

# Behavioral Health Service Provision by Primary Care Physicians

**October 2019**

## Project Team

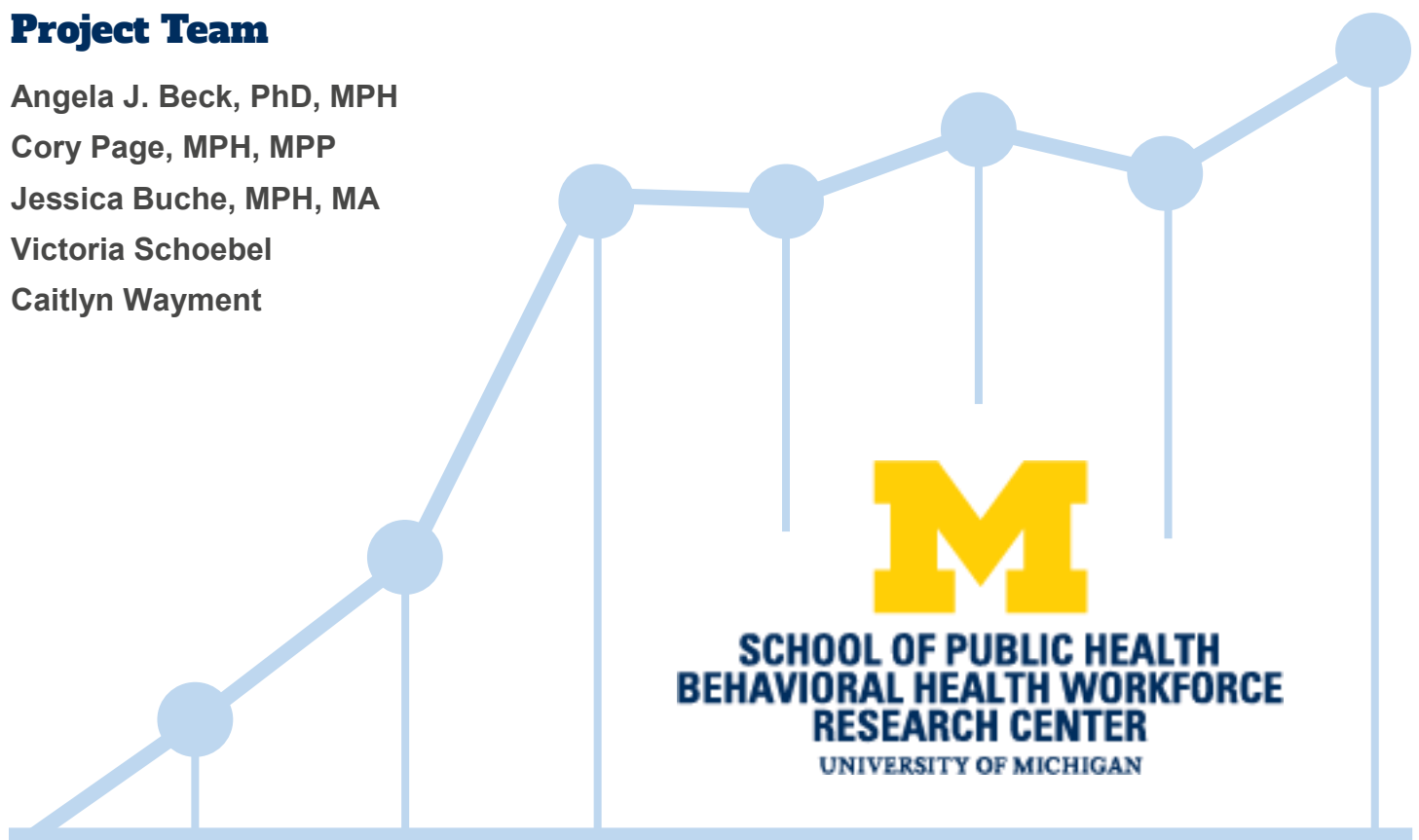
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## Background

Approximately 19% of adults in the U.S. (47.6 million adults in 2018) experience mental illness.<sup>1</sup> Of adults with a mental illness, more than 24 million do not receive any treatment.<sup>2</sup> For those who do, approximately half of all care received for common psychiatric disorders is provided by primary care physicians, including those practicing in family medicine, internal medicine, or general practice.<sup>3</sup> It is important to understand how the role of primary care physicians contributes to and affects behavioral health care in different geographic areas.

Primary care physicians are generally more accessible in rural areas than behavioral health specialists.<sup>2,4</sup> In terms of overall workforce supply, there are approximately 25,250 psychiatrists, for example, and they tend to practice in urban areas along the coasts of the U.S.<sup>5</sup> By comparison, there are approximately 114,130 practicing family physicians who have better geographic distribution than psychiatrists.<sup>5,6</sup> Further, between 39% and 55% of individuals living in non-metropolitan areas have either government insurance or no insurance at all,<sup>7,8</sup> which is an influential factor in the accessibility of care as psychiatrists are less likely to accept these patients than primary care physicians.<sup>9,10</sup> These findings help explain why rural Americans are more likely to seek behavioral health care from primary care physicians (54%) than from psychiatrists (29%).<sup>11</sup>

Although primary care physicians are regularly engaged in delivery of some behavioral health services, they are not typically specialized behavioral health providers. The educational requirements from the Accreditation Council for Graduate Medical Education do not mention or include requirements for behavioral health training for internists.<sup>12,13</sup> However, accredited family medicine curricula highlight common mental illnesses, training residents to competently and independently treat and coordinate care for patients of any age with behavioral health disorders. Even with these curricular standards, a 2013 survey of medical school program directors reported only 24% of programs had more than 12 hours of training in addiction medicine and only 36% required or encouraged training with buprenorphine.<sup>14</sup> Lacking sufficient training, primary care physicians may be unprepared or uncomfortable treating behavioral health disorders and instead refer patients to specialists.<sup>15–17</sup> This creates discontinuity in care, and many referrals go uncompleted by the patient.<sup>18–20</sup>

