Adoption of Behavioral Health Crisis Care Best Practices by Mental Health Treatment Facilities in the US

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Abstract

Objective: This study examined the adoption of behavioral health crisis care (BHCC) services included in SAMHSA's BHCC best practices guidelines across the US.

Methods: This study used secondary data downloaded from SAMHSA's Behavioral Health Treatment Services Locator in 2022. BHCC best practices were measured as a summated scale capturing whether a mental health treatment facility (n=9385) adopted BHCC best practices, including provision of the following services to all age groups: emergency psychiatric walk-ins, crisis intervention teams, onsite stabilization, mobile/offsite response, suicide prevention, and peer support specialists. Descriptive statistics were used to examine organizational characteristics (facility operation, type, geographic area, licensing, payment methods, etc.) of mental health treatment facilities nationwide and a map was created to illustrate best practice BHCC facility locations. Further, logistic regressions were performed to identify organizational characteristics of facilities associated with adopting BHCC best practices.

Results: Only six percent (n=564) of mental health treatment facilities have fully adopted BHCC best practices. Suicide prevention was the most common BHCC service offered by 70 percent (n=6554) of facilities. Offsite/mobile response was the least common, adopted by 22 percent (n=2101) of facilities. Higher odds of BHCC best practices adoption were associated with public ownership (AOR=1.95, CI=1.57-2.41),

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accepting self-pay (AOR=3.18, CI=1.60-6.29), accepting Medicare (AOR=2.68, CI=1.75-4.08), and receiving any grant funding (AOR=2.45, CI=1.91-3.13).

Conclusions: Despite SAMHSA guidelines calling for comprehensive BHCC services, only a fraction of facilities appear to have fully adopted BHCC best practices. Efforts are needed to facilitate widespread uptake of BHCC best practices nationwide.

Introduction

A behavioral health crisis is an acute episode of severe distress associated with a mental health or substance use disorder requiring emergency intervention.[1] One in eight patients seeking care in the emergency department (ED) does so for a behavioral health crisis.[2] Importantly, patients with a behavioral health crisis can be safely and efficiently treated through behavioral health crisis care (BHCC) services delivered in alternate care settings.[3] Additionally, patients who have received care in both ED and BHCC settings reported a preference for BHCC settings.[4] However, patients who have experienced behavioral health crises frequently cite access barriers to alternative care sites, such as BHCC settings, as a primary reason for seeking care in the ED.[4] Improving access to BHCC offers an opportunity to avoid a substantial number of ED visits.[5] Thus, in addition to providing improved care to patients experiencing a behavioral health crisis, increasing adoption of BHCC services is a promising solution to reduce ED overcrowding.[1,3,5]

Various types of health care organizations, including public and private mental health treatment facilities, have adopted BHCC services.[1] The Substance Abuse and Mental Health Services Administration (SAMHSA) outlines minimum expectations and requirements that facilities must meet to fully align with best practices for BHCC. The following services are included among these BHCC best practices: emergency psychiatric walk-ins, crisis intervention teams, onsite stabilization, mobile crisis responses, suicide prevention, and peer support specialists.[1] Additionally, BHCC organizations should provide care to anyone, regardless of ability to pay for services.[1] When BHCC services are not implemented comprehensively, care may be inadequate

and fragmented, and may fail to meet patient needs.[1] Despite their value, the adoption of BHCC services among mental health treatment facilities varies greatly.[6,7] In fact, recent studies report that the vast majority of mental health treatment facilities do not offer these services.[6,7] However, it is important to note that these prior studies utilized data aggregated to the state level to describe the availability of services in each state.[6,7] Thus, limited information is available on the geographic distribution of service availability. Furthermore, prior studies examined the availability of individual crisis services but not how frequently all of these BHCC services are adopted by the same facility. As such, it remains unclear whether mental health treatment facilities adopt these best practices comprehensively, independently, or at all.

The purpose of this study is to examine the adoption of best practice BHCC services. Limitations of previous studies are overcome in the current study by using the most recent data from SAMHSA's Behavioral Health Treatment Services Locator tool to identify facilities that have adopted BHCC services. Organizational characteristics associated with each BHCC service and the geographic distribution of BHCC best practice facilities by county are presented. Findings from this study may be of interest to leaders of mental health treatment facilities as well as other types of health care organizations that offer BHCC services. Furthermore, as efforts to transform the crisis care system, such as the transition to the 988 Suicide and Crisis Lifeline, are implemented across the U.S., it is critical to identify gaps in access to BHCC services. Policy and decision-makers can use our findings to address gaps in the system and support the adoption of BHCC services in areas lacking availability.

