



OKLAHOMA'S BEHAVIORAL HEALTH WORKFORCE: ACTION AREAS

HEALTHY MINDS
POLICY INITIATIVE

January 2021

In *Oklahoma's Behavioral Health Workforce: Greatest Needs*, we summarized Oklahoma's shortages of behavioral health professionals, which will be intensified by the upcoming Medicaid expansion. In this second brief, **we provide a select list of high-priority recommendations and considerations for addressing Oklahoma's behavioral health workforce challenges.** Many of these solutions are informed by best practices and can best be realized through strategic public-private partnerships.

Over the past decade, Oklahoma has thoughtfully examined workforce needs and solutions. The Governor's Council for Workforce and Economic Development's Healthcare Workforce Subcommitteeⁱ worked toward a coordinated state approach for training, recruitment, and retention. The 2011 ODMHSAS-commissioned *Oklahoma Behavioral Healthcare Workforce Study Statewide Report* outlined strong recommendations,ⁱⁱ and the Tulsa Partnership for Children's Behavioral Health collaborative made "workforce retention" one of its strategic priorities in 2019.ⁱⁱⁱ **Although some key solutions have begun to take shape in Oklahoma, others have not been implemented and none have been taken to scale.** Our recommendations, summarized in the "Act" (immediately) and "Consider" (for the future) sections below, and followed by more in-depth analysis, provide a way forward.

ACT

Identify public and private resources for Oklahoma's Mental Health Loan Repayment Revolving Fund so the loan repayment program can be implemented.

- The Mental Health Loan Repayment Revolving Fund (MHLRRF), created in 2019 by Senate Bill (SB) 773, provides for educational loan repayment assistance to providers in Health Professional Shortage Areas whose caseloads include at least 25% Medicaid beneficiaries, people who are uninsured, or both.
- Oklahoma ranks last within the seven-state region (Oklahoma and its six surrounding states), after adjusting for cost of living, in compensation for social workers and psychologists; third for alcohol and drug counselors; and fourth for psychiatrists. Loan repayment programs can offset wages by allowing emerging professionals to retain more of their earnings and reduce educational debt.
- Oklahoma's Physician Manpower Training Commission (PMTTC) is already familiar with managing a loan repayment program and could be a strong partner in administering this one for mental health providers.
- The Governor's Council for Workforce recommended expanding PMTTC's mission to address shortages in other medical specialty areas, including psychiatry. Supply data support this recommendation, as Oklahoma has more primary care physicians, per population, than the national average (though some rural areas still experience shortages), but far fewer psychiatrists, relative to its population, than the national average and well below the estimated need.^{iv}
- To help fund the MHLRRF, Oklahoma should pursue federal Student Loan Repayment Program dollars—a competitive four-year grant cycle program. The next call for applications will be in 2022.

Retain more psychiatrists and increase psychiatry residencies in Oklahoma.

- Over 60% of the physicians who completed Oklahoma residencies from 2009 through 2018 are practicing in-state.^v If Oklahoma could achieve a 75% retention rate of new psychiatry graduates,^{vi} the state could

reach the current national average of psychiatrists in 10 years by adding 28 more residency positions. These efforts could be supported by strong mentorships; sought-after specialty experiences in integrated care, rural settings, and community psychiatry; connecting graduates to loan repayment programs; and increasing positions by pursuing federal grants, working to raise the Medicare cap for residency funding, and adding preceptors and training sites.

- The shortage of psychiatrists is particularly acute in rural areas, community mental health, child/adolescent psychiatry (CAP) and addiction medicine. Training in these areas could be expanded by extending OSU's Office of Rural Medical Education's training experiences to OSU's psychiatry residents, utilizing Certified Community Behavioral Health Clinics as training sites for residents and funding additional CAP and addiction medicine fellowships.

Expand the behavioral health workforce by taking to scale current programs that train primary care providers to detect and treat mild-to-moderate behavioral health conditions.

- The OU HSC Oklahoma Primary Healthcare Improvement Cooperative, funded by ODMHSAS and grants, provides consultative resources, behavioral health diagnosis and treatment manuals, and practice facilitation to primary care providers. This program should be fully supported and taken to scale.
- Project ECHO is a hub-and-spoke network that connects interdisciplinary teams with community providers in virtual clinics to discuss treatment for chronic and complex medical conditions. OSU's ECHO hub can help providers improve access to behavioral health care.
- Oklahoma should establish a psychiatry access network that offers primary care providers, particularly pediatricians, virtual "curbside consultation" to support the initial prescribing and ongoing management of psychotropic medications.

CONSIDER

Increase the numbers of advanced practice registered nurse–psychiatric mental health nurse practitioners (APRN-PMHNPs) in the state.

- The Bureau of Labor Statistics projects the field of APRNs to experience a 26% increase in demand between 2018 and 2028.^{vii} Currently, there are no APRN-PMHNP-specific programs in Oklahoma.
- Create an Oklahoma cohort experience that provides mentorship and local training opportunities for students enrolled in high-quality, online out-of-state APRN-PMHNP programs.

Fund and facilitate the development of an entity that can examine behavioral health workforce data and disseminate best practice solutions.