Comfort with providing behavioral health care influences treatment and prescriptive habits. A 2012 survey of physicians in Vermont reported that around half of the prescriptions for antipsychotics for children and adolescents were written by primary care providers.<sup>21</sup> However, primary care physicians are less likely than psychiatrists to follow best practice guidelines for these psychotropic drugs.<sup>21</sup> Physicians practicing in rural areas are also more likely to prescribe antipsychotics to children compared with physicians who do not practice in rural areas.<sup>22</sup> This research suggests primary care physicians are engaging with patients with behavioral health disorders but may not be prescribing the appropriate treatment, which could hinder recovery efforts.

Regarding methods to improve substance use disorder (SUD) treatment, physicians can apply for a Drug Enforcement Agency waiver to prescribe buprenorphine for treating opioid use disorder. More than half of all U.S. counties have physicians with such waivers, with the greatest increase recently seen in rural areas; however, 56% of rural areas still lack waived physicians as compared with 23% of urban areas.<sup>23</sup> Collaborative and integrated care models in which behavioral health providers are linked with physicians for consultations and referrals are another method for improving primary care providers' ability to effectively treat patients while reducing healthcare costs and improving patient care experiences.<sup>24</sup>

Treating behavioral health conditions in primary care settings is challenging owing to inadequate provider training backgrounds, low detection rates of behavioral health conditions, minimal prioritization of behavioral health services, and use of treatments inconsistent with standard of care.<sup>25–27</sup> This study aims to describe the contribution of primary care physicians in delivering behavioral health services across rural and non-rural areas.

## Methods

Researchers at the University of Michigan Behavioral Health Workforce Research Center conducted a sample survey of primary care physicians in summer 2019 to collect data on the following: 1) physician medical specialty and practice characteristics; 2) patient population characteristics; 3) physician practices for screening and diagnosing patients for behavioral health disorders; and 4) roles in managing patients with behavioral health disorders.

The survey was developed in Qualtrics and took respondents approximately 15 minutes to complete. A copy of the survey, complete with skip and display logic, can be found in Appendix A. The physician panel was selected through Toluna, a company with a panel of physicians who have volunteered to participate in surveys, which also disseminated the survey. The survey panel included providers that specialized in either family medicine, internal medicine, or general practice, to represent the three most common primary care physician specializations. Physicians in rural areas were oversampled to better detect differences between rural and non-rural screening, diagnosing, and treatment patterns. A total of 2,060 physicians were invited to participate in the survey. A \$30 incentive was offered for survey completion.

Data analysis included descriptive statistics and stratified analyses using two-sample t-tests, two-sample proportion tests, and chi-square tests.

## Results

### Practice Characteristics

A total of 313 physicians completed the survey for a response rate of 15.2%. The majority of survey respondents specialized in family medicine (59%) followed by internal medicine (36%), with the remaining respondents specializing in general practice, pediatrics, or a combination of specialties (5%). Most respondents reported practicing at one location (74%). Fifty-two (17%) physicians worked in two locations and 28 (9%) worked at three or more practice sites. More than half (53%) of reporting physicians practiced in an integrated care setting at their primary site, where most of their time was spent; 56% worked in an integrated care setting at a secondary site; and 61% at a tertiary site.

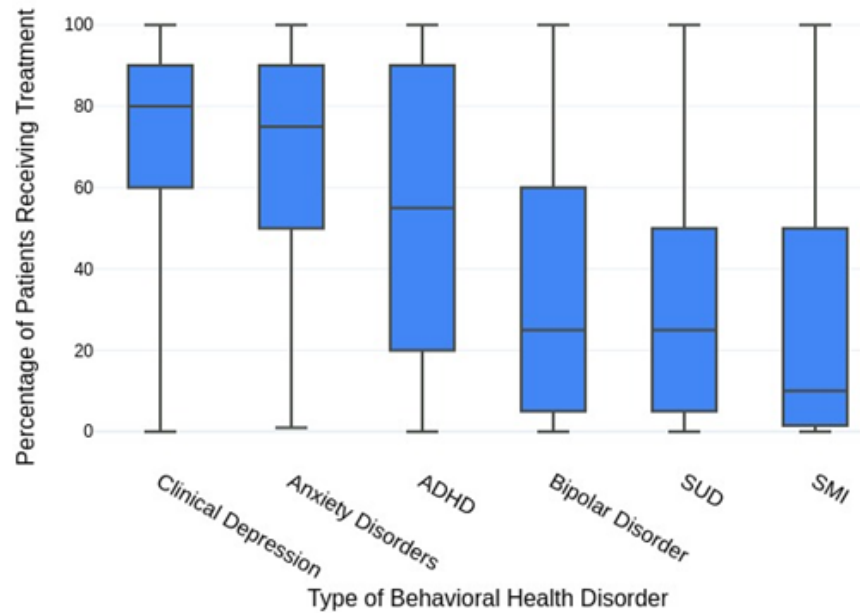
Eighty primary practice sites (26%) were located in rural areas and the remaining 233 (74%) were located in non-rural areas. When the 26 respondents who practiced in both rural and non-rural areas were asked to compare the amount of behavioral health services they provide at their practice sites, 11% reported that they provided fewer behavioral health services at non-rural sites, 58% provided about the same amount of services at rural and non-rural sites, and 31% provided more behavioral health services at rural locations than non-rural.

