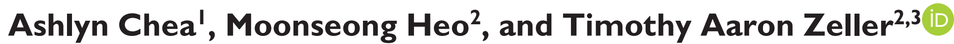
Original Research Article

Family Medicine Physician Readiness to Treat Behavioral Health Conditions: A Mixed Methods Study

Journal of Primary Care & Community Health
Volume 15: 1–5
© The Author(s) 2024
Article reuse guidelines:
sagepub.com/journals-permissions
DOI: 10.1177/21501319241275053
journals.sagepub.com/home/jpc

Ashlyn Chea[1], Moonseong Heo[2], and Timothy Aaron Zeller[2,3]



Abstract

Introduction: Behavioral and mental health conditions present significant challenges in the United States where access to care is limited. Family medicine physicians play a crucial role in addressing these challenges, often serving as frontline clinicians for behavioral and mental health conditions. **Methods:** This study examined the current behavioral and mental health system in a predominantly rural 10-county region in the Southeastern United States through gap analysis in addition to a survey of preparedness and barriers among family medicine physicians in the region. **Results:** Gap analysis results indicated that (1) stigma and lack of accessible education about behavioral and mental health, (2) fragmented resources, (3) inaccessible care, and (4) workforce shortage and burnout were primary drivers of poor outcomes in the region. Survey results indicated that physicians feel prepared to treat anxiety and depression but feel less prepared to manage bipolar disorder, schizophrenia, and substance use disorders. Respondents disagreed that there are adequate local resources and referral options for patients with behavioral and mental health conditions. Lack of timely access, distance, cost/insurance status, were all cited by respondents as barriers to appropriate care. **Conclusion and Recommendations:** Findings underscore the importance of supporting family medicine physicians to enhance behavioral and mental healthcare outcomes. Behavioral health integration in primary care settings is a promising strategy to improve care accessibility and clinician preparedness. Bridging gaps in health care outcomes requires collaborative efforts, enhanced training, and policy advocacy within the family medicine community to ensure comprehensive and equitable behavioral and mental healthcare delivery.

Keywords

behavioral health, underserved communities, primary care, access to care, rural health

Dates received: 5 June 2024; revised: 12 July 2024; accepted: 27 July 2024.

Introduction

About 1 in 5 American adults experiences mental illness and 1 in 20 experiences serious mental illness.[1] In 2022, nearly 1 in 5 individuals aged 12 years or older had a substance use disorder.[2] Mental health disorders are a leading contributor to the nation's disproportionately high healthcare spending.[3] Nationwide, the COVID-19 pandemic exacerbated mental health conditions resulting in more individuals seeking behavioral and mental health resources from an already overburdened system. The country's behavioral and mental health system faces growing demand in the setting of clinician shortages, inadequate funding, and stigma.[4,5] The state of mental health in South Carolina reflects these broader national trends, with similar incidences of anxiety or depressive symptoms. The state's age-adjusted suicide rate, 15.2 per 100 000 in 2021, is also higher than the national level.[6] Mental Health America ranked the state in the bottom 10 in Access to Care in 2022.[5] Mental Health America Access ranking includes measuring un- and under-insured populations and South Carolina's uninsured rate, 12.7% in 2020, is higher than the nationwide rate.[6]

[1]University of South Carolina School of Medicine Greenville, Greenville, SC, USA
[2]Clemson University College of Behavioral, Social, and Health Sciences, Clemson, SC, USA
[3]Clemson Rural Health, Clemson, SC, USA

Corresponding Author:
Timothy Aaron Zeller, Clemson University College of Behavioral, Social, and Health Sciences, 200 Booker Dr, Walhalla, SC 29691, USA.
Email: tazelle@clemson.edu

Creative Commons Non Commercial CC BY-NC: This article is distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 License (https://creativecommons.org/licenses/by-nc/4.0/) which permits non-commercial use, reproduction and distribution of the work without further permission provided the original work is attributed as specified on the SAGE and Open Access pages (https://us.sagepub.com/en-us/nam/open-access-at-sage).