- In 2006, Oklahoma SB 1394 established the Oklahoma Health Care Workforce Center, but the center has not realized its vision. Solutions include expanding the center to include behavioral health, establishing a partnership with another entity to do this work, or creating a separate center.
- With its existing health workforce efforts in telehealth expansion, rural health care and Project ECHO, OSU may be a natural partner to enhance the existing center.

In future briefs, we will explore additional recommendations, including ensuring full implementation of parity laws to keep wages competitive, maximizing telehealth use by making COVID-19-inspired changes permanent, and expanding non-emergency health care professions compacts to include behavioral health care providers in areas of short supply.

RECOMMENDATIONS—SOLUTIONS THAT CAN BE PURSUED IMMEDIATELY

Identify public and private resources for the Mental Health Loan Repayment Revolving Fund, created by SB 773, so that the program can be implemented.

In 2019, the Mental Health Loan Repayment Act (SB 773) directed ODMHSAS to administer an educational loan repayment assistance program for mental health or substance use treatment providers who serve individuals in Health Professional Shortage Areas and whose caseloads include at least 25% Medicaid beneficiaries, people who are uninsured, or a combination of both. This program offers hope to provider organizations that often have difficulty recruiting and retaining staff because of noncompetitive wages stemming from low reimbursement rates.

Median wages in Oklahoma for social workers and psychologists average around 75% of national wages, indicating that their compensation is below the national average, even considering Oklahoma's relatively lower cost of living. As illustrated in Table 1 on the next page, after adjusting for Oklahoma's cost of living (COL), the state ranks last within its seven-state region (Oklahoma and its six surrounding states) in compensation for these two types of behavioral health care providers, and it ranks third for alcohol and drug counselors and fourth for psychiatrists. Oklahoma has the highest COL-adjusted median wages for advanced practice registered nurses and marriage and family therapists. The appendix on page 15 includes an expanded table of behavioral health occupation wages for the seven-state region). To attract talented behavioral health care professionals, Oklahoma should examine where it stands in relation to regional competition. At 88% of the national level, Oklahoma's cost of living is lower than five of the six surrounding states, a selling point that—if paired with higher wages—employers can market to emerging professionals. Although increasing reimbursement rates and salaries is a more direct lever for attracting workers, loan repayment programs can offset low rates and wages by allowing emerging professionals to retain more of their earnings through reduced educational debt payments.

Loan repayment programs require a commitment from participating professionals to work in a Health Professional Shortage Area (HPSA), typically equal to the number of years of loan repayment. Compared with their peers who did not participate in loan repayment programs, physicians who fulfilled obligations to state programs practiced in needier areas and cared for more patients who were uninsured or insured under Medicaid. Obligated physicians also remained in their practices longer than nonobligated physicians, with half staying over eight years.^{viii} That is, practitioners do not often leave the high-need areas where they were obligated to practice once the loan repayment program ends.

Table 1. A State, Region and National Comparison of Behavioral Health Provider Average Salaries

Occupation	Oklahoma		United States	Six-State Region Comparison ¹	
	Average Salary ²	COL-Adjusted Average Salary	Average Salary	COL-Adjusted Average Salary ³	OK’s COL-Adjusted Rank
Advanced Practice Registered Nurses-Psychiatric/Mental Health ⁴	\$111,400	\$126,018	\$109,820	\$114,906	1
Alcohol and Drug Counselor	\$43,970	\$49,740	\$46,240	\$50,783	3
Marriage and Family Therapist	\$53,300	\$60,294	\$49,610	\$53,534	1
Psychiatrist	\$212,680	\$240,588	\$220,430	\$247,968	4
Psychologist	\$59,470	\$67,274	\$78,200	\$75,791	7
Social Worker ⁵	\$35,000	\$39,593	\$46,650	\$45,075	7
Cost of Living (Percentage of National Level)		88.4%	100.0%	92.3%	--

Oklahoma currently participates in several Health Resources and Services Administration (HRSA) federal loan repayment programs, including the National Health Service Corps (NHSC) Loan Repayment Program (LRP), which offers behavioral health providers up to \$50,000 toward student loans in exchange for a two-year commitment at an NHSC-approved site. The NHSC program also has two programs focused on combating the opioid epidemic—the NHSC Substance Use Disorder Workforce LRP and the NHSC Rural Community LRP. NHSC LRP funding has been found to correlate with positive increases in behavioral health providers serving in HPSAs.^{ix}

One administrator interviewed for this project took the necessary steps to have her substance use treatment program become an approved site for one of the federal LRPs. She described a six-month process, with a narrow window for submitting an application. Her efforts paid off, as several employees who applied experienced a rapid approval process as a

¹ States include Arkansas, Colorado, Kansas, Missouri, New Mexico, and Texas.

² Average wages for all occupations were either median or mean, depending on the type of data available.

³ The table lists the rank of the median wage for each behavioral health occupation in Oklahoma in comparison to the median wages in the six surrounding states. In order to make cross-state comparisons of median wages meaningful, we adjusted each wage by the state’s cost of living using the BLS’s regional price parities. See <https://www.bls.gov/opub/mlr/2016/article/purchasing-power-using-wage-statistics-with-regional-price-parities-to-create-a-standard-for-comparing-wages-across-us-areas.htm>

⁴ Wage data do not distinguish between APRN-PMHNPs from other APRN specialties. APRN Certified Registered Nurse Anesthetists (CRNA), generally the highest-earning specialty, are likely pulling up the average wages.