Methods

Design. This is a cross-sectional study using secondary data from SAMHSA's Behavioral Health Treatment Services Locator (hereafter, 'the Locator'), which can be accessed at https://findtreatment.samhsa.gov/.

Sample. This study uses secondary data from mental health treatment facilities (n=11355) downloaded on January 8, 2022. As noted by previous studies, residential treatment facilities and facilities owned by the U.S. Department of Veterans Affairs (VA) serve very specific populations and do not provide services to the general public.[6] Thus, we excluded these facilities, bringing the final sample size to n=9385 facilities.

The Locator is an online, searchable database which includes information on facilities included in the National Mental Health Services Survey (N-MHSS). The N-MHSS is a cross-sectional survey designed to collect statistical information on all known public and private mental health treatment facilities in the United States.[8] Facility staff, including directors or administrators, complete the survey annually. In 2020, 89 percent of eligible facilities responded to the N-MHSS. Additionally, facility information and service listings are updated weekly when facilities inform SAMHSA of changes. Thus, the Locator is the most up-to-date data source on mental health treatment facilities and service availability. As an added advantage, data from the Locator includes detailed information on facility locations, making it possible to examine the distribution of services by state and county. More details on the N-MHSS are available at https://www.datafiles.samhsa.gov/.[8]

Variables. The primary dependent variable captured whether a mental health treatment facility has fully adopted BHCC best practices. This was determined using

seven dichotomous variables indicating whether a facility serves all age groups and provides each of the following six services: emergency psychiatric walk-ins, crisis intervention teams, onsite stabilization, mobile crisis responses, suicide prevention, and peer support specialists. A summated scale (0-7) was created from these dichotomous variables, with a 7 indicating that the facility has adopted all BHCC best practices included in this measure. The selected services were chosen to reflect SAMHSA's requirements for BHCC best practices.[1] Additionally, the selected services are routinely reported by mental health treatment facilities to the N-MHSS and represented in the Locator data.[8]

Data from the Locator tool includes a range of facility characteristics captured by the N-MHSS. Facility characteristics for which data were available included facility operation (private non-profit, private for-profit, public), facility type (outpatient facility, community mental health center, psychiatric hospital, general hospital, partial hospital, certified behavioral health clinic, multi-setting facility), licensure (licensed mental health clinic, federally qualified health center), payment methods accepted (Medicaid, self-pay, private insurance, Medicare), payment options (sliding fee scale, payment assistance), grant funding received (yes/no), special groups (e.g., LGBTQ+ clients, veterans, clients with HIV, etc.) served (yes/no), pharmaceuticals prescribed (yes/no), and multiple languages offered (yes/no).[8] In order to capture geographic area, the SAMHSA data was merged by zip code with 2010 Rural-Urban Commuting Area codes from the U.S. Department of Agriculture, which were aggregated into four categories (metropolitan, micropolitan, small town, rural).[9]

Analyses. Descriptive statistics were used to understand characteristics of mental health treatment facilities represented in the Locator data. Logistic regressions were used to identify characteristics of facilities associated with BHCC best practices as well as each separate service. All analyses were conducted in SPSS version 27. Further, the locations of BHCC best practice facilities were geocoded using ArcGIS software.[10] Because SAMHSA data is publicly available and this research was conducted at the organizational level, this study did not constitute human subject research.

Results

A total of 9385 mental health treatment facilities were included in the analyses. Overall sample characteristics, including organizational characteristics and crisis care service availability, are summarized in Table 1. Almost two-thirds of facilities were private non-profits (62.2%, n=5837), and one-half were outpatient facilities (50.1%, n=4705). Most facilities were located in metropolitan counties (75.5%, n=7087), accepted Medicaid (92.7%, n=8703), self-payment (90.5%, n=8492), private insurance (86.6%, n=8132), and Medicare (75.3%, n=7066). However, less than half received any grant funding (42.2%, n=3963).