This lack of access especially impacts those belonging to minority groups and those living in rural communities. Over 25% of South Carolina counties lack a licensed general psychiatrist or psychologist with rural counties facing the lowest rates. Between 2009 and 2019, the number of psychiatrists in the state increased, but the number in rural areas declined by one-third. While an adjacent county may have a psychiatrist or psychologist, some residents may not be able to access reliable transportation or be able to afford to make the trip regularly on top of paying for healthcare. About 13.2% of the state's adults need but are not receiving treatment for substance use.[7]

Family medicine physicians frequently see patients with behavioral and mental health conditions and demonstrate a high level of confidence in managing common behavioral and mental health conditions such as depression and anxiety.[8] However, many family medicine physicians struggle to manage less common conditions such as bipolar disorder and attention-deficit/hyperactivity disorder, and demonstrate low levels of confidence in managing serious mental illnesses.[8] Still, nearly 60% of patients receiving any mental health treatment and almost a third of those receiving care for serious mental illnesses do so from their primary care physician.[9]

Ideally, robust multidisciplinary referral systems would connect patients with more complex needs to appropriate and accessible resources. Such a system is necessary for a community to truly improve behavioral and mental health outcomes but is not currently in place in many parts of both South Carolina and the United States. Without adequate resources and referral options, family medicine physicians find themselves managing conditions for which they are not adequately prepared in order to not leave their patients without needed care.[10] Behavioral health integration, a collaborative approach to delivering mental health care within primary care settings, shows promise as a strategy to improve the quality of behavioral healthcare management.[11]

In 2023, a Behavioral Health Collaborative was formed to centralize efforts aimed at improving the behavioral and mental health outcomes in this region. Initial goals involved establishing region-specific strengths and barriers and developing an action plan to inform targeted efforts moving forward.[12] A mixed-method study was undertaken to meet these goals: a qualitative gap analysis and a survey of physicians practicing within the region.

Methods

Gap Analysis

A cross-sectional study through facilitator-led groups of local behavioral and mental health stakeholders was conducted by researchers and regional public health officials. Approximately 40 stakeholders participated in a Behavioral Health Collaborative event in September 2023. Participating stakeholders included representatives from peer support recovery programs, mental health clinics, public health agencies, suicide prevention organizations, and school districts. Facilitators led discussion to the following prompts: local challenges/barriers, entities making progress, and proposed action items. Responses were aggregated and categorized using an aim and driver model, or driver diagram, a common process tool used in improvement science.[13]

Survey

A cross-sectional survey was distributed to family medicine physicians across the 10 counties included in the study. The survey questionnaire items were designed to address 3 constructs: preparedness (7 items), accessibility (3 items), and resources (single item). The outreach strategy involved various channels, including a department-wide email sent to all family medicine physicians within a regional academic department. Additionally, program directors from 4 family medicine residency programs within the study counties facilitated the distribution of the survey among their residents and faculty. Emails and mailers containing study information and the survey link were sent to other Family Medicine practices using available contact information sourced online. The South Carolina chapter of the American Academy of Family Physicians included the survey on a statewide email newsletter.

The survey was developed in RedCAP and took respondents approximately 5 min to complete. A copy of the survey can be found in the Supplemental Appendix. The survey included 16 questions designed to assess demographics, sense of preparedness to manage certain behavioral and mental health conditions, and experiences with the local behavioral and mental health service system.

Data Analysis

Qualitative gap analysis was conducted using an aim and driver model. Descriptive statistics of the survey data included frequency, percentage, mean, and standard deviation. The reliability of the preparedness and accessibility items were measured by Cronbach's alpha. The response scores were compared using 2-sample *t*-tests between participants in urban and rural counties as well as between residents and attendings. The rurality of the counties was determined based on the Health Resources and Services Administration's 2021 List of Rural Counties. To test equality of the 7 preparedness item response scores and of the 3 accessibility item response scores, we applied repeated-measure mixed-effects models among all participants and among subgroups defined by rurality and experience levels.

Table 1. Qualitative Gap Analysis.