⁵ BLS classification includes both bachelor’s- and master’s-level social workers.

result of working at a site already approved by HRSA. The administrator said, “Six of my employees each had up to \$75,000 paid toward their student loan debt in exchange for agreeing to remain working [for the program] for three years. They all became debt free, which was life changing for them.” Because the application process can be daunting and time-consuming, provider organizations should be supported through technical assistance or a learning community to pursue this eligibility. Although this federal program is a good resource, more could be done to recruit and retain behavioral health providers if SB 773 were fully implemented.

One potential partner who could bring SB 773 to fruition is Oklahoma’s Physician Manpower Training Commission (PMTC). PMTC is already familiar with implementing and managing a loan repayment program and could be a strong partner in administering the mental health provider loan repayment program. PMTC currently distributes Tobacco Settlement Endowment Trust grants and cultivates matching community funds to support scholarships and loan repayment and subsidize residency programs for primary care providers (PCPs).

In 2016, the Governor’s Council for Workforce and Economic Development’s Healthcare Workforce Subcommittee recommended expanding PMTC’s mission to address shortages in other medical specialty areas, including psychiatry.* Supply data support this recommendation. Oklahoma’s current average of 92.2 PCPs per 100,000 residents is considerably higher than the national figure (56 per 100,000), and higher than the estimated 2025 need of 76 PCPs per 100,000 residents—though some rural areas still experience shortages. However, the number of psychiatrists statewide (10.3 per 100,000 residents)^{xi,xii} lags behind the national average of 12.9 psychiatrists per 100,000 people^{xiii} and is well below the estimated need for 30.3 psychiatric prescribers per 100,000 residents.^{xiv} Although PMTC’s statute, as currently focused, limits its programs to PCPs, expanding that scope could be explored.

A potential federal program Oklahoma could consider is HRSA’s State Loan Repayment Program (SLRP), which provides cost-sharing grants to more than 30 states to operate loan repayment programs as a way of drawing providers to serve in HPSAs. The program varies from state to state, but can include mental health professionals and substance use disorder counselors. **Oklahoma should pursue these federal SLRP dollars to help fund the SB 773 Mental Health Loan Repayment Revolving Fund. The SLRP is a competitive four-year grant cycle program; the next call for applications will be in 2022.**

Increase the number of psychiatry residencies in the state, particularly with placements in community psychiatry and rural areas, and expand fellowship opportunities in child and adolescent psychiatry and addiction medicine.

As noted in our previous brief, the number of psychiatrists retiring from the workforce exceeds the number entering it by a multiple of two.^{xv} Another challenge is that psychiatry residencies have higher attrition rates than other medical specialty programs.^{xvi} The cap on Medicare-funded residency positions has not increased proportionally with population growth, broader insurance coverage, the number of retiring physicians, or the demand for services, further limiting the number of psychiatrists entering the workforce by constricting the number and geographic distribution of these Medicare-funded positions.

Psychiatrists tend to practice where they complete their residencies. More than half (64.5%) of the psychiatrists who completed residency training from 2009 through 2018 are practicing in the state where they did their residency training.^{xvii} Residents of all medical specialties in Oklahoma practice in-state at higher rates than the national average (60.4% vs 54.6%) However, Oklahoma currently has only four accredited psychiatry residency programs to draw these psychiatrists. Three are located in metro areas and all have regularly filled their open slots for at least the last five years.^{xviii}