### Screening, Diagnosing, and Treating Behavioral Health Disorders

Respondents were most likely to screen new patients for and diagnose clinical depression (74% and 36% of patients, respectively), SUD (69% and 25%), and anxiety disorders (62% and 31%). Screening and diagnosis were less common for serious mental illness (SMI; 44% and 16%), bipolar disorder (39% and 17%), and attention-deficit/hyperactivity disorder (ADHD; 31% and 17%).

Respondents reported depression as the most common behavioral health condition for which patients received care, with an average of 72% of these patients being treated (Figure 1). Approximately 33% of patients diagnosed with SUD received treatment from responding primary care physicians, in addition to 69% of those diagnosed with an anxiety disorder, 27% of patients with SMI, 36% of patients with bipolar disorder, and 53% of patients diagnosed with ADHD.

**Figure 1.** Treatment of Patients With a Diagnosed Behavioral Health Disorder by Credential Type

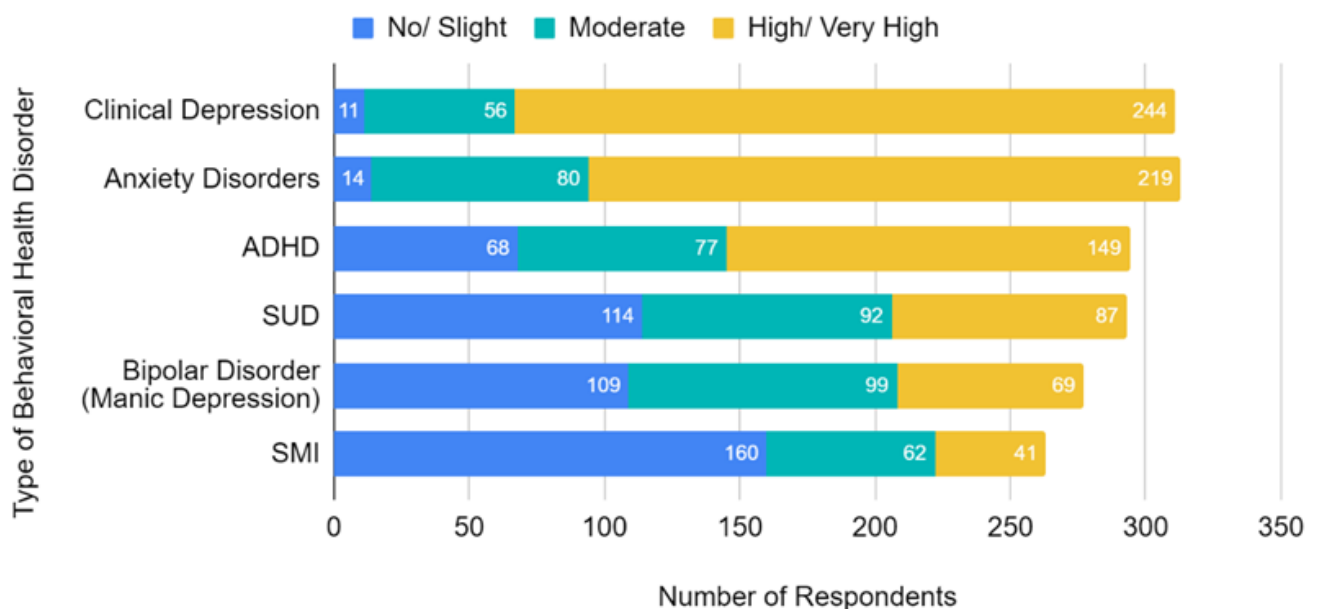


ADHD, attention-deficit/hyperactivity disorder; SUD, substance use disorder; SMI, serious mental illness.

### Confidence in Treating/Managing Behavioral Health Disorders

Physicians reported high or very high confidence in their ability to treat patients with clinical depression (78%), anxiety disorders (70%), and ADHD (51%) (Figure 2). However, more than half of the physicians (61%) reported having little to no confidence in treating patients with SMI, and more than one third were not confident in treating bipolar disorder or SUD (41% and 39%, respectively).

