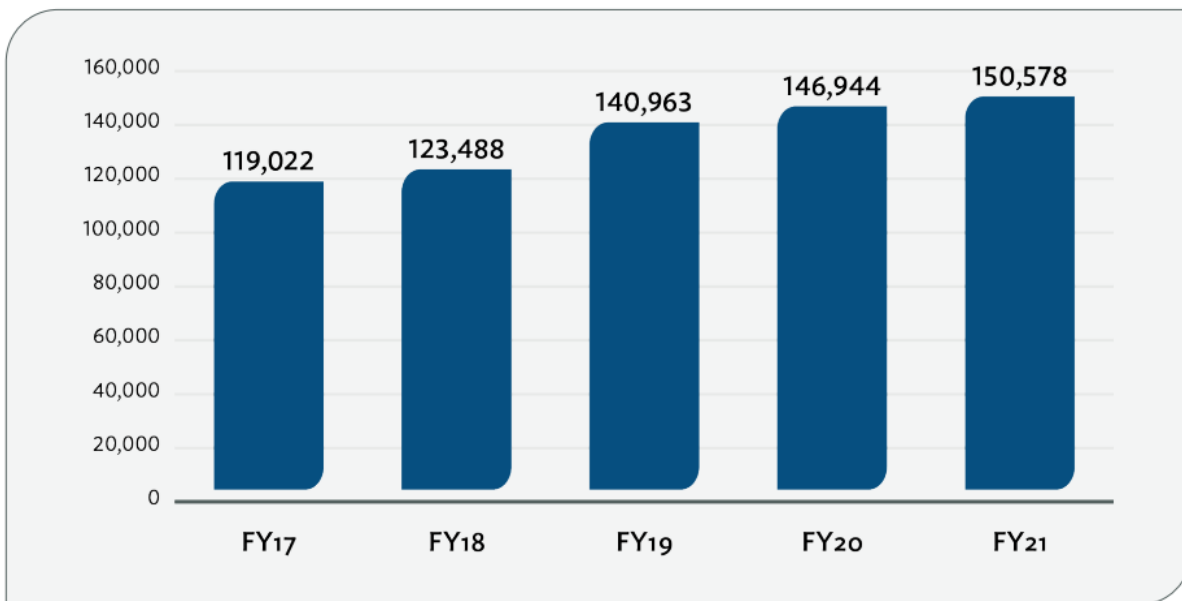


Figure 2: Missouri Data Snapshot: Increased Access in Number of Individuals Served by CCBHCs; (Source: National Council for Mental Wellbeing, 2023)

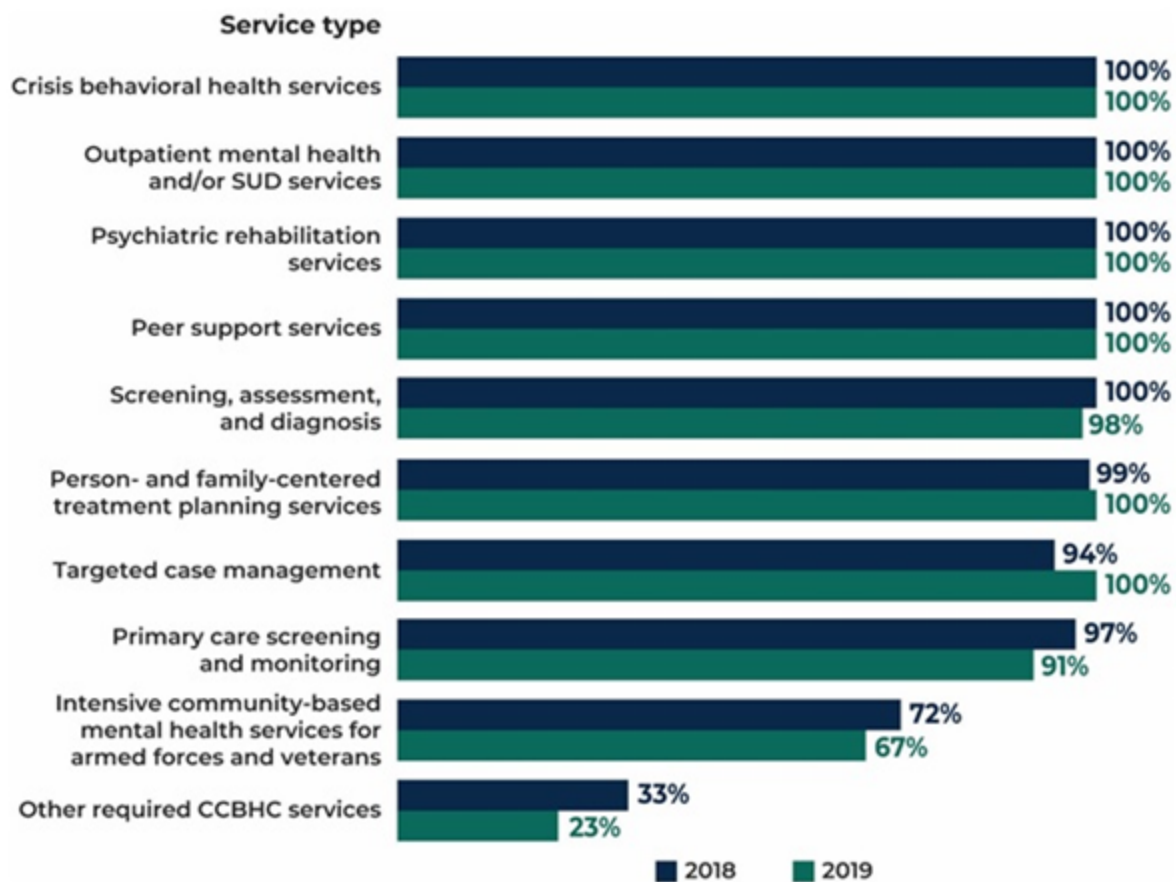


Figure 3: Proportion of CCBHCs that Provided Each Type of Service Either Directly or Through a DCO; (Source: Siegwarth et al., 2020)