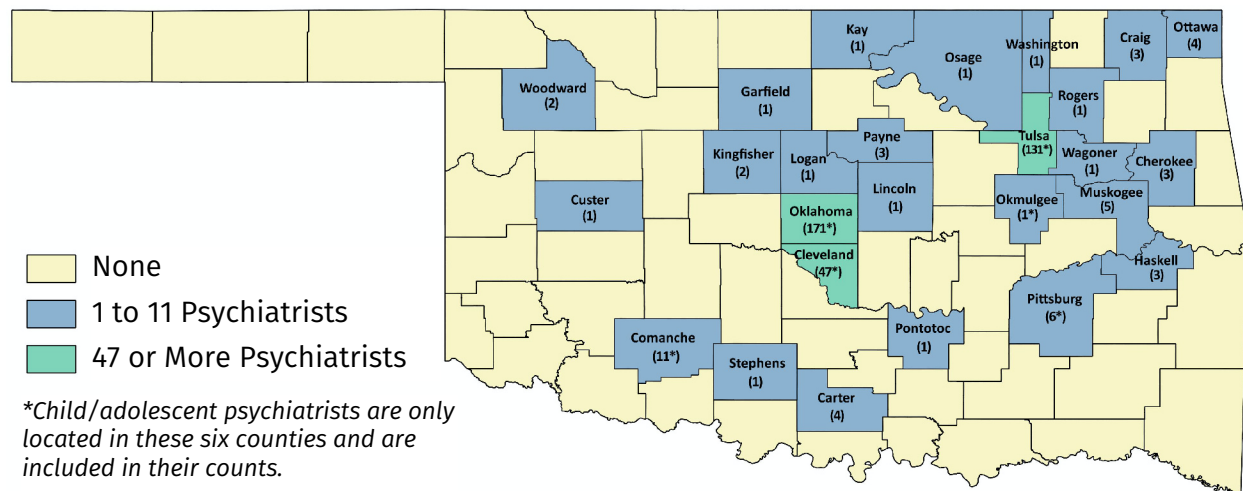
To reach the national average of 12.5 psychiatrist per 100,000 people, Oklahoma would need an additional 87 psychiatrists statewide (2.2 more per 100,000). This could be achieved by either adding residency positions in Oklahoma or increasing the percentage of graduating psychiatrists who choose to practice in Oklahoma—or some combination of the two. Assuming a 60% retention rate, it would take 58 additional residencies (a 64% increase) and 10 years to achieve the national average of 12.5 psychiatrists per 100,000 people. Instead, if Oklahoma could achieve a retention rate of 75%, the state would have 34 of the 87 additional psychiatrists without adding any additional residency positions, and could reach the current national average in 10 years by adding 28 more residency positions. Under any of these scenarios, after 10 years, the number of psychiatrists would steadily grow above the national average. Oklahoma could improve retention through strong mentorship; sought-after specialty experiences in integrated care, rural settings, and community psychiatry training; and increase positions by pursuing federal grant funds, participating in efforts at the federal level to raise the Medicare cap for residency funding, and recruiting and providing incentives to additional training sites and preceptors.

Table 2. Accredited Psychiatry Residencies in Oklahoma

Accredited Psychiatry Residencies	Location	Total Approved Psychiatry Residency Positions	Post-Residency Specializations Available
Griffin Memorial Hospital	Norman	24	
University of Oklahoma Health Sciences Center Department of Psychiatry & Behavioral Sciences	Oklahoma City	22	Child and Adolescent Psychiatry Fellowship, which alternates two slots one year, three slots the next year, for a total of five slots
University of Oklahoma College of Medicine–Tulsa	Tulsa	20	Child and Adolescent Psychiatry Fellowship with two slots per year, for a total of four slots
Oklahoma State University Center for Health Sciences Program	Tulsa	24	Addiction Medicine Fellowship with two approved positions

Psychiatric provider shortages are most severe in Oklahoma’s non-metro areas. For children and youth, the situation is even worse, as demonstrated by the following map. Not only do many counties in Oklahoma lack child and adolescent psychiatrists, in some areas, especially the Northwest region, families have to travel long distances to access these psychiatrists.

Figure 1. Number of Psychiatrists per County in Oklahoma



Existing and new residencies should include opportunities for psychiatrists to gain experience in rural medicine. The University of New Mexico has a dedicated residency track to promote practice in rural areas. After completing this program, 37% of participating

psychiatry residents eventually practice in rural New Mexico, as compared to 10% of other psychiatry residents.^{xix} The University of Oklahoma-Tulsa OU-TU School of Community Medicine residency program provides residents the opportunity to participate in telepsychiatry services offered to patients in rural parts of the state; however, it reports that on-site rotations are a challenge because of supervision requirements.^{xx} Oklahoma State University's (OSU) Office of Rural Medical Education has a Rural Medical Track for medical students, along with other rural training experiences. A partnership with OSU's psychiatry residency program could open up the possibility of a rural rotation experience for residents.

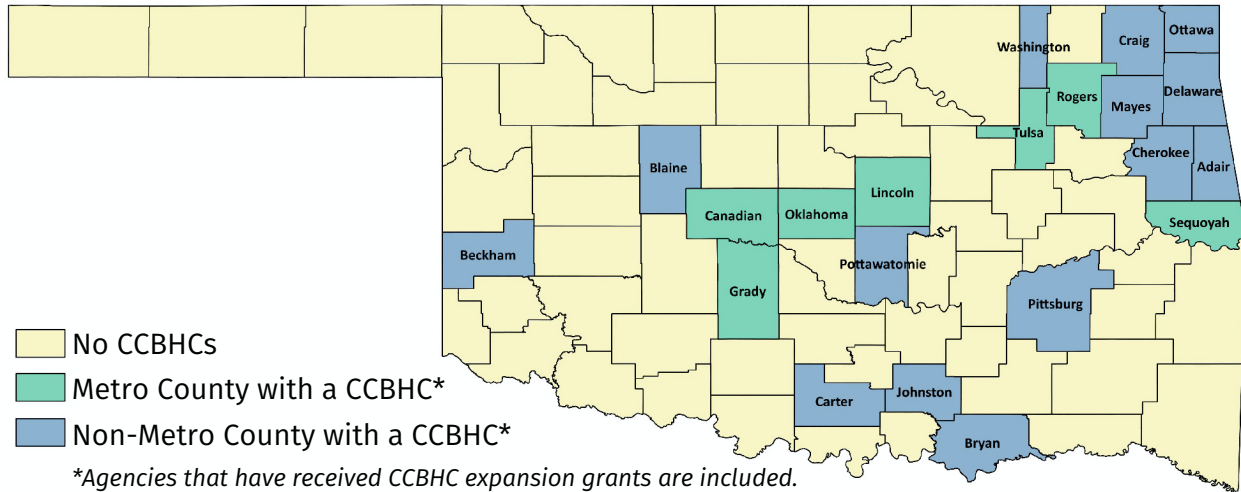
Many of Oklahoma's tribal lands are located in rural areas. Stakeholders interviewed for this project noted the importance of developing stronger partnerships between tribes in Oklahoma and institutions of higher education that are preparing the future behavioral health workforce. "Tribes have a tremendous interest and need in dealing with mental health issues."^{xxi} Tribes often have federal grant resources that can be brought to partnership projects. In the fall of 2020, OSU Medicine and the Cherokee Nation opened the nation's first tribally-affiliated college of medicine in Tahlequah. This may open up future training possibilities and serve as a pipeline for recruiting local Native American medical school graduates to Oklahoma psychiatry residencies.