**Figure 2.** Physicians' Confidence in Treating/Managing Behavioral Health Disorders

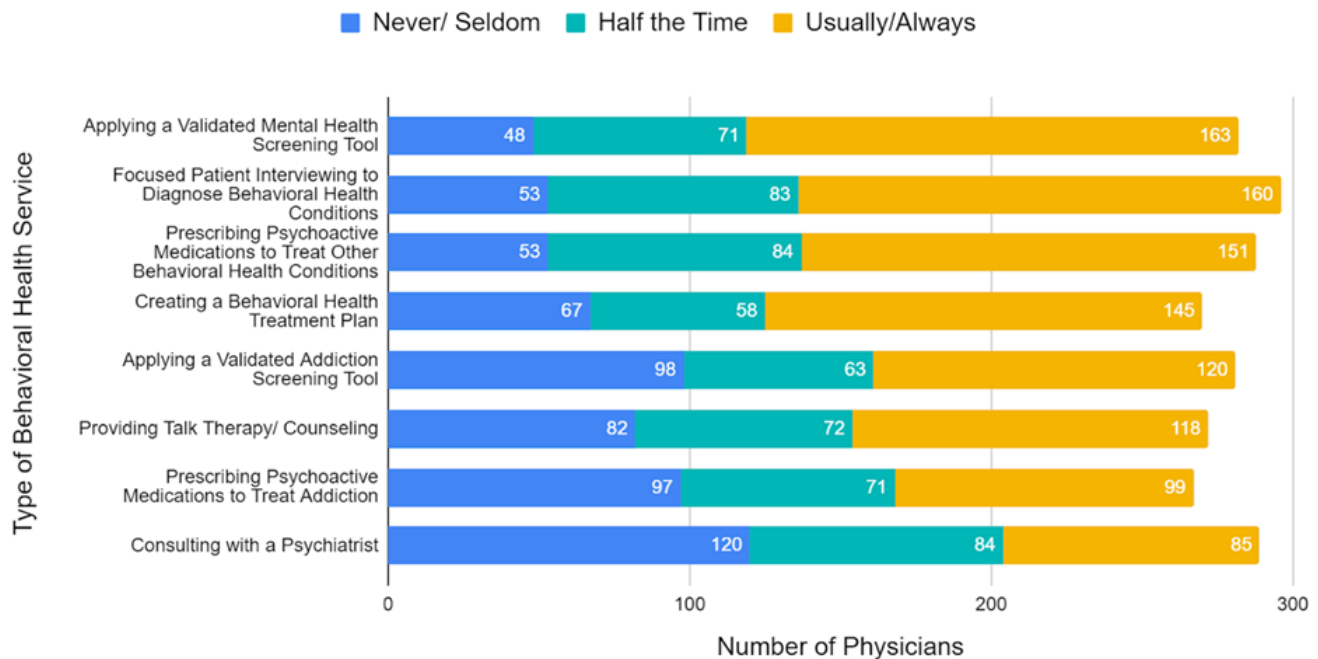


ADHD, attention-deficit/hyperactivity disorder; SUD, substance use disorder; SMI, serious mental illness.

## Primary Practice Site: Provision of Behavioral Health Services

Physicians reported that they usually or always utilize patient interviewing to diagnose behavioral health conditions (54%) and/or apply validated mental health screening tools (58%). However, fewer than half of respondents reported that they usually or always apply a validated addiction screening tool (43%), consult with psychiatrists (29%), or consult with other behavioral health providers (41%). Fifty-four percent of physicians reported they typically create a behavioral health treatment plan for their patients, and 43% usually or always provide counseling services to their patients. Physicians were also more likely to prescribe psychoactive medications to treat behavioral health conditions (52%) than SUD (37%) (Figure 3).

**Figure 3.** Frequency of Behavioral Health Service Provision to Patients



In terms of available psychosocial support services, patients are most likely to have access to psychiatrists (72%), other behavioral health providers (59%), and inpatient services (51%). Primary sites less commonly offered or provided access to telehealth and telepsychiatry for behavioral health services (19%), medication-assisted treatment for SUD (39%), peer support or 12-Step programs (25%), residential treatment (22%), other supporting physicians (24%), psychiatric hospitals (32%), or opioid treatment programs (37%) than their behavioral health counterparts.

On average, physicians reported that they refer about 42% of their patients to other providers for behavioral health services. When physicians referred patients to outside behavioral health services, patients were usually or always referred to psychiatrists (63%) and other behavioral health providers/counseling services (54%, n=95/175) instead of other behavioral health resources, such as community health centers, detoxification centers, residential treatment options, or psychiatric hospitals.

## Behavioral Health Service Provision in Rural and Non-rural Settings

Approximately one quarter of responding physicians (26%) had primary practice sites located in rural areas and the rest (74%) had primary practice sites in non-rural areas. The chi-square analysis between rural and non-rural physicians was not statistically significant in terms of medical specialty or if their practice site was an integrated care setting. This rules out the potential of those two variables confounding the relationship between rurality and the outcome variable in question.

A two-sample proportion test showed that providers in rural settings were significantly more likely to provide services to patients aged  $\leq 18$  years ( $p=0.005$ , 95% CI=0.07, 0.30) and to patients who work in agriculture or farms ( $p<0.0001$ , 95% CI=0.18, 0.43) than providers in non-rural settings. Seventy-seven percent of rural physicians reported providing services to those aged  $\leq 18$  years and 71% of rural physicians reported providing services to patients who work in agriculture or farms, as compared with non-rural providers (59% and 41%, respectively). This difference was not seen among other special populations, including patients who were aged  $>65$  years, homeless or at risk for homelessness, using public housing, survivors of human trafficking, veterans, or had opioid use disorder or other SUD.

Results from two-sample t-tests did not indicate any significant differences between screening and referral rates for any of the behavioral health disorders considered between rural and non-rural practice sites. However, two-sample t-test results indicated rural practice sites diagnosed patients with behavioral health conditions at a higher rate than non-rural sites (Table 1). The statistical significance for this test varied by condition, with ADHD and bipolar disorder yielding the strongest significance ( $p=0.008$  and  $p=0.014$ , respectively).

**Table 1:** Percentage of Patients Diagnosed With a Behavioral Health Disorder by Primary Care Physicians, by Rural and Non-rural Primary Practice<sup>a</sup>

	Rural Setting		Non-rural Setting		Confidence Interval
	n	% Patients Diagnosed	n	% Patients Diagnosed	p <sup>b</sup> (95% CI) <sup>c</sup>
Anxiety Disorders	78	36	229	29	0.029 <b>(0.72, 12.38)</b>
Attention-Deficit/Hyperactivity Disorder	73	24	211	15	0.008 <b>(2.44, 15.56)</b>
Bipolar Disorder (Manic Depression)	76	23	212	15	0.014 <b>(1.64, 14.36)</b>
Clinical Depression	78	41	230	34	0.034 <b>(0.54, 13.46)</b>
Serious Mental Illness	73	21	205	13	0.017 <b>(1.49, 14.51)</b>
Substance Use Disorder	78	30	221	23	0.044 <b>(0.20, 13.80)</b>

<sup>a</sup> Totals vary because of missing data.

<sup>b</sup> p-values obtained from two-sample t-tests.

<sup>c</sup> Bold confidence intervals indicate that they do not contain 0.