Of the 9385 facilities represented, only 6% (n=564) have adopted all of the BHCC best practices examined. The map (see Figure 1) pinpoints the exact locations of these BHCC best practice facilities across the country. BHCC best practice facilities appear to be concentrated in certain states, while other states have few to no BHCC best practice facilities. Among the BHCC services examined, suicide prevention services were the most common, offered by 69.8% (n=6554) of facilities. As for the

other BHCC services, each type of service was offered by less than one-half of the facilities. Mobile/offsite response was the least common, offered by 22.4% (n=2101) of facilities. Approximately 7 percent (n=603) of facilities offered no BHCC services. Table 2 presents cross-tabulations of how frequently facilities that offered a particular service offered each of the additional BHCC services, providing insight into the relationship between services offered. For example, among facilities that offered walk-in services (n=3164), 75 percent (n=2391) also have a crisis team. However, among facilities that have a crisis team (n=4473), only 40 percent (n=1868) offer mobile services, and only 52 percent (n=2328) offer peer support.

Several organizational characteristics were significantly associated with BHCC best practices adoption (see Table 3). Publicly owned facilities had higher odds (AOR=1.95, CI=1.57-2.41) of adopting BHCC best practices, relative to privately owned non-profits. Community mental health centers (AOR=2.54, CI=2.01-3.21), certified behavioral health clinics (AOR= 3.94, CI=2.77-5.61), and multi-setting facilities (AOR=2.08, CI=1.22-3.54) had higher odds of adopting BHCC best practices relative to outpatient facilities. General hospitals had lower odds (AOR=0.24, CI=0.09-0.60) of adopting BHCC best practices compared to outpatient facilities. Furthermore, facilities licensed as federally qualified health centers had lower odds (AOR=0.36, CI=0.24-0.54) of adopting BHCC best practices relative to non-federally qualified health centers.

Several types of payment mechanisms were associated with higher odds of BHCC best practices adoption compared to facilities not accepting that payment type. Specifically, facilities accepting self-pay (AOR=3.18, CI=1.60-6.29) and Medicare (AOR=2.68, CI=1.75-4.08) had higher odds of BHCC best practices adoption.

Additionally, facilities receiving any grant funding had higher odds (AOR=2.45, CI=1.91-3.13) of adopting BHCC best practices relative to facilities without any grant funding. In terms of other facility characteristics, facilities that serve special groups (AOR=2.06, CI=1.46-2.91) and facilities that prescribe pharmaceuticals (AOR=3.27, CI=2.34-4.57) had higher odds of BHCC best practices adoption. Finally, facilities located in a micropolitan area (AOR=2.31, CI=1.83-2.91), a small town (AOR=2.40, CI=1.85-3.09), or a rural area (AOR=2.05, CI=1.40-3.00) had higher odds of BHCC best practices adoption, relative to facilities located in metropolitan counties.

Discussion

This study sought to examine the adoption of the SAMHSA-recommended BHCC services across the US using secondary data obtained from SAMHSA's Locator tool. We found that only a small fraction of facilities fully adopted BHCC best practices, despite SAMHSA's call for widespread national adoption.[1] There were more mental health treatment facilities with no BHCC services offered than there were facilities that fully adopted all BHCC best practices. Furthermore, we observed considerable variation in the adoption of each individual BHCC service type among mental health treatment facilities. Given that we used 2022 data only two years after the SAMHSA guidelines were published (2020), it is possible that more facilities will adopt BHCC best practices over time.

By pinpointing the locations of BHCC best practice facilities, we can visually examine the distribution of services and identify geographic disparities in access to BHCC. Given the observed geographic variation, we hypothesize that state and local regulations likely play a role in the adoption of BHCC services. These findings

underscore the need for additional research comparing state and local policy differences that facilitate or prevent the adoption of BHCC services at the county level. Mental health experts have recently noted the division between the responsibility of states and the federal government and how it influences a largely decentralized, state-managed behavioral health system.[11] While SAMHSA guidelines for best practices apply nationwide, our finding that BHCC best practices adoption is varied across states further highlights the absence of a national approach to implementing a complete BHCC system.

Our findings on the availability of walk-in services, crisis intervention teams, onsite services, and suicide prevention services are similar to previous reported availability from 2010-2018,[6,7] suggesting there has been little progress towards increasing the adoption of these services in more recent years. Notably, we found a higher percentage of facilities offering peer support services relative to 2017.[7] Thus, more facilities have adopted peer support services since the release of SAMHSA's 2020 guidelines.[1] Additional research is needed to further understand factors that influence the adoption of each key service as well as comprehensive BHCC best practices.