Aim	Primary drivers	Secondary drivers
Improve behavioral and mental health in upstate SC	Stigma and lack of accessible education about behavioral and mental health	Stigmatizing beliefs
		Stigmatizing attitudes
		Lack of accessible knowledge
		Fear of repercussions
	Fragmented resources	Insufficient awareness of available resources
		Lack of up to date, centralized directory
		Separate electronic medical record systems
	Inaccessible care	Lack of insurance coverage for behavioral and mental health care
		Services too costly
		Long wait times for care

Results

Gap Analysis Results

Primary drivers of the current state of behavioral and mental health in the Upstate were (1) stigma and lack of accessible education about behavioral and mental health, (2) fragmented resources, (3) inaccessible care, and (4) workforce shortage and burnout. Each primary driver's secondary drivers are included in Table 1.

Survey Data Analysis Results

The estimated Cronbach alpha of the survey items was good and acceptable: 0.89 (95%CI: 0.82-0.93) for the preparedness items and 0.67 (0.44-0.81) for the accessibility items. Forty-three (43) individuals completed the cross-sectional survey, representing 5 rural South Carolina counties. About 69.8% (n=30) of those were practicing physicians and 30.2% (n=13) were residents. About 51.2% (n=22) practiced in an urban county and 48.8% (n=21) practiced in a rural county. About 58.1% (n=25) reported additional training in behavioral and mental health while 41.9% (n=18) did not. As of 2021, 739 family medicine physicians practiced in the Upstate, so the estimated survey response rate was 5.8%.[14]

Overall, respondents felt most prepared to manage anxiety, closely followed by depression. Schizophrenia and substance use disorders were the conditions respondents felt least prepared to manage. (See Table 2) Rural-practicing respondents reported feeling more prepared to manage substance use disorders than urban-practicing respondents ($P=.0269$). There were no significant differences in sense of preparedness for management of other study conditions. Residents reported feeling less prepared to manage anxiety ($P=.029$), depression ($P=.011$), and other mood disorders ($P<.001$) than practicing physicians. There were no significant differences in sense of preparedness for management of other study conditions.

Participants were asked to rate the degree of agreement to the following statement: "There are adequate local resources and referral options for my patients with behavioral and mental health conditions." Response options ranged from "Strongly Disagree (1)" to "Strongly Agree (5)." Respondents reported an average of 1.95, most closely reflecting "Disagree (2)." While timely access was identified as the factor most burdensome in accessing appropriate care, respondents felt distance, cost/insurance status, and lack of timely access all contributed to the inaccessibility faced by their patients. Practicing physicians reported greater overall resource inaccessibility ($P=.047$). Once stratified by factors, cost was the only factor that differed significantly between levels of training ($P=.012$). Compared to those working in urban communities, physicians in rural communities reported cost and location as greater barriers to resources ($P=.012$ and .035). There was no significant difference between urban and rural respondents for overall resources.

Discussion

Stakeholders and family medicine physicians identified barriers to accessing behavioral and mental health services, highlighting lack of timely access issues and extended waiting periods. Family medicine physicians reported perceiving this factor as a greater obstacle than cost or distance. Prohibitive costs for services, insufficient insurance coverage, and lack of affordable, dependable transportation to services were also reported as significant barriers for those seeking care. Family medicine physicians and other primary care physicians are uniquely positioned to address many of these barriers.

Particularly, providing common behavioral and mental health services in primary care settings could reduce both service costs and transportation obstacles for patients. Behavioral health integration (BHI) is 1 model associated with higher levels of patient satisfaction, better quality of care, and more

Table 2. Survey of Family Medicine Physicians.