Table 2 shows the results of the two-sample t-tests between rural and non-rural practice sites and the percentage of patients with a diagnosed behavioral health condition that receive treatment. Rural sites treated patients with behavioral health conditions at significantly higher rates than non-rural sites, with the greatest significance observed for ADHD ( $p=0.0001$ ) and bipolar disorder ( $p=0.0002$ ).



**Table 2:** Percentage of Patients With a Diagnosed Behavioral Health Condition Receiving Treatment, by Rural and Non-rural Primary Practice<sup>a</sup>

	Rural Setting		Non-rural Setting		Confidence Interval
	n	% Receiving Treatment	n	% Receiving Treatment	p <sup>b</sup> (95% CI) <sup>c</sup>
Anxiety Disorders	77	77	227	66	0.001 <b>(4.43, 17.57)</b>
Attention-Deficit/Hyperactivity Disorder	73	66	203	49	0.0001 <b>(8.47, 25.53)</b>
Bipolar Disorder (Manic Depression)	75	48	204	32	0.0002 <b>(7.43, 24.26)</b>
Clinical Depression	78	79	229	70	0.002 <b>(3.32, 14.68)</b>
Serious Mental Illness	73	34	199	25	0.045 <b>(0.59, 17.83)</b>
Substance Use Disorder	78	39	221	31	0.058 <b>(0.04, 15.96)</b>

<sup>a</sup> Totals vary because of missing data.

<sup>b</sup> p-values obtained from two-sample t-tests.

<sup>c</sup> Bold confidence intervals indicate that they do not contain 0.

There was no reported significance in the amount of specific screening and diagnosing services provided at rural versus non-rural primary sites. However, results from a chi-square analysis indicated a relationship between how often providers are prescribing psychoactive medications to treat behavioral health conditions other than addiction ( $p=0.028$ ) and the rurality of their primary site. Of all surveyed psychosocial support services, only the availability of other behavioral health providers/counseling services was significant ( $p=0.023$ , 95% CI=  $-0.28, -0.02$ ) according to a two-sample proportion test, with 48% of rural primary sites and 63% of non-rural sites reporting such access.

Table 3 shows the results of the chi-square analysis regarding the reported respondents' confidence in their ability to treat/manage behavioral health conditions. Providers' confidence was significantly associated with treating/managing ADHD ( $p=0.01$ ), bipolar disorder ( $p=0.0005$ ), SMI ( $p=0.002$ ), and rurality of practice site.

**Table 3:** Physician Confidence Levels in Treating Behavioral Health Conditions, by Rural and Non-rural Primary Practice<sup>a</sup>

Physician Confidence Level Treating Behavioral Health Conditions							
	Rural Setting			Non-rural Setting			
	No/Slight n (%)	Moderate n (%)	High/ Very High n (%)	No/Slight n (%)	Moderate n (%)	High/ Very High n (%)	p <sup>b,c</sup>
Anxiety Disorders	3(4)	20(25)	57(71)	11(5)	60(26)	162(70)	0.921
Attention-Deficit/ Hyperactivity Disorder	8(11)	23(30)	45(59)	60(28)	54(25)	104(28)	<b>0.010</b>
Bipolar Disorder (Manic Depression)	18(24)	28(38)	28(38)	101(47)	71(33)	41(19)	<b>0.0005</b>
Clinical Depression	3(4)	13(16)	64(80)	8(3)	43(19)	180(78)	0.891
Serious Mental Illness	30(45)	19(28)	18(27)	130(66)	43(22)	23(12)	<b>0.002</b>
Substance Use Disorder	25(33)	24(32)	26(35)	89(41)	68(31)	61(28)	0.437
<sup>a</sup> Totals vary because of missing data.							
<sup>b</sup> p-values obtained from chi-square tests.							
<sup>c</sup> Bold p-value indicates significance at α=0.05.							

## Conclusions and Policy Considerations

### Conclusions

The findings from this study indicate that most responding primary care physicians are providing behavioral health services to their patients, affirming that primary care physicians are a major component of behavioral health service delivery.<sup>3</sup> The high rate at which respondents were working within integrated care settings warrants attention. One possible explanation is that the surveyed rural site physicians were working in Federally Qualified Health Centers or larger health systems. This explanation would also account for the relatively high access to psychiatrists (72%) and inpatient services (51%), which did not vary significantly between rural and non-rural respondents, and differs from national analyses detailing psychiatric shortages in rural areas.<sup>28,29</sup>

Of the behavioral health conditions included in the survey, physicians in both rural and non-rural locations were generally more likely to screen, diagnose, and treat patients with clinical depression, anxiety disorders, and SUD, as compared with patients with ADHD, bipolar disorder, and SMI. The higher rates of services provided to patients with clinical depression, anxiety disorders, and SUD may be attributed to a higher prevalence of these disorders.<sup>1,30</sup> Further, physicians' reported confidence levels in treating behavioral health disorders paralleled how often they diagnosed and treated their patients: Anxiety and depression were both screened, diagnosed, and treated more often than other conditions. Existing literature has outlined that a lack of confidence among physicians may be due to inadequate behavioral health education and training requirements.<sup>15,16</sup> If a physician feels unprepared or uncomfortable in treating behavioral health disorders, it can influence their treatment and prescriptive habits.