Inventory of Competencies in Capstone paper and Health Professions Day presentation

This table is to be completed at the end of the capstone course. Please describe how select foundational and concentration competencies were synthesized through the capstone paper and Health Professions Day presentation. All students will be synthesizing Foundational Competency #19: Communicate audience-appropriate public health content, both in writing and through oral presentation. In addition, choose a minimum of 4 more competencies (at least one of which from the concentration list and describe below how they were synthesized through the activities that contributed to the completion of your paper and presentation. **Include this completed inventory as an Appendix to your Capstone paper.**

MPH Foundational Competencies | Fatmata Kula Jah 8/11/23

Foundational Competency	Description of how used for Capstone
Evidence-based Approaches to Public Health	
1. Apply epidemiological methods to the breadth of settings and situations in public health practice	
2. Select quantitative and qualitative data collection methods appropriate for a given public health context	
3. Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software as appropriate	
4. Interpret results of data analysis for public health research, policy and practice	
Public Health & Health Care Systems	
5. Compare the organization, structure and function of health care, public health and regulatory systems across national and international settings	
6. Discuss the means by which structural bias, social inequities and racism undermine health and create challenges to achieving health equity at organizational, community and societal levels	Structural bias, social inequities, and racism are all deeply contributing factors to significant health disparities and challenges towards the achievement of health equity at multiple levels such as organizational, community, and societal levels. This was evident with behavioral health disorders on which my project was focused on. I

	was able to address these multiple factors by applying a multi-faceted approach that involves healthcare staff, healthcare organizations, communities, policymakers, and the entire society. This will create a pathway for both a just and equitable behavioral healthcare system as is evident in my ILEX/Capstone recommendations to focus on the promotion of individuals' behavioral and general wellbeing, regardless of their socio-economic status.
Planning & Management to Promote Health	
7. Assess population needs, assets and capacities that affect communities' health	I was able to assess the population needs, assets, and capacities of the CCBHC model and made recommendations that will pact communities facing disparities in service delivery that does not meet their needs. My multifaceted recommendations will provide not only holistic understanding of the health landscape of that community, it also informs evidence-based strategies that focus on health equity promotion, addressing disparities, and enhancing overall wellbeing by providing insights into those factors that significantly impact the needs of persons with behavioral health disorders, it will impact the entire community as a whole. It also provides guidance on effective strategies and intervention development.
8. Apply awareness of cultural values and practices to the design or implementation of public health policies or programs	
9. Design a population-based policy, program, project or intervention	
10. Explain basic principles and tools of budget and resource management	
11. Select methods to evaluate public health programs	
Policy in Public Health	
12. Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence	
13. Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes	
14. Advocate for political, social and economic policies and programs that will improve health in diverse populations	
15. Evaluate policies for their impact on public health and health equity	

Running Head: Certified Community Behavioral Health (CCBHC) Outpatient Redesign for Behavioral Health Care

Leadership	
16. Apply principles of leadership, governance and management, which include creating a vision, empowering others, fostering collaboration and guiding decision making	
17. Apply negotiation and mediation skills to address organizational or community challenges	
Communication	
18. Select communication strategies for different audiences and sectors	
19. Communicate audience-appropriate public health content, both in writing and through oral presentation	Outlined, drafted and finalized Capstone paper including a literature review, recommendations and implications on a current public health problem. Created a slide deck based on the Capstone paper and delivered an oral presentation at Health Professions Day in front of an interprofessional audience. Title: Certified Community Behavioral Health (CCBHC) Outpatient Redesign for Behavioral Health Care.
20. Describe the importance of cultural competence in communicating public health content	My cohort comprises individuals from different backgrounds. I interacted with each one of them, and got along with them, overall. Cultural competence is both crucial and essential in public health communication. It helped me understand, engage, respect, and effectively interact with individuals from diverse backgrounds and communicate with individuals from diverse backgrounds, all while being ethically and equitably aware of my communication content and context, and apply oneself accordingly. This approach helps to nurture and foster inclusivity.
Interprofessional Practice*	
21. Perform effectively on interprofessional teams	I worked and collaborated with colleagues and professors from different backgrounds during my ILEX/Capstone project.
Systems Thinking	
22. Apply systems thinking tools to a public health issue	

Health Policy Leadership Concentration Competencies

Competency	Anticipated FW Activity
1. Apply economic concepts to understand the effect of changes in policies at the government, health systems, and public health sectors	I was able to surmise the effect of government policy changes and its impact on health systems, the government, and public health prior to, and during, my research. The need for CCBHC demonstrations to be expanded beyond the required two years would go a long way to empower CCBHCs in their sustainability to provide

Running Head: Certified Community Behavioral Health (CCBHC) Outpatient Redesign for Behavioral Health Care

	much-needed behavioral healthcare services to already marginalized communities. My recommendation for legislative expansion will promote health equity and CCBHC sustainability.
2. Synthesize economic concepts to assess equity and efficiency in making health policy recommendations in underserved communities	
3. Formulate efficient health policy change recommendations through the analysis of proposed health policy initiatives that could affect health outcomes of vulnerable populations	
4. Develop recommendations to improve organizational strategies and capacity to implement health policy	
5. Analyze policy options to address environmental health needs at the local, state, and federal levels	