

## ORIGINAL RESEARCH

# Recruitment and retention of mental health care providers in rural Nebraska: perceptions of providers and administrators

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## ABSTRACT

**Introduction:** The nationwide shortage of mental health professionals is especially severe in rural communities in the USA. Consistent with national workforce statistics, Nebraska's mental health workforce is underrepresented in rural and frontier parts of the state, with 88 of Nebraska's 93 counties being designated as federal mental health professional shortage areas. Seventy-eight counties have no practicing psychiatrists. However, supply statistics alone are inadequate in understanding workforce behavior. The objective of this study was to understand mental health recruitment and retention issues from the perspectives of administrators and mental healthcare professionals in order to identify potential solutions for increasing the mental health workforce in rural communities.

**Methods:** The study used semi-structured focus groups to obtain input from administrators and mental health providers. Three separate focus groups were conducted in each of four regions in 2012 and 2013: licensed psychiatrists and licensed psychologists, licensed (independent) mental health practitioners, and administrators (including community, hospital, and private practice administrators and directors) who hire mental health practitioners. The transcripts were independently reviewed by two reviewers to identify themes.

**Results:** A total of 21 themes were identified. Participants reported that low insurance reimbursement negatively affects rural healthcare organizations' ability to attract and retain psychiatrists and continue programs. Participants also suggested that enhanced loan repayment programs would provide an incentive for mental health professionals to practice in rural areas. Longer rural residency programs were advocated to encourage psychiatrists to establish roots in a community. Establishment of rural internship



programs was identified as a key factor in attracting and retaining psychologists. To increase the number of psychologists willing to provide supervision to provisionally licensed psychologists and mental health practitioners, financial reimbursement for time spent in this activity was identified as important.

**Conclusions:** The present study showed that a comprehensive approach is needed to address workforce shortage issues for different types of professionals. In addition, systemic issues related to reimbursement and other financial aspects must be resolved to strengthen the overall rural mental healthcare delivery system.

**Key words:** access, counseling, manpower, mental health, nursing, provider, psychiatry, psychology, underserved.

## Introduction

Mental disorders are the leading cause of disability and they account for 28.4% of years lived with disability globally<sup>1</sup>. Mental health costs are larger than those associated with cardiovascular disease, diabetes and other chronic disease<sup>2</sup>. Mental health is one of the major health issues in the USA. In 2013, 43.8 million adults, or one in five adults in the USA, had a diagnosable mental disorder<sup>3</sup>. Among those adults with a mental disorder, only 24.4% used outpatient services and 3.3% used inpatient services for mental health issues in the past year<sup>3</sup>. One of the reasons for the limited use of mental health care is the overall shortage and maldistribution of mental health professionals. About half of the world's population lives in a country where there is only one psychiatrist per 200 000 population<sup>4</sup>. The median rate of psychiatrists per 100 000 ranges from 0.05 in low income countries to 8.59 in high income countries<sup>4</sup>. Within higher income countries such as the USA and Australia, there is a severe shortage of mental health professionals, and challenges recruiting and retaining mental health professionals in rural and poor communities<sup>5-9</sup>. In the USA, 85% of federally designated health professional shortage areas (HPSAs) for mental health are rural<sup>10</sup>.

For decades, workforce shortage, especially mental health professional shortage, has been a serious public health problem in many rural US states including Nebraska<sup>11</sup>. Nebraska is located in the Midwest region of the USA. With 1.8 million residents, Nebraska is ranked 38th out of

50 states for its population size<sup>12</sup>. Close to 90% of the cities in Nebraska have fewer than 3000 people<sup>12</sup>. Eighty-eight of Nebraska's 93 counties are designated as federal mental health HPSAs. Eighty counties have a psychiatrist-to-population ratio below the federal HPSA ratio of 1:30 000 and 78 counties have no practicing psychiatrists (Fig1)<sup>11</sup>.