Physicians located in rural areas had higher rates of diagnosing and treating patients with anxiety disorders, ADHD, bipolar disorder, clinical depression, SMI, and SUD than physicians practicing in non-rural areas. These findings could be attributed to the observed higher rates of behavioral health disorders among Americans located in rural areas,<sup>1</sup> as Americans in rural areas with behavioral health disorders are more likely to use primary care for their behavioral health conditions rather than specialized providers.<sup>11</sup> Previous studies concluded this trend could be due to a lack of rural access to psychiatric services<sup>31</sup> or other behavioral health specialists,<sup>32</sup> requiring patients to seek care wherever possible. Although the results of this survey do not rule out that lack of access to specialty behavioral health providers could be a cause, stigma or cultural context could also explain patients seeking services from primary care physicians instead of psychiatrists or master's-level therapists.<sup>33</sup>

This study also identified a relationship between a physician's practice site location and their confidence level in treating ADHD, bipolar disorder, and SMI. Physicians with more practice managing patients with certain disorders, such as physicians in rural areas reporting higher rates of treating and diagnosing patients with behavioral health disorders, gain confidence in treating those specific disorders. This is in keeping with other research showing that formal training in behavioral health best practices is positively correlated with confidence in treating behavioral health disorders.<sup>22</sup> Furthermore, as there was no statistically significant difference between the rates at which rural and non-rural respondents were working in integrated care settings and thus integrated care is not a confounder, the difference in provider confidence is more attributable to practice geography than practice type.

The survey's results were mixed when it came to quantity of provided services. In an early survey question, the 26 eligible respondents were asked to compare the amount of behavioral health services they provide at their rural and non-rural practice sites. The majority (58%) reported providing about the same number of services at both sites, 31% reported providing more at non-rural sites, and 11% reported providing fewer. The high percentage of respondents who feel that they provide the same number of services at their rural and non-rural sites may be a result of desirability bias whereby respondents did not feel comfortable admitting they provided services at different rates based on geography. Quantitative questions later in the survey run through stratified analysis revealed that rural physicians provided more behavioral health services than non-rural physicians. These results may differ because the stratified analysis did not analyze the difference between a single physician working in a rural and a non-rural location, respectively, which comprised a small subset of the survey sample and may not be generalizable. Conversely, the stratified analysis included the entire survey sample categorized by primary site locations.

This study provides a foundation for future studies to continue exploring behavioral healthcare provision by primary care providers. Future research could benefit from expanding upon the amount of behavioral health services physicians offer by coupling qualitative surveys with private and public reimbursement data. Quality of services provided from both a physician and patient perspective can also be explored through self-reported health system metrics on patient satisfaction. Continuing to survey physicians can also lead to a deeper understanding of the behavioral health education and training that primary care physicians receive. The use of larger samples of primary care physicians in future surveys may also generate more-generalizable results.

## Limitations

This study has multiple limitations that should be considered when interpreting the results. It is unclear whether the response rate of 15.2% was due to inherent differences in the physicians who responded to the survey relative to those who did not choose to participate, ultimately resulting in participation bias. Selection bias may have played a result in the study results, as the physicians who chose to be a part of Toluna's panels may have different practice characteristics than those who did not. Additionally, not all physicians responded to each question, and the stratified sample by practice location had a small sample size. Two cells used in the chi-square analysis amounted to fewer than five, introducing the possibility of inaccurate results and obscuration of a true association. Results should be interpreted with these limitations in mind, and caution should be taken generalizing these results to all primary care physicians in rural and non-rural areas.

## Policy Considerations

Based on the findings in this report, several policy solutions can be considered. The first is to address primary

care physician confidence in treating behavioral health disorders. According to the survey results, large proportions of primary care physicians had little to no confidence treating SMI (61%), bipolar disorder (41%), and SUD (39%). One way to improve physician confidence would be to increase their exposure to these conditions and best practices for treating them during their medical programs, residencies, and continuing education.<sup>16,17,34–36</sup>

Changing medical school curricula across the country would require action from the Liaison Committee on Medical Education for MDs and the Commission on Osteopathic College Accreditation for DOs. Residencies and continuing medical education programs for both MDs and DOs are accredited by the Accreditation Council for Graduate Medical Education. Pushes to improve primary care physician exposure to behavioral health could also move through any of the number of organizations that make up the Liaison Committee on Medical Education, Commission on Osteopathic College Accreditation, and Accreditation Council for Graduate Medical Education, including, but not limited to: the American Medical Association, American Osteopathic Association, Association of American Medical Colleges, American Board of Medical Specialties, and American Hospital Association.

Another policy recommendation is to address the lack of community psychosocial support. Although a majority of respondents reported patient access to psychiatrists (72%), fewer respondents reported patient access to telehealth/telepsychiatry (19%), opioid treatment programs (37%), or medication-assisted treatment for SUD (39%). This lack of access was not significantly different between urban or rural providers, suggesting nationwide lack of access to these specialized interventions.

Increasing rural access to these specialized treatment options could require incentivizing medical residencies and training programs in rural areas as a way to draw more physicians to underserved communities, particularly for physicians specializing in addiction treatment. Meta-analysis of available literature suggests that rural practice sites can acclimatize medical residents to treating in rural settings, helping shape their identity as a provider and lead them to practice in non-urban settings.<sup>37,38</sup> One such federal program incentivizing rural training is the National Health Service Corps, which offers loan repayment and scholarships to medical school residents and physicians of any specialization who train or practice in qualified Health Professional Shortage Areas.<sup>39</sup> Maintaining or increasing federal funding for the National Health Service Corps could generate more psychosocial support resources for rural primary care providers.

For urban settings, recruiting physician specialists may not be as necessary. Instead, adjusting state regulations on telepsychiatry, such as limiting the number of settings where a provider can practice, could improve patient access to same-day psychiatric consultations and treatment.<sup>40</sup> In this way, the geographic distribution of addiction medicine physicians would matter less, and the existing workforce could be leveraged to its fullest capacity. Furthermore, telemedicine programs can improve physician options for treating behavioral health conditions. Project ECHO (Extension for Community Healthcare Outcomes) is one example of primary care physicians being connected with SUD treatment specialists for education and training.<sup>41</sup> Project ECHO shows how telemedicine could not only improve access to services, but also improve primary care providers' confidence in treating behavioral health disorders.