We found that a mobile/offsite response was the least common of the six BHCC services, adopted by roughly one in five mental health treatment facilities. Even when looking specifically among mental health treatment facilities that have adopted other types of BHCC services, mobile/offsite response has not been widely adopted. Notably, the availability of a mobile/offsite response team that can be dispatched to meet community members wherever they are is a critical component of BHCC best practices.[1] However, delivering mobile/offsite services may be more resource-intensive

(e.g., personnel, equipment, etc.) than other BHCC services. As such, many facilities may lack the capacity to implement mobile/offsite response teams. Future studies should examine barriers and facilitators of mobile/offsite response adoption and identify challenges facilities may face when implementing this service.

We also found that types of payment methods accepted, including Medicare and self-payment, were significant predictors of BHCC best practices adoption. Further, having any grant funding significantly increased the odds of a facility fully adopting BHCC best practices. These findings highlight the importance of reimbursement for BHCC services in encouraging their adoption by mental health treatment facilities. In previous qualitative research, organizational leaders reported funding as a barrier to adopting BHCC services,[5] indicating the need for adequate reimbursement to sustain BHCC services. Thus, additional research is needed to understand how different payment and reimbursement models facilitate versus impede the adoption of BHCC services.

Finally, there were significant differences in adopting BHCC best practices by geographic area. Micropolitan, small towns, and rural areas all had higher odds of adopting BHCC best practices than metropolitan areas. While this may seem counterintuitive, previous research has reported similar findings when examining the distribution of suicide prevention services.[12] It is plausible that the direction of grant funding to increase access for underserved populations in rural areas has influenced adoption of BHCC. Our understanding of how the external environment, or factors outside of the organization, influence the adoption of BHCC services is still limited. Hence, future research should examine county-level characteristics (e.g., available

resources, social determinants of health) associated with BHCC best practice facility locations.

These findings are subject to limitations. First, this study examines six BHCC services that are among those required by SAMHSA to be fully aligned with best practice BHCC. However, this does not represent an exhaustive list of all services and expectations outlined by SAMHSA, as there are additional requirements that cannot be measured through publicly available data used in this study. Second, while this study used the most recent data available, as the Locator tool relies on facilities to report any changes in service offerings to keep the information up-to-date, it is not possible to verify whether facilities are actively providing the services indicated. Additionally, the N-MHSS is a voluntary survey. While responses are solicited from all known mental health treatment facilities, 11% of eligible facilities did not respond.[8] Finally, facility listings in the Locator tool are optional. When completing the N-MHSS, facilities may opt out of having their information included in the Locator tool. As such, a small percentage of facilities represented in N-MHSS data are not represented in the Locator tool, which may result in differences in frequencies of services reported across data sources.

Conclusion

In many communities, the crisis care system is fragmented, inadequate, or non-existent. Despite SAMHSA guidelines calling for comprehensive BHCC services, only a fraction of facilities have fully adopted BHCC best practices. Efforts are needed to encourage widespread uptake of BHCC best practices and increase access to resources for patients experiencing a behavioral health crisis.

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Figure 1: Behavioral health crisis care best practice locations

Table 1: Organizational characteristics of mental health treatment facilities (n=9385)

Organizational characteristics	**N**	**%**
Facility operation		
Private non-profit	5837	62.2
Private for-profit	2241	23.9
Public	1307	13.9
Facility type		
Outpatient facility	4705	50.1
Community mental health center	2332	24.8
Psychiatric hospital	838	8.9
General hospital	508	5.4
Partial hospital	391	4.2
Certified Behavioral Health Clinic	306	3.3
Multi-setting facility	305	3.2
Geographic area		
Metropolitan county	7087	75.5
Urban county	2035	21.7
Rural county	263	2.8
Licensed mental health clinic	1027	10.9
Federally qualified health center	821	8.7
Medicaid	8703	92.7
Self-pay	8492	90.5
Private insurance	8132	86.6
Medicare	7066	75.3
Sliding fee scale	3912	41.7
Payment assistance	2330	24.8
Any grant funding received	3963	42.2
Serves special groups	7889	84.1
Prescribes pharmaceuticals	6534	69.6
Provides services in other languages	1093	11.6
Adoption of Behavioral Health Crisis Care Services		
Offers suicide prevention services	6554	69.8
Offers crisis intervention team	4473	47.7
Offers peer support services	3554	37.9
Offers onsite emergency services	3383	36.0
Offers emergency walk-ins	3164	33.7
Offers mobile/offsite services	2101	22.4
Accepts patients of all ages	5751	61.3
No BHCC services offered	603	6.4
BHCC Best Practices (Offers all 6 services and serves all ages)	**564**	**6.0**