In 2009, the passage of legislative bill 603 established the Behavioral Health Education Center at the University of Nebraska Medical Center (UNMC) to support the increase of recruitment, retention, and competency of behavioral health workforce<sup>13</sup>. Since 2011, Behavioral Health Education Center has sponsored studies to examine characteristics of mental health professionals and geographic and time trends of mental health workforce in Nebraska. These studies found considerable differences in demographic characteristics and the number of active practitioners across different types of mental health providers<sup>11,14,15</sup>. For example, more than 70% of actively practicing addiction counselors and psychologists are nearing the retirement age (50 years and older) while other providers are relatively young<sup>15</sup>. Prescribers such as psychiatrists and advanced practice registered nurses (APRNs) specializing in psychiatry are concentrated in metropolitan communities while non-prescribers such as psychologists, licensed mental health practitioners, and addiction counselors are more evenly located throughout the state<sup>15</sup>. Between 2010 and 2014, there was a decrease in the number of psychiatrists (-3.1%) while there was an increase in the number of APRNs practicing psychiatry (+25.6%)<sup>15</sup>. One of the major contributors to the increase in the number of psychiatric nurses is the presence of nursing programs in



rural communities and a historical emphasis on rural nursing programs. The UNMC has five nursing campuses throughout the state, three of which are located in rural communities. In more recent years, two medical schools (UNMC and Creighton University) have placed more efforts into their rural residency programs; however, the impact on the psychiatrist supply may take some time to be seen.

Although supply statistics are important for monitoring workforce trends, supply statistics alone are inadequate in understanding workforce behavior. Research has been conducted to identify reasons for difficulty recruiting and retaining mental health professions in rural communities and potential solutions to address shortage of mental health professionals. Most of the studies have focused on recruitment and retention of psychiatrists and rural residency and loan repayment programs to attract psychiatrists to rural communities<sup>5,7,16-18</sup>.

Identifying recruitment and retention factors specific to mental health providers in rural communities is an important step in developing strategies for increasing the rural mental health workforce. The objective of this study was to understand mental health recruitment and retention issues from the perspectives of various types of mental healthcare professionals and administrators in order to identify potential solutions for increasing the mental health workforce in rural communities.

## Methods

This qualitative study used semi-structured focus groups to obtain views and experiences of administrators and mental health providers. Nebraska is divided into six mental health regions, in which the state partners with local units of governments to plan and implement public mental health services (Fig1). Each region contracts with providers in its own area to provide public mental health services; as necessary, regions will contract with other service providers across the state. Some psychiatrists and psychologists also practice privately in these areas. For this study,

administrators and mental health providers were recruited from four rural mental health regions, all of which are designated as mental health HPSAs.

In addition to psychiatrists, the following licensed specialists typically provide mental health care in Nebraska: psychiatrists, psychologists, APRNs specializing in psychiatry, physician assistants specializing in psychiatry, licensed independent mental health practitioners (LIMHPs), licensed mental health practitioners (LMHPs), and addiction counselors<sup>19</sup>. Psychiatrists, APRNs, and physician assistants are often grouped together as 'prescribers' because they can prescribe medications to the patients. Non-prescribers provide a wide range of assessment and treatment services and are often the first and main contacts for patients with mental health problems who seek care in rural communities. LMHPs and LIMHPs have similar scope of work but LMHPs need to consult or to make a referral in some circumstances.

Three separate focus groups were conducted in each region: licensed psychiatrists and licensed psychologists, LIMHPs and LMHPs, and administrators (including community, hospital, and private practice administrators and directors) who hire mental health practitioners. Participants were recruited by letter from the mental health regional administrator or the Behavioral Health Education Center. Focus groups were limited to 12 participants.

Following Krueger's recommended focus group methodology<sup>20</sup>, a semi-structured question guide was developed consisting of nine open-ended questions to explore the perceptions of the participants in relation to three categories (Table 1): factors affecting recruitment or retention of mental health providers in the participants' region, benefits of the area and/or of rural mental health jobs, and solutions to improve recruitment and/or retention of mental healthcare providers in the participants' region or the state. Twelve focus groups were conducted from November 2012 to March 2013. Each 60-to-90 minute group took place in a meeting room at the regional mental health office, a hospital, or a community provider group office. The



focus groups were facilitated by one of the authors. Another author observed all groups.

All focus group sessions were audio-recorded. Each audio file was transcribed in full, with redaction of names and other information that could lead to recognition of a participant. Participants gave their informed consent to be part of the research, in accordance with standards of the University of Nebraska Medical Center Institutional Review Board, which approved the study.

