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LITERATURE REVIEW OPEN ACCESS

Family Nurse Practitioners Bridging Rural Gaps in Anxiety and Depression Management

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Abstract

Purpose: This review explores the important role that Family Nurse Practitioners (FNPs) play in addressing mild to moderate anxiety and depression in rural primary care settings. With limited to no access to psychiatric providers, rural communities often rely on FNPs to bridge critical gaps. This paper highlights practical, evidence-based approaches tailored to the unique challenges of rural healthcare, including provider shortages, stigma, and geographic location.

Methods: A review of clinical guidelines and peer-reviewed literature published between 2020 and 2025 was conducted. The focus was on tools and strategies that support FNPs in assessing and managing anxiety and depression rural settings.

Findings: In many rural areas FNPs often serve as the primary, and sometimes only, mental health providers. Their role includes early screening, diagnosis, treatment planning, and ongoing management. Validated tools such as the PHQ-9 andGAD-7 help guide clinical decision-making and track progress over time. First-line treatments typically include selective serotonin reuptake inhibitors (SSRIs) and serotonin-norepinephrine reuptake inhibitors (SNRIs). When access to

medication is limited, nonpharmacologic interventions such as cognitive behavioral therapy (CBT), behavioral activation, lifestyle changes, and community-based support become even more valuable. Telehealth and collaborative care models are increasingly used to improve access, reduce barriers and support continuity of care in rural areas.

Discussion: FNPs are well positioned to respond to mental health needs in rural communities. By combining practical tools, evidence-based treatments, and flexible care delivery models-including telehealth., FNPs can expand access to care and help reduce mental health disparities. Their unique position in primary care allows them to build trust, deliver holistic care, and make a meaningful impact on the mental well-being of underserved rural populations.

Keywords: Practice guidelines, literature review, mental health, FNP

Family Nurse Practitioners Bridging Rural Gaps in Anxiety and Depression Management

Anxiety and depression are two of the most frequently encountered mental health conditions among Family nurse practitioners (FNPs) working in rural primary care. Together, they affect roughly one in five adults in the United States annually totaling over 50 million individuals (National Institute of Mental Health [NIMH], 2023). The impact of these conditions is often magnified in rural settings, where timely access to care is limited. Geographic isolation, provider shortages, and transportation barriers contribute to extended delays in diagnosis and treatment (Rural Minds, 2023a; Rural Minds, 2023b; NIMH, 2023).

Several factors compound the challenges rural residents face, including persistent workforce shortages, poor broadband access, long travel distances, and stigma surrounding mental illness (Rural Health Information Hub [RHIhub], n.d.-b). Rurality, in this case, implies a geographic isolation between the residential and/or working location of individuals from more urban areas, where resources are more likely to be found (RHIhub, n.d.-a). Travel distance between an individual's regular locations and the resources needed for physical and mental health services creates a significant barrier to care. These barriers increase the risk of untreated anxiety and depression. Family nurse practitioners are in a unique position to help bridge these gaps by delivering holistic, evidence-based care. Their ability to combine pharmacologic and nonpharmacologic therapies, utilize telehealth technologies, and build lasting community relationships allow them to improve access, engagement, and long-term outcomes for rural patients.

In many rural regions, FNPs serve as the primary and sometimes only mental health providers available. Their role spans from screening and diagnosis to initiating treatment and follow-up, often without access to specialty psychiatric support. The growing use of telehealth platforms and clinical decision support tools, including emerging applications of artificial intelligence (AI), presents opportunities to improve diagnostic precision, medication safety, and access to behavioral health expertise in underserved areas (Hilty et al., 2022; Gerke et al., 2020).

This article explores evidence-based strategies that FNPs can apply to improve rural mental

health care, with a focus on early identification, coordinated management, and technology-supported service delivery.

Background and Significance

Rural populations face a distinct set of challenges in accessing timely and effective mental health care. Geographic isolation, provider shortages, transportation limitations and cultural factors collectively hinder the diagnosis and management of common mental health conditions like anxiety and depression (RHIhub, n.d.-b.). Although prevalence rates in rural and urban areas are comparable, rural residents are significantly less likely to receive appropriate treatment, resulting in a persistent gap in care (Rural Minds, 2023a; Rural Minds, 2023b).

Geographic isolation remains one of the most difficult challenges rural patients face when trying to access mental health care. Patients in rural areas often travel long distances to see a mental health provider, and the absence of reliable public transportation further compounds this challenge. Poor road conditions, extreme weather, and limited appointment availability can lead to delays in care, fragmented follow-up, and worsening symptoms.

Provider shortages intensify these challenges. A large proportion of federally designated Mental Health Professional Shortage Areas (HPSAs) are located in rural counties, where psychiatrists, psychologists, and licensed mental health counselors may be unavailable (RHIhub, n.d.-b). In these settings, primary care providers (PCP), including FNPs, often serve as the default mental health providers, often without direct psychiatric support or referral networks.