Many tribal members within Oklahoma receive health care, including behavioral health care, from the Indian Health Service (IHS). However, behavioral health providers cannot assume that IHS can fully meet the needs of tribal members. Some members live in areas where those services are not easily accessed. And key informants from CREOKS, one of the state's CCBHCs that has partnerships with the local tribes, noted that tribal members sometimes seek its services because of the lengthy waitlist for services through IHS. Providers need to have an understanding of tribal cultures and intergenerational trauma among Native Americans when serving most communities in Oklahoma. **Partnerships with local tribes and the IHS that hold promise for training, recruitment, and increased access to services should be explored.** The IHS Loan Repayment Program, like the other federal loan repayment programs mentioned previously, provides an opportunity to attract behavioral health professionals to areas of Oklahoma where clinicians are sorely needed.

Community psychiatry training experiences are also needed. Medicaid expansion will put increased demand on community-serving and public behavioral health care agencies, exacerbating the shortage of psychiatric providers in these settings. A community psychiatry track can be a recruitment tool for students who want to work with underserved populations. These tracks typically include opportunities for disseminating scholarly work and assisting faculty with teaching responsibilities. Faculty mentorship has been a well-received component of these programs and should be prioritized.^{xxii} In Nebraska, the percentage of University of Nebraska Medical Center's students who choose psychiatry has more than doubled to over twice the national average since a strong culture of mentoring

(along with other training innovations) was implemented.^{xxiii} Likewise, Community Behavioral Health Clinics (CCBHCs) in both metro and non-metro areas are excellent training opportunities for psychiatry residents to work with people with serious mental illnesses, who often also have chronic health issues.^{xxiv} Rural CCBHCs⁶ could provide dual training experiences in both community psychiatry and rural medicine.

Figure 2. Certified CCBHC Opportunities for Community Psychiatry and Rural Training in Oklahoma



Fellowships that offer psychiatrists opportunities to specialize after completing their residencies are also needed in Oklahoma. Specialization areas that would particularly benefit the state include child and adolescent psychiatry (CAP) and addiction medicine. Although there are 86 approved general psychiatry residency positions in Oklahoma, only nine CAP fellowship positions exist. Given that Oklahoma has only 26 child and adolescent psychiatrists statewide, this specialization is in dire need of growth. However, there is a challenge in adding more CAP fellowships. For the 2020 National Residential Matching Program cycle, 37.7% of CAP programs had open slots while 17.8% of CAP positions nationwide went unfilled.^{xxv} Training for CAP takes a significant amount of time. After medical school, a candidate typically must spend four years studying general psychiatry and then complete a two-year fellowship in CAP. Some programs allow students to start their CAP fellowship in their fourth year of residency, shortening the process by one year. At the national level, past efforts to recruit additional candidates to these programs have not been successful.^{xxvi} If additional CAP fellowship positions were created, institutions that host these positions would need support for their marketing and recruitment efforts. Providing competitive pay and a robust loan repayment program would be essential steps for keeping these emerging

⁶ For the purposes of this discussion, we are equating “rural” and “non-metro.” Metropolitan statistical areas (MSA) are defined as having at least one urbanized area with a minimum population of 50,000. Some non-metro areas may not technically be considered “rural” because of their proximity to urban areas.

professionals in Oklahoma.

Another sorely needed medical specialization in Oklahoma is in the treatment of substance use disorders. OSU has one Addiction Medicine Fellowship, with two approved positions, accredited by the American College of Academic Addiction Medicine. Possibilities for expanding these positions may exist through OSU's National Center for Recovery and Wellness, which was identified as a recipient of a large portion of the settlement from opioid manufacturer Purdue Pharma.

Expand the behavioral health workforce by taking to scale current programs that train primary care providers to detect and treat mild-to-moderate behavioral health conditions.

Many patients with mild and moderate behavioral health conditions receive medication management through a primary care physician; however, only half of the diagnoseable mental health and substance abuse conditions are detected in primary care, and only half of those whose condition is detected receive any form of treatment.^{xxvii, xxviii} But PCPs can be trained to better detect and treat behavioral health conditions. When they have support from embedded behavioral health specialists and nurse care managers—along with targeted psychiatric consultation for patients with the most serious behavioral health issues or those with complex chronic health issues (fewer than one quarter of all cases^{xxix})—PCPs can vastly expand access to behavioral health treatment for thousands more Oklahomans each year.