For the first four focus group transcripts, the facilitator and the observer independently encoded participants' comments according to themes identified as pertinent to the study questions. The encodings of the two researchers were compared in order to reach a final result. In the event of disagreement, the coding in question was discussed, and convergence of views was achieved. The facilitator encoded the remaining eight transcripts independently, and the observer conducted random sampling of coding to ensure continued reliability of coding. Analysis took place in three distinct phases: comments were identified in the transcription that related to problems with recruitment/retention or suggested solutions to recruitment/retention problems, comments were further examined to identify themes for each provider group, and themes were compared between provider groups to identify themes that were common across all or most provider groups.

## **Ethics approval**

This study was approved the University of Nebraska Medical Center Institutional Review Board, approval number 393-12-EP.

## **Results**

### **Factors affecting recruitment or retention**

**Theme 1. National and local competition:** Many rural providers and administrators reported that competition for

psychiatrist applicants is high, due to short supply nationwide, high salaries offered in more desirable places, the draw of private practice, and hiring competition among local agencies. Two areas reported having had psychiatrist positions open for up to 8 years, even when using a recruitment agency, with few applicants brought in. One region reported having had to bring in at least 12 applicants before finally hiring a psychiatrist. Respondents also indicated that it is difficult to hire psychiatric APRNs due to applicants having many other options, including local competition.

**Theme 2. Medicaid:** Medicaid was established to help with medical costs for individuals with limited financial resources<sup>21</sup>. The program is jointly sponsored by the federal and state governments, and eligibility and coverage differs among states<sup>21</sup>. Respondents reported that Medicaid's requirement for prior authorization for medications is a strain on providers and a barrier to recruitment and retention:

*[Providers are] shocked by ... the amount of time that has to be spent not in direct client care because of [the prior authorization requirement].*

Another participant noted:

*You can't bill if you go to an emergency room for Medicaid because they don't pay for that.*

Even in private practice, some said, low Medicaid reimbursement 'pays enough to pay the ancillary staff, but not enough to pay the physician'.

**Theme 3. Pay:** The need for competitive pay was emphasized in all provider groups. The inability to offer competitive pay reportedly is caused by lack of funding and poor reimbursement rates. One administrator stated:

*Two-thirds of our revenue comes from state, federal, and county dollars. So only one-third ... is coming from other sources, and that's a scary mix.*



**Table 1: Focus group question guide**

Category	Question
Factors affecting recruitment or retention	1. What do you notice about mental health providers in this region, including psychiatrists, psychologists, LMHPs, nurse practitioners, physician assistants, or any other mental health provider group?
	2. What has been your experience hiring and retaining mental health providers in your office/clinic/hospital?
	3. What do you think would be the primary reasons a mental health professional might not stay in this area?
	4. What issues regarding recruitment and/or retention of mental health workers in rural areas are unique to Nebraska?
Benefits of the area and/or rural mental health jobs	5. For a mental health professional, what do you think are the pros and cons of working in this region?
Solutions to improve recruitment and/or retention	6. How do mental health providers connect to others in their field? What professional resources currently support behavioral health providers in this region? What additional resources would enhance support to these providers?
	7. What is the best way to get mental health professionals to work and stay in this area?
	8. Of the approaches to improving recruitment and retention offered by the World Health Organization <sup>1</sup> , which do you think are most applicable to Nebraska?
	9. Any other thoughts about why mental health professionals would come here to work or would leave the area?

<sup>1</sup>See Figure 1.

LMHP, licensed mental health practitioner

1. Target educational admission policies to enroll those with a rural background.
2. Locate schools, campuses, and residency programs outside of major city areas.
3. Expose undergraduates to rural community experiences.
4. Include rural health topics in educational curricula.
5. Design continuing education programs that meet needs of rural health workers.
6. Use fiscal incentives.
7. Improve living conditions/infrastructure.
8. Provide a good and safe working environment.
9. Implement outreach activities to facilitate cooperation between areas.
10. Develop and support career development programs.
11. Support development of professional networks.
12. Adopt public recognition measures.

**Figure 1: Summary of mental health provider recruitment/retention recommendations.**

Respondents agreed that cutting revenue dollars according to per capita allowance differentially affects rural agencies due to having less money available for basic programming and infrastructure. One person indicated:

*We get the smallest budget, but we have to travel the most.*

Lack of funding was reported as problematic even in hiring behavioral health providers not required to be licensed, such as technicians and residential workers, community support workers, and foster care workers. Respondents reported:

*It's very, very difficult to get the bachelor's level.*



Some regions indicated they pay less than the State of Nebraska's pay scale for comparable workers, and several said they cannot compete with retail stores in their area that often pay workers more.