Table 2: Cross-tabulations of best practice behavioral health crisis care services

BHCC Services Offered	Suicide Prevention (n=6554)		Crisis Team (n=4473)		Peer Support (n=3554)		Onsite (n=3383)		Mobile/ Offsite (n=2101)		Walk-Ins (n=3164)	
	N	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**
Suicide Prevention	-	-	3717	83.1	2921	82.2	2849	84.2	1807	86.0	2832	89.5
Crisis Team	3717	56.7	-	-	2328	65.5	2488	73.5	1868	88.9	2391	75.6
Peer Support	2921	44.6	2328	52.0	-	-	1669	49.3	1313	62.5	1757	55.5
Onsite	2849	43.5	2488	55.6	1669	47.0	-	-	1381	65.7	2246	71.0
Mobile/Offsite	1807	27.6	1868	41.8	1313	37.0	1381	40.8	-	-	1252	39.6
Walk-Ins	2832	43.2	2391	53.5	1757	49.4	2246	66.4	1252	59.6	-	-

Table 3: Multivariate relationships between organizational characteristics of mental health treatment facilities and adoption of behavioral health crisis care (BHCC) services

Organizational Characteristics	Suicide Prevention	Crisis Team	Peer Support	Onsite	Mobile/ Offsite	Walk-Ins	All Services
Facility operation (reference: private non-profit)							
Private for-profit	0.84**	1.00	0.91	1.26**	1.06	1.27**	1.34
Public	1.29**	1.53***	1.65***	1.46***	1.77***	1.87***	1.95***
Facility type (reference: outpatient facility)							
Community mental health center	1.38***	2.80***	1.55***	2.24***	2.41***	2.28***	2.54***
Psychiatric hospital	1.69***	2.27***	0.66***	10.23***	0.65***	4.76***	0.66
General hospital	1.87***	2.43***	0.66***	15.26***	0.37***	4.88***	0.24**
Partial hospital	1.20	1.25	0.66**	1.07	0.58***	0.36***	0.30
Certified Behavioral Health Clinic	2.12***	5.62***	4.44***	2.20***	3.34***	1.72***	3.94***
Multi-setting facility	0.80	1.81***	1.97***	2.42***	1.97***	1.03	2.08**
Geographic area (reference: metropolitan)							
Micropolitan	1.27**	1.44***	1.20**	1.55***	1.37***	1.42***	2.31***
Small town	1.49***	1.89***	1.07	1.52***	1.62***	1.45***	2.40***
Rural	1.87***	2.04***	1.20	1.47**	1.70***	1.73***	2.05***
Licensed mental health clinic	0.95	1.10	0.97	0.87	0.89	0.88	0.67
Federally qualified health center	1.11	0.74***	0.76**	0.76**	0.58***	0.91	0.36***
Medicaid	1.42***	1.63***	1.01	1.24	2.05***	1.08	0.82
Self-pay	0.97	0.69***	0.79*	1.12	0.71**	1.85***	3.18**
Private insurance	1.37***	1.03	0.66***	1.02	0.92	1.04	0.90
Medicare	1.09	1.18**	1.42***	1..65***	1.29**	2.11***	2.68***
Sliding fee scale	1.05	1.15*	1.19**	1.17**	1.35***	1.06	0.92
Payment assistance	1.15*	1.28***	1.13*	1.36***	0.97	1.37***	1.31*
Any grant funding received	1.56***	1.98***	2.02***	1.66***	1.82***	2.06***	2.45***
Serves special groups	1.55***	1.78***	2.11***	1.45***	1.46***	1.96***	2.06***
Prescribes pharmaceuticals	2.26***	1.88***	2.07***	2.77***	2.32***	2.76***	3.27***
Provides services in other languages	1.25*	1.02	1.34***	0.91	0.85	1.14	0.94

Note: Exp(B) presented *=p<0.05, **=p<0.01, ***=p<.001