Oklahoma has shown that when PCPs receive structured guidance on screening, diagnosing, and treating behavioral health conditions, they can increase their ability to detect behavioral health issues. The OU Health Science Center's Oklahoma Primary Healthcare Improvement Cooperative (OPHIC)^{xxx} has worked with about 60 PCPs to help them implement the Screening, Brief Intervention, and Referral to Treatment (SBIRT) approach as an integrated behavioral health care solution. OPHIC provides research and dissemination capacity for implementing evidence-based best practices, quality improvement techniques, and an array of chronic care improvement resources for primary care practices across the state. Through its SBIRT-OK Project, funded by ODMHSAS, OPHIC has provided practices with academic detailing, practice facilitation, technical assistance, sharing of best practices and performance feedback to help PCPs implement universal behavioral health screening, just-in-time interventions, and referrals for behavioral health treatment. Supporting the expansion of their work would be an ideal way to improve the behavioral health infrastructure in the state.

The OPHIC program, which is funded and otherwise supported by SBIRT experts at ODMHSAS, is perhaps the most important approach that is currently active on a relatively wide scale in Oklahoma. It should be taken to full scale statewide, ensuring that every

primary care provider in Oklahoma has access to it. One way to achieve this scale is to build out an educational pyramid model, in which OPHIC leaders apply their consultative and technical assistance work to identifying primary care provider champions who would be trained in providing peer coaching and practice facilitation. To achieve this, funding mechanisms would need to be developed to support the operations of a growing OPHIC program. Because the Governor has included SBIRT in his set of priorities, a case could be made for more robustly funding the SBIRT dissemination program through ODMHAS. This case could be further bolstered by the fact that untreated depression alone costs businesses nearly \$200 billion nationally.^{xxxii} Also, rigorous programs that help primary care providers treat depression increase remission rates dramatically.^{xxxiii} One way to draw on the resources and skills of primary care provider champions is to give them university adjunct positions, or some other affiliative designation, that would serve as a form of compensation for their time.

Other research-supported approaches that have been found to dramatically increase remission rates for common behavioral health conditions such as depression could also supplement the rigorous approach already available through OPHIC. One such approach is the VitalSign6/SMART-D program from the University of Texas–Southwestern in Dallas.^{xxxiii}

Another way to support PCPs in addressing behavioral health conditions is to establish a psychiatry access network that can provide them with “curbside consultation” that will aid in navigating questions about the initial prescribing and subsequent management of psychotropic medications. The OU-TU School of Community Medicine CAP fellowship program opened a co-located pediatrics psychiatry consultation clinic that allows CAP fellows to develop their consultation skills and helps pediatrics residents increase their confidence in managing mild to moderate psychiatric problems experienced by their patients. Another consultation resource is **Project ECHO (Extension for Community Healthcare Outcomes), a hub-and-spoke knowledge-sharing network that connects interdisciplinary teams with community providers in virtual clinics to discuss treatment for chronic and complex medical conditions. OSU’s ECHO hub could support providers who are focused on improving access to behavioral health.**

Integrated care can be further expanded by working with federally qualified health centers, Comprehensive Primary Care Plus (CPC+) providers, payers, health plan purchasers, and even business leaders and organizations that represent health care purchasers (e.g., the Northeastern Oklahoma Business Group on Health, the Chamber of Commerce). Similar technical assistance units that provide support and training (e.g., OPHIC, mentioned above) to practices that implement integrated care have been established in medical schools. These centers include resources such as a practice facilitator or coach who works with primary care practice groups on real-time implementation, defining team member roles, retooling workflows, supporting quality improvement activities, and establishing learning collaboratives.

The Physician Manpower Training Commission (PMTTC) was identified earlier as a potential partner for administering a loan repayment program. Through PMTTC's support of PCPs and its connections to the agencies where these funded PCPs are located, it could also play a role in furthering efforts to expand integrated primary care/behavioral health care by introducing behavioral health care training and metrics for their funded providers.

Integrated care tracks for emerging behavioral health professionals and certificate programs for established professionals within existing behavioral health training programs should be added to prepare providers for work in integrated care settings.

Much of the training for psychosocial behavioral health providers is still built around the traditional 50-minute psychotherapy hour that occurs in a behavioral health setting that are separate from primary care. Most of these providers have not been trained in the brief interventions and motivational interviewing skills that are key to functioning as behavioral health consultants who are part of an integrated team in a primary care setting. Likewise, psychiatric prescribers often lack the opportunity to train alongside psychosocial providers and learn to become part of team. However, some programs that focus on these integrated care skills do exist, both as part of existing training programs and as opportunities for reorienting mid-career providers.