**Theme 4. Licensing requirements:** Delays in processing licensure applications at the state level, as well as credentialing with health maintenance organizations (HMOs), were cited as problematic in trying to hire most provider types. One respondent stated:

*Usually, when we interview people, they want to start tomorrow, and we've got to wait, usually at least 90 days ... and that's if the credentialing turns around [quickly], because you have to do Medicaid first and then [HMO], and they won't start one until [the other] one's done. So we've actually lost a mid-level hire over that.*

Another respondent indicated that while waiting for credentialing to be completed, a provider is unable to see patients.

*You can't bill, and we're not getting reimbursed.*

As with other types of providers, provisionally licensed mental health practitioners sometimes experience long delays after submitting their applications to the state for full licensure. Such delays also create financial difficulty for the agencies wanting to hire these providers, as agencies are unable to bill for providers' services until they are licensed.

**Theme 5. Supervision:** Many provider groups reported that after providers' educational requirements have been met, trainees in rural locations have difficulty obtaining the supervision required for licensure. Psychologists in private practice, who are reportedly willing to supervise provisionally licensed mental health practitioners and provisionally licensed psychologists, are unable to do so because they are not reimbursed for time spent providing supervision. Even when there are potential supervisors on site agencies reportedly cannot afford to reduce the

provider's caseload to allow them supervision time. One administrator explained:

*I try not to hire a provisional LMHP because there are so many payers that don't pay you for that.*

Also cited was concern of supervisors regarding professional liability for the supervisee's actions. In addition, administrators expressed concern that if a provisionally licensed therapist leaves after a year of intensive supervision supported by an agency's resources, the agency essentially loses its investment. For psychiatrists, a lack of local supervising psychiatrists and the need for medical authorizations were also reported as problematic.

**Theme 6. Education and training:** Several factors were cited as barriers to hiring LMHPs with the licensed alcohol/drug counselor credential, including inability of mental health practitioners to obtain necessary coursework or supervised experience required for licensed alcohol/drug counselor licensure, and the cost of the training process. Costs include coursework fees, travel to classes, time away from work, and continuing education requirements. Numerous respondents indicated that the closing of a state psychiatric hospital, the site for Nebraska's only rural psychology internship program, resulted in a dearth of students who have experienced a rural area and in students leaving the state for training elsewhere, thus becoming lost to the Nebraska pool of providers. Losing this training center reportedly also further reduced the opportunity for provisionally licensed psychologists to obtain their required year of supervision in a rural Nebraska location, thus decreasing the likelihood that they would apply for a position in rural Nebraska post-licensure.

**Theme 7. Workload and resources for complex cases:** The burden of not having others with whom to share the patient load, and consequently having little downtime, was thought to be both a reason applicants do not take jobs in rural areas and a factor that has contributed to losing providers in the past. Many groups reported having too few professional resources and agencies to which they can refer



complex patients, and believed this affects hiring and retention of behavioral health workers. This lack of resources was cited by a majority of focus groups, as was a specific need for prescribers and chemical dependency services.

**Theme 8. Isolation:** Isolation in rural areas was cited as a significant deterrent for some individuals in all provider groups, and particularly for psychiatrists. Professional isolation reportedly often means having to see everyone in a given area who needs psychiatric treatment, and often being the only person on call or doing hospital rounds.

**Theme 9. Spouses:** Lack of opportunity for employment for a spouse was cited as problematic by many respondents. For LMHPs in particular, having a spouse who is tied to farming or other local industry was reported to often keep them in the rural area but limit access to professional education and jobs. Numerous subgroups indicated that not being able to offer a psychiatrist's spouse employment opportunities is a significant problem in recruiting and retaining psychiatrists.

**Theme 10. Cultural differences:** Several regions reported that foreign-born providers sometimes have difficulty adjusting to jobs in rural areas. Problems cited included difficulty learning cultural nuances, a language barrier that made it hard for patients to understand the provider, and experiencing racism in some cases. One group mentioned perceiving some foreign-born providers as having a cultural expectation of a top-down hierarchy (a perception also attributed by some participants to psychiatrists in general), resulting in dissatisfaction and perhaps distancing by colleagues.

### *Benefits of the area and/or rural mental health jobs*

**Theme 1. Safe and family-friendly environment:** Rural Nebraska is a wonderful place to raise a family.' In general, respondents believed that rural Nebraska provides a particularly positive environment for providers who wish to

raise a family in an area that is safe, free from problems like graffiti, and less traffic on the commute to work.