One final policy is for improving provider access to care teams. About half of the respondents practiced in an integrated care setting at either their primary (53%), secondary (56%), or tertiary practice site (61%). Integrated care is capable of improving health outcomes, boosting patient access to behavioral health care, and increasing patient satisfaction.<sup>42</sup> Though a majority of the sample population reported working in at least one integrated care site, the sample reported referring 42% of their patients to other providers for behavioral health services. This high rate of referrals could be detrimental, as a large proportion of referrals are never completed.<sup>18–20</sup>

If states were to further incentivize integrating behavioral health and primary care sites through changes to state Medicaid plans, possibly by implementing value-based payment methodologies, then more sites could begin integrating services.<sup>43</sup> Such integration would shorten or eliminate the time gap between a patient receiving a referral and meeting with a behavioral health specialist. Behavioral health integration, as an ideal, can be implemented in numerous ways, depending on the resources available to the providers. As such, another way to encourage integration without changing financial incentives would be to adjust state regulations on telehealth and telemedicine. Given the national shortage of psychiatrists<sup>43</sup> and other behavioral health providers,<sup>44</sup> especially prominent in rural areas, physical co-location of services may be impossible for many provider sites. However, through cooperative telehealth arrangements, primary care physicians could

immediately connect patients with high-severity behavioral health concerns to a behavioral health specialist, or request a consultation from distant clinicians.

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## Appendix A. Survey Test

**Q1 Introduction and Directions:** You are invited to take this online survey because you are a practicing primary care physician, specialized in either internal, pediatric, or family medicine. We at the Behavioral Health Workforce Research Center (BHWRC) would like to better understand how often, and to what extent, you treat behavioral health conditions. Your input is very important to us and we appreciate your time and feedback! We welcome your responses, whether or not you provide behavioral health services. This online pilot survey will take approximately 12 minutes to complete. Your participation in this research study is voluntary. You may choose not to participate. To protect your confidentiality, this survey will not ask you to provide any information that will personally identify you, such as your name, email address, or Social Security number. All survey results will be stored securely at the BHWRC. Only members of the BHWRC will use this survey information. Survey responses will not be released to employers or anyone other than research staff of the BHWRC. This research has been reviewed according to the University of Michigan Institutional Review Board procedures for research involving human subjects. Participation in this survey implies consent.

### Q2 Section II. Professional and Practice Characteristics

This set of questions will ask you to provide information about your professional and practice characteristics.

### Q3 Please select your medical specialty. (Select all that apply)

- ☐ Family medicine
- ☐ General practice
- ☐ Internal medicine
- ☐ Obstetrics/gynecology
- ☐ Pediatric medicine
- ☐ I do not have an area of specialty
- ☐ Other \_\_\_\_\_

### Q4 How many years have you been practicing in your field?

- ☐ less than 1
- ☐ 1–5
- ☐ 6–10
- ☐ 11–15
- ☐ 16–20
- ☐ 21–25
- ☐ 26–30
- ☐ 31+

### Q5 How many sites do you practice across?

- ☐ 1
- ☐ 2
- ☐ 3
- ☐ More than 3

**Q6 Does your practice take place in a rural area?**

The Census Bureau defines rural areas as not densely populated or developed; without substantial commercial or residential land use.

	Yes	No
Primary site (where most time is spent)	<input type="radio"/>	<input type="radio"/>
Secondary site (where second most time is spent)	<input type="radio"/>	<input type="radio"/>
Tertiary site (where least time is spent)	<input type="radio"/>	<input type="radio"/>

**Q7 Does your practice take place in an integrated care setting?**

The Substance Abuse and Mental Health Services Administration defines integrated care as “the systematic coordination of general and behavioral healthcare,” possibly including co-location of medical and behavioral health providers.

	Yes	No
Primary site (where most time is spent)	<input type="radio"/>	<input type="radio"/>
Secondary site (where second most time is spent)	<input type="radio"/>	<input type="radio"/>
Tertiary site (where least time is spent)	<input type="radio"/>	<input type="radio"/>

**Q8 [DISPLAY LOGIC: Respondent works at more than 1 site, and the sites are a combination of rural and non-rural sites] Which of the following statements best represents how many behavioral health services you provide across practice sites?**

- ☐ I provide more behavioral health services at my rural practice site(s) than at my non-rural practice site(s)
- ☐ I provide the same amount of behavioral health services at my rural practice site(s) than at my non-rural practice site(s)
- ☐ I provide less behavioral health services at my rural practice site(s) than at my non-rural practice site(s)

**Q9 Section III. Patient Population**

The next set of questions will ask you to provide information about your patient population. To protect patient confidentiality, this survey will not ask for any identifying information.

**Q10 On average, across all your practice sites, approximately how many unique patients do you serve in an average month?**

- ☐ None
- ☐ 0–30 patients
- ☐ 31–60 patients
- ☐ 61–90 patients
- ☐ 91–120 patients
- ☐ 121–150 patients
- ☐ 151–180 patients
- ☐ 181–210 patients
- ☐ 211–240 patients
- ☐ >240 patients



**Q11 Does your primary practice site currently provide behavioral health services to any of the following types of patients? (Select all that apply)**

- ☐ Patients under 18 years of age
- ☐ Patients over 65 years of age
- ☐ Patients who are homeless or at-risk for homelessness
- ☐ Patients who work in agriculture or on farms
- ☐ Patients who are using public housing
- ☐ Patients who are victims of human trafficking
- ☐ Patients who are veterans
- ☐ Patients with opioid use disorder
- ☐ Patients with substance use disorder, other than opioid use disorder

**Q12 Section IV. Screening**

The next set of questions will ask you to provide information about screening and diagnosing for behavioral health disorders.