The Baylor University School of Social Work Integrated Behavioral Health Certificate program prepares behavioral health providers from a variety of professions to work at the highest level of their licenses in a primary care clinic. Program content and skills development are offered in professional roles, ethics, treatment considerations for patients with chronic medical conditions, behavioral health assessment and intervention in a primary care setting, and psychopharmacology. **Oklahoma also has programs that are already participating in this type of interdisciplinary training. As part of its pre-doctoral psychology internship program, the OU College of Medicine Pediatric Psychology Training Program offers an Integrated Behavioral Health Track funded by an HRSA Graduate Psychology Education Grant.** Interns complete major rotations in pediatric primary care and pediatric psychology/behavioral medicine within the University of Oklahoma Health Sciences Center, Department of Pediatrics, as well as minor rotations in both integrated primary care and substance abuse prevention and treatment services at the Oklahoma City VA Medical Center. **Likewise, the OU Center for Social Work in Healthcare (CSWH) in the Anne and Henry Zarrow School of Social Work promotes and supports the optimal use of social workers in health care settings, with an emphasis on primary health care settings,** by offering classes, field experiences, and interdisciplinary training opportunities with the OU Health Sciences Center. The CSWH also has an SBIRT Collaborative that trains students across a number of health profession programs—including dentistry, medicine, nursing, psychology, and social work—in this evidence-based practice.

CONSIDERATIONS—SOLUTIONS THAT WARRANT FURTHER EXPLORATION

Increase the numbers of advanced practice registered nurse–psychiatric mental health nurse practitioners (APRN-PMHNP) in the state.

The Bureau of Labor Statistics projects the field of APRNs to experience a 26% increase in employment opportunities between 2018 and 2028. This rate of growth is much faster than the average for all occupations and ensures prospective nurse practitioners of a high demand for their expertise.^{xxxiv} **Currently, there are no APRN-PMHNP specific programs in Oklahoma. Although establishing such a program in Oklahoma would be ideal, it is complex and costly to do so. Several affordable and accredited online programs exist in other states and are accessible to Oklahomans.^{xxxv} A “cohort” experience—a small community of learners that capitalizes on shared goals and interests and provides mentorship, social support, and local training opportunities—could be created for students enrolling in high-quality, online out-of-state APRN programs.** APRN-PMHNP graduates who attend out-of-state programs could be motivated by the PMTC loan repayment program, which includes APRNs as well as PCPs, to stay on in Oklahoma after they graduate.

Fund and facilitate the development of an entity that can examine behavioral health workforce data and disseminate best practice solutions.

A sustained focus on examining behavioral health workforce data and disseminating best practice solutions is key to addressing a workforce shortage issue that cannot be easily or quickly resolved. **In 2006, Oklahoma SB 1394 established the Oklahoma Health Care Workforce Center (Center), but the Center has not realized its vision.** The Center was designed to collect data, analyze trends in health care worker supply and demand, increase the level of awareness among Oklahomans about opportunities in health care, and improve job satisfaction and retention rates of current health care employees. The appropriations bill for the Center indicates that the Center is eligible to accept both private and public funding, but it is unclear whether a dedicated funding stream was created when the Center was established. Although the Center continues to engage in scholarship and conference activities, it has been without executive leadership for several years and does not appear equipped to fulfill its intended role. **Oklahoma should pursue federal and private funding to expand the Oklahoma Health Care Workforce Center to include a focus on behavioral health, establish a partnership between the center and another institution to focus on these issues, or create a separate center focused solely on behavioral health workforce development.** With its existing health workforce efforts in telehealth expansion and rural health care, along with its implementation of the Project ECHO network, OSU may be a natural partner to enhance the existing Oklahoma Health Care Workforce Center.

The HRSA's Workforce Research Center Program funds eight centers nationwide. These centers conduct original research on various aspects of the health care workforce to provide input on federal policy interests. HRSA releases a federal funding opportunity announcement every four years, which involves a competitive application process; the next cycle is expected sometime in 2022 and Oklahoma should consider preparing an application for this funding. Several entities are eligible to apply, including, but not limited to, states, state workforce investment boards, health professions schools, and academic health centers.^{xxxvi}

Behavioral health workforce data analysis and policy development centers in other states have had a significant impact on workforce issues. Nebraska's Behavioral Health Education Center has achieved outcomes that have benefitted the rural health care workforce, including establishing learning collaboratives for rural health networks, developing a program that introduces behavioral health careers to students from rural areas, and providing support to rural students who are enrolled in community health worker and drug and alcohol counselor programs. The University of Michigan's Behavioral Health Workforce Research Center maps workforce shortages, tracks issues such as reimbursement parity, and strengthens the behavioral health service capacity of primary care providers. The University of Nebraska Medical Center's Munroe-Meyer Institute's Behavioral Health Workforce Education and Training grant program has established or supported the creation of 42 integrated primary care-behavioral health care clinics across Nebraska, including 24 in rural locations and 18 in urban locations.

CONCLUSION

Effective treatment of behavioral health conditions helps people contribute more to their families, the businesses where they work, and their communities. For these reasons, it is important to ensure that people have timely access to the treatment they need when they need it. Without a robust workforce, it is extremely difficult to ensure timely access to behavioral health care and achieve positive outcomes.

Oklahoma, like most other states, faces daunting challenges with its behavioral health workforce. However, if it chooses to embrace a multi-faceted approach such as the one we have described in this brief, Oklahoma has the potential to become a national leader in recruiting and retaining a behavioral health workforce that is fully prepared to meet the behavioral health needs of its residents.