**Theme 2. Positive teamwork:** Respondents from several regions reported experiencing positive teamwork among providers in their rural agencies and with others in the community, and they saw this as beneficial in hiring and retaining behavioral health workers. They indicated that they can call, and can count on, each other for assistance with clients.

### *Solutions for improving recruitment and/or retention*

**Theme 1. Higher pay and perks:** Although participants in one administrative subgroup reported that pay for psychiatrists is good in their area, the general perception was that pay for psychiatrists in rural Nebraska is not high enough to attract them and is lower than in metropolitan areas, not to mention other parts of the country. Some groups indicated that applicants likely expect higher pay for working in a rural area and suggested that offering more money might make a difference; however, others reported they doubted this would help. One group suggested paying double for residents; another suggested offering hardship pay. One group indicated that offering family housing is attractive, and another suggested offering potential hires a long-term contract and a guaranteed salary.

**Theme 2. Rural residency:** The strongest recommendation for improving recruitment of psychiatrists to rural Nebraska was developing one or more rural residency programs. A majority of subgroups made this recommendation, as did all psychiatrist groups. Many emphasized the importance of familiarizing a potential candidate with the area, and the need to include the family, when possible, to help them integrate into the community. Respondents felt that a rural residency would attract medical residents to the area and allow them to engage with and learn 'hands-on' how to work with community workers. It was strongly urged that residency program placements be for a period of several years, as participants felt that, until a



resident lives in a rural area, he or she is not going to know what it is like. One respondent said, hopefully:

*By the time your J-1 [visa] is over and you're able to leave, you have roots in the community, your kids have already been in school for the last 4 years, you've already made friends, you've established a practice.*

The Exchange Visitor (J) non-immigrant visa is for individuals approved to participate in work- and study-based exchange visitor program<sup>20</sup>.

**Theme 3. Internship and supervision:** The most cited solution for increasing psychologist hiring and retention in rural areas, proposed by all regions, was creation of a rural psychology internship site that would provide supervision to pre-doctoral interns and postdoctoral provisionally licensed psychologists. One group indicated the goal should be:

*to build a core of fully-licensed psychologists ... so that you would have enough supervisors to bring interns or post-docs in, because they need to be on-site.*

Providing post-doc supervision was deemed important because otherwise:

*... people would finish their internship here ... then they'd have to leave ... if they want to go do an actual true APA [American Psychological Association]-approved internship.*

**Theme 4. Loan repayment:** Although one respondent reported loan repayment was not enough to bring psychiatrists to the area and another reported a psychiatrist had moved soon after his loan was repaid, many respondents felt that loan repayment could encourage psychiatrists to rural areas, particularly early in their career. Respondents reported that if a psychiatrist has an opportunity to integrate into the community and possibly start a family, he or she may want to stay. Three of the four regions recommended offering psychologists additional opportunities for loan repayment as a strategy for increasing hiring and retention of psychologists in rural areas. Loan repayment was also

recommended by three regions as helpful in recruiting LMHPs. An administrator group in one region said the region included a National Health Service Corps-approved site, which has been helpful in recruiting mental health practitioners:

*They've all just stayed, even after their loans are done.*

Another respondent said:

*Exposing people in the rural area to counseling as [a career] option ... might start them on that path that ... leads to somebody being homegrown and wanting to be here.*

**Theme 5. Training:** Many mental health practitioners reportedly have a spouse whose job determines where they live, and many respondents identified this factor as a reason to bring advanced education and training to rural areas. All regions recommended providing more training opportunities to local individuals as an important way to improve availability and retention of LMHPs in their regions. A lack of social work training programs in rural Nebraska was mentioned as problematic, as Medicare apparently only will pay for services provided by an LMHP, if they are also licensed as a social worker. Medicare is the federal health insurance program, different parts of which cover healthcare services for individuals 65 years and older, younger individuals with disabilities, and individuals with end-stage-renal disease<sup>10</sup>.

**Theme 6. Medical staff privileges:** One group recommended granting psychologists medical staff privileges in more rural hospitals. Doing so would expand the pool of available attending providers and address the problem of psychologists not being paid by Medicaid when providing some of the same services provided by psychiatrists on an inpatient basis.