	Mean (SD)						
	Training				Areas		
Survey items	All (N = 43)	Resident (N = 10)	Practicing (N = 33)	*P*-value*	Rural (N = 21)	Urban (N = 22)	*P*-value*
Preparedness							
Anxiety	4.3 (0.7)	3.9 (0.7)	4.4 (0.6)	**.029**	4.2 (0.7)	4.4 (0.7)	.293
Depression	4.3 (0.7)	3.6 (0.8)	4.5 (0.5)	**.011**	4.2 (0.7)	4.3 (0.7)	.552
Mood disorder	3.6 (0.8)	2.8 (0.9)	3.8 (0.6)	**<.001**	3.8 (0.7)	3.4 (0.9)	.115
Panic	4.0 (0.8)	3.5 (1.2)	4.2 (0.6)	.096	4.1 (0.8)	4.0 (0.9)	.716
PTSD	3.6 (1.0)	3.5 (1.1)	3.7 (0.9)	.633	3.6 (0.9)	3.7 (1.0)	.709
Schizophrenia	2.4 (1.0)	2.3 (1.1)	2.4 (0.9)	.723	2.6 (1.0)	2.2 (0.9)	.242
SUD	3.1 (1.0)	2.7 (0.8)	3.3 (1.0)	.110	3.5 (0.8)	2.8 (1.1)	**.028**
P-value**	**<.001**	**<.001**	**<.001**		**<.001**	**<.001**	
Accessibility							
Cost	2.0 (0.9)	2.6 (1.1)	1.8 (0.8)	**.012**	1.7 (0.8)	2.3 (0.9)	**.028**
Location	2.5 (1.1)	2.8 (1.1)	2.5 (1.0)	.370	2.2 (1.2)	2.9 (0.8)	**.035**
Time	1.7 (0.7)	1.7 (0.8)	1.7 (0.7)	.991	1.6 (0.6)	1.8 (0.9)	.280
P-value**	**<.001**	.063	**<.001**		**.0424**	**<.001**	
Resource	2.0 (1.0)	2.5 (1.2)	1.8 (0.9)	**.047**	1.7 (0.9)	2.2 (1.0)	.065

Data in bold are statistically significant.
*For testing equality of means between 2 groups based on 2-sample tests.
**For testing equality of means across the items based on repeated measure mixed-effects models.

cost-effective care.[15] BHI may also mitigate lack of timely access issues as primary care physicians would have formal relationships with behavioral health clinicians. Additionally, such collaboration would allow physicians to learn from the integrated behavioral and mental health specialists, resulting in a boost of physicians' confidence in managing behavioral and mental health conditions.[16]

The survey of family medicine physicians aligned with previous studies,[8] with respondents feeling well-prepared for common mental health conditions such as anxiety and depression. By managing less severe presentations of these conditions, family medicine physicians can alleviate demand pressures, enabling increased access of psychiatric specialists for more severe cases. While many family medicine physicians are already managing these more common presentations, patients may not be aware of their physician's ability to address such conditions. Family medicine professional organizations could enhance awareness by emphasizing the preparedness of their members and diplomates to treat these common behavioral and mental health conditions, particularly in regions where specialized care is limited.

Family medicine physicians felt least prepared to manage schizophrenia, a complex condition that warrants specialized psychiatric management. However, efficient referral systems and a robust network of resources are imperative for family medicine physicians to connect patients with severe mental health conditions to appropriate care. The strain of the current crisis-oriented system, both nationwide and at the local level, underscores the need for better-equipped upstream interventions. This gap analysis identified increased awareness about existing resources as an area for improvement, suggesting a need for collaborative efforts and educational interventions. While practicing physicians who are established in a community may have knowledge of the local resources, residents, and new physicians may be unfamiliar with the resources available. Behavioral health integration could bridge this gap by developing and maintaining up-to-date directories of regional resources for both physicians and community members. Residency programs would benefit from incorporating a session on local resources into their didactic curricula. Further, wide variations exist in the consistency of family medicine residency behavioral health curricula in general, and this has been identified as a major gap in the training of resident physicians.[17] Family medicine physicians whose residency programs had a higher emphasis on behavioral science feel better prepared to use behavioral skills in practice.[18] This represents another area of potential advocacy for family medicine professional organizations.

Despite this study's limitations, such as a small sample size and a confined geographic scope, these findings can help guide future inquiries and initiatives. Future research aims to explore preparedness for additional conditions (such as eating disorders and safety assessments) and extend the study's reach statewide.

This study illuminates critical gaps in the current behavioral and mental healthcare system in a predominantly rural 10-county region and emphasizes the pivotal role of family medicine physicians in bridging these gaps. Family medicine physicians are uniquely equipped for screening, intervention, treatment, and referral to specialty care when needed. Locally, community organizations can support family medicine physicians to bridge the behavioral and mental healthcare gap by establishing collaborative resources and referral systems. On a broader scale, family medicine organizations should actively encourage and empower trainees and practicing physicians to participate in the policy-making processes that shape their communities. Family medicine physicians are already bridging the gap for behavioral and mental healthcare not only in the rural Southeast, but nationwide. By collectively working on targeted initiatives, we can build a more resilient system to better support physicians and patients.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This research was completed with financial support from the American Academy of Family Physicians.