**Q13 Approximately what percentage of new patients do you screen for the following disorders?**

Anxiety disorders (0–100, NA)

Attention Deficit Hyperactive Disorder (ADHD) (0–100, NA)

Bipolar Disorder (Manic Depression) (0–100, NA)

Clinical Depression (0–100, NA)

Severe Mental Illness (SMI) (0–100, NA)

Substance Use Disorder (alcohol use disorder, opioid use disorder, etc.) (0–100, NA)

**Q14 Approximately what percentage of your patients do you diagnose with the following disorders?**

Anxiety disorders (0–100, NA)

Attention Deficit Hyperactive Disorder (ADHD) (0–100, NA)

Bipolar Disorder (Manic Depression) (0–100, NA)

Clinical Depression (0–100, NA)

Severe Mental Illness (SMI) (0–100, NA)

Substance Use Disorder (alcohol use disorder, opioid use disorder, etc.) (0–100, NA)

**Q15 [DISPLAY LOGIC: Respondent diagnoses any percentage of their patients with anxiety] For approximately what percentage of your patients with a diagnosis of an anxiety disorder are you treating/managing their symptoms of anxiety?**

(Please express your answer as a whole number)

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**Q16 [DISPLAY LOGIC: Respondent diagnoses any percentage of their patients with ADHD] For approximately what percentage of your patients with a diagnosis of ADHD are you treating/managing their symptoms of ADHD?**

(Please express your answer as a whole number)

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**Q17 [DISPLAY LOGIC: Respondent diagnoses any percentage of their patients with bipolar disorder] For approximately what percentage of your patients with a diagnosis of Bipolar Disorder are you treating/managing their symptoms of Bipolar Disorder?**

(Please express your answer as a whole number)

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**Q18 [DISPLAY LOGIC: Respondent diagnoses any percentage of their patients with depression] For approximately what percentage of your patients with a diagnosis of depression are you treating/managing their depressive symptoms?**

(Please express your answer as a whole number)

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**Q19 [DISPLAY LOGIC: Respondent diagnoses any percentage of their patients with SMI] For approximately what percentage of your patients with a diagnosis of SMI are you treating/managing their symptoms?**

(Please express your answer as a whole number)

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**Q20 [DISPLAY LOGIC: Respondent diagnoses any percentage of their patients with substance use disorder] For approximately what percentage of your patients with a diagnosis of substance use disorder are you treating/managing their addictive symptoms?**

(Please express your answer as a whole number)

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**Q21 Rank your level of confidence in your ability to treat/manage the following behavioral health disorders.**

Anxiety Disorders (No Confidence – Very High Confidence, 1–5)

Attention Deficit Hyperactivity Disorder (ADHD) (No Confidence – Very High Confidence, 1–5)

Bipolar Disorder (Manic Depression) (No Confidence – Very High Confidence, 1–5)

Clinical Depression (No Confidence – Very High Confidence, 1–5)

Severe Mental Illness (SMI) (No Confidence – Very High Confidence, 1–5)

Substance Use Disorders (No Confidence – Very High Confidence, 1–5)

**Q22 At your primary practice site, how often do you provide the following behavioral health screening/diagnosing services?**

Focused patient interviewing to diagnose behavioral health conditions (Never – Always, 1–5)

Applying a validated addiction screening tool (e.g. Opioid Risk Tool) (Never – Always, 1–5)

Applying a validated mental health screening tool (e.g. Client Health Questionnaire) (Never – Always, 1–5)

Consulting with a psychiatrist (Never – Always, 1–5)

Consulting with a behavioral health provider (non-psychiatrist) (Never – Always, 1–5)

**Q23 Section V. Management**

The next set of questions will ask you to provide information about managing behavioral health disorders.

**Q24 At your primary practice site, how frequently do you provide the following behavioral health services?**

Providing talk therapy/counseling (Never – Always, 1–5)

Prescribing psychoactive medications to treat addiction (Never – Always, 1–5)

Prescribing psychoactive medications to treat other behavioral health conditions (Never – Always, 1–5)

Creating a behavioral health treatment plan (Never – Always, 1–5)

**Q25 Do you provide any behavioral health services not listed? If so, please detail them below, along with how often you provide the service.**

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**Q26 Approximately what percentage of your patients with behavioral health disorders do you refer to other providers?**

(Please express your answer as a whole number)

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**Q27 Which psychosocial support services are available to patients visiting your primary practice site? (Select all that apply)**

- ☐ Community Health Center / Public Health Clinic
- ☐ Detoxification services
- ☐ Inpatient hospital treatment
- ☐ Medication-Assisted Treatment (MAT) for substance use disorder
- ☐ Opioid Treatment Program (Methadone clinic)

- ☐ Psychiatrist
- ☐ Other physician
- ☐ Other behavioral health provider/counseling services
- ☐ Peer support or 12-Step groups
- ☐ Psychiatric hospital
- ☐ Residential treatment
- ☐ Telepsychiatry, telemedicine, and/or telehealth for behavioral health services
- ☐ No services available

**Q28 How often do you refer patients in the following ways for behavioral health services?**

Community Health Center / Public Health Clinic (Never – Always, 1–5)

Detoxification center (Never – Always, 1–5)

Inpatient treatment (Never – Always, 1–5)

Medication-Assisted Treatment (MAT) (Never – Always, 1–5)

Opioid Treatment Program (methadone clinic) (Never – Always, 1–5)

Psychiatrist (Never – Always, 1–5)

Other physician (Never – Always, 1–5)

Other behavioral health provider/counseling services (Never – Always, 1–5)

Peer support or 12 Step group (Never – Always, 1–5)

Psychiatric hospital (Never – Always, 1–5)

Residential treatment (Never – Always, 1–5)

Telepsychiatry, telemedicine, and/or telehealth (Never – Always, 1–5)