**Theme 7. Telemedicine:** Although not a solution to hiring or retaining psychiatrists, telemedicine was presented as a solution to not having enough prescribers in the rural areas, and already was reported to be working well for medication



management in one region. The suggestion was made that provisional non-prescribing providers also could be supervised via telemedicine by psychologists, depending on supervision and licensing requirements. Providing therapy via telemedicine was mentioned as a way for LMHPs to get achieve experience required for full license faster when hired. In addition, administrators indicated that an:

*... agency doesn't lose revenues [for telehealth] because they can bill for telehealth services.*

However, the time involved in setting up and doing paperwork on the receiving end that is necessary for reimbursement was mentioned as problematic, along with a need to streamline processes and regulations regarding telemedicine. One suggestion was for Medicaid to consider paying local staff for their time in setting up and doing paperwork as a cost offset.

### **Theme 8. Combining resources to afford a position:**

A psychiatrist focus group suggested that rural areas combine to fund a psychiatrist position in a variety of settings, offering a fixed schedule, relief from weekend or holiday call, and time off. One person said:

*All these small communities ... they've got to come together and say ... 'I've got enough for one day, so I can chip in for you.' One person moonlighting in different places, that is the only, only way.*

**Theme 9. Marketing strengths and benefits:** Some groups felt that national recruiters are not an effective way of marketing to potential psychiatrist applicants:

*They don't get small-town life ... they're not going to highlight the things that someone would be attracted to here.*

One suggestion that emerged from two regions was to create a video specific to the area that would highlight the community, including key providers and resources in the area. Some groups felt that marketing approaches needed to be specific about the job as well as the area, and that current

staff members who would have contact with interviewees needed to know the information and feel positive about the benefits as well. One psychiatrist group suggested that marketing for a psychiatrist to work in frontier or remote areas of the state may need to focus on candidates who want to take on the challenge of a 'Peace Corp kind of mission,' where they are going to be trailblazing and establishing services:

*That's a whole different campaign and it needs to be marketed to a different group of people.*

## Discussion

In 2007, the Annapolis Coalition proposed a framework for mental health workforce development<sup>21</sup>. The Annapolis Coalition's action plan called for broadening the concept of workforce, strengthening the workforce, and enhancing structures to support the workforce. The need for broadening of the scope of workforce has been emphasized in the commentary by Hoge et al. in more recent publications<sup>22</sup>. In the present study, a range of mental health providers including both prescribers and non-prescribers were included to gain input from different types of professionals.

General consensus emerged among groups around the likelihood of having greater success in hiring rural behavioral health providers when the potential provider has roots in the specific area, or in a rural area elsewhere. Such a provider was thought likely to have a better understanding of, and appreciation for, the culture and/or the natural 'draw' of having family in the area. Other factors cited as important to look for when hiring for the rural area were having personal initiative, being a good networker, and loving to serve. Encouraging local people to consider careers in behavioral health was cited as potentially being helpful in later hiring them as providers. However, having to travel in order to get the education required is often problematic.

According to a US national survey of rural hospital administrators, on average 18 total professionals per hospital



were needed<sup>8</sup>. The administrators reported having the most difficulty recruiting psychiatrists (89.9%) followed by nurse practitioners (70.6%) and psychologists (70.2%)<sup>8</sup>. The present study found that rural hospitals are in fierce competition with urban hospitals in and outside of the state. Hospital administrators expressed great frustration with recruitment of psychiatrists. In Nebraska, having a vacant psychiatrist position for a few years is not uncommon but the impact of the absence of psychiatrist is much larger in rural hospitals where the absolute number of psychiatrists is already low. The present study's supply data analysis shows that the total number of psychiatrists slightly decreased between 2010 and 2014 (-3%)<sup>15</sup>.

Previous research found that spending one's childhood in a rural location and identifying a rural location to be one's childhood home is the strongest predictor of rural practice choice<sup>23-25</sup>. Interestingly, one previous study found that rural clinical training through extended placements in rural clinical school was a stronger predictor than rural upbringing of expressing preference for rural placement<sup>26</sup>. The focus group data from the present study indicated that most physicians in the J-1 visa program left rural communities following the completion of the obligatory 3-year commitment.

Overall, the focus group participants from this Nebraska study reported that the J-1 visa participants were more likely to leave rural Nebraska when compared with those enrolled in the state loan repayment program. The study identified the need to extend the commitment period and increased efforts to integrate these physicians and their families into the rural communities.