ORCID iD

Timothy Aaron Zeller https://orcid.org/0000-0003-0194-3193

Supplemental Material

Supplemental material for this article is available online.

References

1. National Alliance on Mental Illness. Mental health by the numbers. 2023. Accessed November 20, 2023. https://nami.org/mhstats?gad_source=1&gclid=CjwKCAiA-vOsB-hAAEiwAIWR0TQ0zcBQ3JYhQakUqEjklR1oLKqZFGW-TyYsZ8B9B9ROT455rgJ3q7kxoCjx0QAvD_BwE
2. Substance Abuse and Mental Health Services Administration. HHS, SAMHSA release 2022 national survey on drug use and health data. 2023. Accessed November 20, 2023. https://www.samhsa.gov/newsroom/press-announcements/20231113/hhs-samhsa-release-2022-nsduh-data
3. McDaid D, Park A-L, Wahlbeck K. The economic case for the prevention of mental illness. *Annu Rev Public Health*. 2019;40(1):373-389. doi:10.1146/annurev-publhealth-040617-013629
4. National Council on Mental Wellbeing. The psychiatric shortage: causes and solutions. 2018. Accessed November 22, 2023. https://www.thenationalcouncil.org/resources/psychiatric-shortage-causes-and-solutions/
5. Mental Health America. The state of Mental Health in America. 2023. Accessed November 22, 2023. https://mhanational.org/issues/state-mental-health-america
6. KFF. Mental health and substance use state fact sheets. 2023. Accessed November 18, 2023. https://www.kff.org/statedata/mental-health-and-substance-use-state-fact-sheets/south-carolina/
7. South Carolina Department of Health and Environmental Control. South Carolina: state health assessment. 2023. Accessed November 18, 2023. https://scdhec.gov/sites/default/files/media/document/SHA-Report-1.8.24.pdf
8. Beck A, Page C, Buche J, Schoebel V, Wayment C. *Behavioral Health Service Provision by Primary Care Physicians*. University of Michigan Behavioral Health Workforce Research Center; 2019.
9. Jetty A, Petterson S, Westfall JM, Jabbarpour Y. Assessing primary care contributions to behavioral health: a cross-sectional study using medical expenditure panel survey. *J Prim Care Community Health*. 2021;12:21501327211023871. doi:10.1177/21501327211023871
10. Horstman C, Federman S, Williams R. Integrating primary care and behavioral health to address the behavioral health crisis (explainer). *Commonwealth Fund*. September 15, 2022.
11. Centers for Disease Control and Prevention. Mental health care, children and behavioral health integration. 2018. Accessed November 20, 2023. https://www.cdc.gov/childrensmentalhealth/documents/access-infographic.html
12. Ten at the Top. SC DHEC health initiative. 2023. Accessed January 27, 2024. https://tenatthetop.org/health-data-walks/
13. Institute for Healthcare Improvement. Driver diagram. 2024. Accessed July 9, 2024. https://www.ihi.org/resources/tools/driver-diagram
14. Greenberg KP, Sarrica Barefoot B, Gaul K. *2021 South Carolina Health Professions Data Book*. South Carolina Office for Healthcare Workforce, South Carolina Area Health Education Consortium; 2021.
15. McGinty EE, Daumit GL. Integrating mental health and addiction treatment into general medical care; the role of policy. *Psychiatr Serv*. 2020;71(11):1163-1169.
16. Hemming P, Hewitt A, Gallo J, Kessler R, Levine R. Residents' confidence providing primary care with behavioral health integration. *Fam Med*. 2017;49(5):361-368.
17. Landall RR, Cervero RM, Quinlan JD, Maggio LA. Primary care behavioral health training in family medicine residencies. *Fam Med*. 2020;52(3):174-181. doi:10.22454/fammed.2020.681872
18. Robohm JS. Training to reduce behavioral health disparities. *Int J Psychiatry Med*. 2017;52(3):298-312. doi:10.1177/009121747730294