APPENDIX: ADJUSTED WAGES FOR BEHAVIORAL HEALTH OCCUPATIONS IN OKLAHOMA REGION AND NATION

Occupation	Oklahoma	Arkansas	Colorado	Kansas	Missouri	New Mexico	Texas	United States
	Median ⁷	Median	Median	Median	Median	Median	Median	Median
Advanced Practice Registered Nurses - Psychiatric/Mental Health ⁸	\$126,018	\$119,015	\$104,956	\$111,811	\$114,707	\$122,634	\$116,312	\$109,820
Alcohol and Drug Counselor	\$49,740	\$64,572	\$48,557	\$48,600	\$41,340	\$52,722	\$48,905	\$46,240
Marriage and Family Therapist	\$60,294	\$58,839	\$57,566	\$48,211	\$52,162	\$53,952	\$50,475	\$49,610
Psychiatrist	\$240,588	\$211,981	\$238,499	\$284,422	\$272,151	\$263,831	\$216,921	\$220,430
Psychologist	\$67,274	\$75,006	\$88,852	\$68,267	\$79,944	\$73,063	\$69,618	\$78,200
Social Worker ⁹	\$39,593	\$40,914	\$45,888	\$45,967	\$43,164	\$53,194	\$41,322	\$46,650
Cost of Living (Percentage of National Level)	88.4%	85.3%	101.9%	90.0%	88.8%	91.1%	96.8%	100.0%

The table lists the rank of the median wage for each behavioral health occupation in Oklahoma in comparison to the median wages in the six surrounding states (Arkansas, Colorado, Kansas, Missouri, New Mexico and Texas). In order to make cross-state comparisons of median wages meaningful, we have adjusted each wage by the state’s cost of living using the BLS’s regional price parities <https://www.bls.gov/opub/mlr/2016/article/purchasing-power-using-wage-statistics-with-regional-price-parities-to-create-a-standard-for-comparing-wages-across-us-areas.htm>. Of the seven-state region, Oklahoma has the highest adjusted median wages for advanced practice registered nurses and marriage and family therapists. It has the lowest adjusted mean wages for clinical social workers and clinical psychologists.

⁷ Average wages for all occupations are either median or mean, depending on availability.

⁸ Wage data do not distinguish between APRN-PMHNPs from other APRN specialties. APRN Certified Registered Nurse Anesthetists (CRNA), generally the highest-earning specialty, are likely pulling up the average wages.

⁹ BLS classification includes both bachelor- and master-level social workers.

NOTES

- ⁱ Oklahoma Office of Workforce Development. (2020). *Healthcare workforce subcommittee*. <https://oklahomaworks.gov/stateworkforceboard/healthcare-workforce-subcommittee/>
- ⁱⁱ Some of the recommendations compiled by the Advocates for Human Potential are echoed in this brief, See Hornik, J., Carpenter, J., Hanna, J., Huntington, N., Frensley, K., Wright, D., & Byrum, L. (2011, February 14). *Oklahoma behavioral health workforce study: Statewide report*. <https://www.ok.gov/odmhas/documents/Oklahoma%20Behavioral%20Workforce%20Study%20Statewide%202-16-11.pdf>
- ⁱⁱⁱ Tulsa Partnership for Children's Behavioral Health. (2019). *Strategic plan 2019*. <https://static1.squarespace.com/static/5c4f226685ede177fe4f92d2/t/5dcc395564eab80fc6745530/1573665109873/strategic+plan+2019-2020.pdf>
- ^{iv} Estimate does not include prescribers needed for SUD treatment. Konrad, T. R., Ellis, A. R., Thomas, K. C., Holzer, C. E., & Morrissey, J. P. (2009). County-level estimates of need for mental health professionals in the United States. *Psychiatric Services*, 60(10), 1307–1314. <https://doi.org/10.1176/ps.2009.60.10.1307>
- ^v Association of American Medical Colleges. (2019, December). Report on residents, executive summary. AAMC.org. <https://www.aamc.org/data-reports/students-residents/interactive-data/report-residents/2019/executive-summary>
- ^{vi} Nationally, in-state retention rates for psychiatrists are higher than the average for all physician types (65.5% vs 54.6%). The AAMC sources we cited do not report retention rates by the combination of state and medical specialty.
- ^{vii} U.S. Bureau of Labor Statistics. (2020, September 1). *Occupational outlook handbook: Nurse anesthetists, nurse midwives, and nurse practitioners*. <https://www.bls.gov/ooh/healthcare/nurse-anesthetists-nurse-midwives-and-nurse-practitioners.htm>
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- ^x Governor's Council on Workforce and Economic Development Health Workforce Subcommittee. (2016, December 7). *Addressing the physician workforce crisis in Oklahoma* [slides]. <https://www.ok.gov/health2/documents/HWF%20Meeting%202012.7.2016%20Addressing%20the%20Physician%20Workforce%20Crisis.pdf>
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- ^{xii} Oklahoma State Board of Osteopathic Examiners. (2020). *Physician directory–full report* [Data file and code book]. <https://www.ok.gov/osboe/>
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