Review studies of interventions to improve rural health workforce have found a moderate level of evidence to support the effectiveness of loan repayment programs and other financial incentives<sup>27,28</sup>. Bärnighausen et al. reported that participants in financial incentive programs were more likely to practice in rural settings than were non-participants, and that although some providers changed practice sites, many tended to move from one underserved area to another<sup>28</sup>. However, because studies of financial interventions

are observational (no randomization of participants), the observed 'effectiveness' of the program may be due to the fact that those who apply to the loan repayment and scholarship programs are more inclined to work and stay in rural settings than those who do not. Nevertheless, Bärnighausen et al. concluded that their results support the notion that financial incentive programs have helped improve the rural workforce<sup>28</sup>. However, their participants also stated that the current loan repayment application process is too complex and time consuming. They expressed interest in setting up loan repayment programs or other financial incentive programs if they could receive guidance from the state or federal government and professional organizations.

A qualitative study conducted in Australia by Moore et al. reports a negative perception about mental health and mental health profession by individuals who are potential candidates for future mental health providers<sup>29</sup>. A longitudinal study of psychiatric nurses conducted in the UK suggested a high level of dissatisfaction with pay in relation to the level of responsibility<sup>30</sup>. Other barriers and facilitators of better recruitment and retention include promotion of area and organization, adaptability to individual and community needs, leadership and management<sup>7</sup>.

Rural residency and internship programs were recommended for psychiatrists and psychologists<sup>31</sup>. Outcome studies looking at rural residency programs in family medicine reported that a high proportion of graduates actually chose to practice in rural settings<sup>32,33</sup>. However, few studies exist on rural residency specific to mental health providers<sup>34</sup>. Because infrastructure is already in place for physicians and other health professionals, using this mechanism to increase the number of mental health professionals in rural areas may be a worthwhile investment of time and effort. Many participants in the present study's focus groups stated that rural rotations and residency programs are too short for the participants to really understand the challenges and benefits of working in rural settings. One potential area of research should be to assess an optimal duration for residency and essential topics to be covered in order to maximize outcomes.



Even if healthcare agencies can successfully recruit providers to work in their rural communities, the stringent financial environment and administrative resource limitations may discourage providers from remaining in the area. Providers widely perceive Medicaid reimbursements to be lower than other insurer's rates. Although Medicaid reimbursement rates for mental health services generally do not vary by practice location, low reimbursement rates, a high amount of paperwork, and requirements regarding precertification for medication may have a greater negative impact on the financial viability of rural mental health practices than on their urban counterparts. Serving a much smaller patient base, rural practices have difficulty taking advantage of scale economies or shifting costs from Medicaid patients to private patients. The present study's results suggest that low Medicaid reimbursement rates contribute to the problems of not being able to offer a competitive salary, having fewer resources available for basic programming and infrastructure, increased burnout due to processing paperwork, and lack of reimbursement for providing supervision among rural mental health practices.

## Conclusions

In Nebraska, where 89 out of 93 counties are designated federal mental health professional shortage areas, administrators face a serious challenge with recruitment and retention of mental health providers of all types. The problem is most pronounced for psychiatrists; it was not uncommon to have a vacant position for more than few years. As suggested by previous studies, participants recommended hiring individuals who are from rural communities or exposing individuals to rural environments through the rural residency program. Nebraska historically has a strong rural nursing program through multiple rural campus locations, which seems to have made a positive impact on the recruitment of nurses into rural locations from 2010 to 2014. However, the number of psychiatrists slightly declined during the same period, possibly indicating a different or additional strategy may be needed to boost recruitment and retention of this profession. The present study found that low

reimbursement and excessive paperwork related to Medicaid may negatively impact retention of mental health providers regardless of provider type. In small rural practices where proportionately large numbers of patients are using Medicaid benefits<sup>35</sup> reimbursement is low and the cost of hiring staff to do necessary paperwork or of giving providers time to do their own paperwork reportedly is prohibitive<sup>36,37</sup>. It is yet to be seen how the expansion of Medicaid enrollment through the *Affordable Care Act* will impact the rural mental health practices and patient outcomes in Nebraska and other rural states. This study, along with previous research on the mental health workforce, has identified potential strategies to improve the access to mental health care in rural communities. Future research should focus on evaluation of these strategies for psychiatrists and other mental health care professions.

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