Cultural barriers also play a critical role in limiting care-seeking behavior. Mental health stigma remains deeply rooted in many rural communities. Despite federal protections such as the Health Insurance Portability and Accountability Act (HIPAA), patients often fear being recognized or judged for seeking help. Additionally, strong cultural values around self-reliance may cause individuals to delay or avoid treatment altogether (NIMH, 2023). This dynamic is well captured by Rural Nursing Theory, which emphasizes that rural residents often demonstrate strong preferences for self-sufficiency, reduced healthcare-seeking behavior, and heightened distrust of formal systems of care (Long & Weinert, 1989). Providers practicing in these areas must therefore adopt flexible roles and culturally attuned strategies to build trust, engage patients, and promote help-seeking behaviors.

While the burden of mental illness is equally distributed between rural and urban populations, treatment outcomes are not. Untreated anxiety and depression can lead to functional impairment, poorer chronic disease outcomes, increased emergency department utilization, diminished quality of life, and heightened suicide risk (Chen et al., 2022; Rural Minds, 2023b; RHIhub, n.d.-b.). Family nurse practitioners are uniquely positioned to help close this care gap. As accessible, community-embedded providers, FNPs often represent the first and sometimes only point of contact for individuals with mental health concerns. Their broad scope of practice enables them to conduct mental health screenings, perform diagnostic assessments, initiate pharmacologic and nonpharmacologic treatment, and provide long-term follow-up care. By fostering trusting, ongoing relationships, FNPs are able to recognize subtle changes in behavior and functioning,

initiate early interventions, and implement community-based strategies to support mental health. Their ongoing presence within the community enhances patient trust and helps reduce stigma, allowing more individuals to engage in care.

Table 1 summarizes the common barriers to mental health care in rural areas and outlines corresponding strategies that FNPs can implement to address these challenges. By understanding and responding to these barriers, FNPs provide not only clinical care but also system-level solutions that improve access and reduce stigma.

Table 1

Barriers to mental health care in rural populations

Barrier	Impact on Rural Mental Health Care	FNP Strategies to Address Barrier
Geographic Isolation	Long travel distances; poor road conditions; lack of nearby providers	Use telehealth platforms; offer home visits or mobile clinics when feasible
Provider Shortages	Few or no psychiatrists/psychologists; reliance on PCPs	Serve as frontline mental health provider; consult via telepsychiatry or collaborative models
Limited Broadband Access	Inconsistent internet connectivity limits telehealth options	Provide telephone-based care when video is unavailable; advocate for rural broadband infrastructure
Mental Health Stigma	Fear of judgment; reluctant to seek care	Normalize mental health conversations; incorporate routine screening; build trust through long-term patient trust
Transportation Barriers	Missed appointment due to lack of public or personal transport.	Offer virtual visits; coordinate transportation assistance or community outreach
Cultural Beliefs in Self-Reliance	Preference for "toughing it out"; tendency to delay or avoid care	Frame care as empowerment; offer brief, solution-focused interventions; use of motivational interviewing
Lack of Local Mental Health Resources	No nearby therapists or support groups	Refer to online CBT/self-help programs; collaborate with community groups and faith networks
Privacy Concerns in Small Communities	Patients fear being "seen" accessing services	Emphasize confidentiality; offer discreet scheduling and virtual appointments
Regulatory Restrictions on FNP Practice	Limited prescriptive authority in some states; required physician collaboration in some states	Advocate for full practice authority; use clinical decision support tools for safer autonomous care

Assessment and Early Detection

Early identification of anxiety and depression is essential for timely intervention, particularly in rural primary care, where treatment delays can worsen symptoms and impact overall health. Rural patients often do not present with emotional complaints; instead, they may report physical symptoms (e.g., fatigue, headaches, or gastrointestinal issues) that can mask underlying

mental health conditions (Rural Minds, 2023a; Rural Minds, 2023b). Family nurse practitioners who develop long-term, trusting relationships with patients are well-positioned to notice subtle behavioral or functional changes that may signal early onset.

Standardized screening tools offer efficient ways to detect these conditions during routine care. The Patient Health Questionnaire-9 (PHQ-9) is widely used for screening and is validated across diverse populations, including rural PCP settings (Kroenke et al., 2001; Levis et al., 2024). A score of 10 or above has strong sensitivity and specificity for identifying major depressive disorder and indicates the need for clinical follow-up (Levis et al., 2024), with good internal consistency reliability (pooled $\alpha = 0.86$; Ajele & Idemudia, 2025).

Similarly, the Generalized Anxiety Disorder-7 (GAD-7) is a validated user-friendly method for assessing anxiety, with previously observed excellent internal consistency reliability ($\alpha = 0.92$; Spitzer et al., 2006a). Scores of 10 or higher suggest clinically significant anxiety and a need for further evaluation (Spitzer et al., 2006b; Toussaint et al., 2020). These tools are particularly valuable in busy rural clinics, where time and staffing are limited.

The PHQ-9 and GAD-7 are also well-suited to telehealth. Patients can complete them remotely before virtual appointments. This enables FNPs to review results in advance, prioritize targeted interventions during the encounter, and optimize in-session care. Routine use facilitates both early identification and ongoing monitoring of symptom progression and treatment response over time (Hilty et al., 2022).

Pharmacological Management

In rural settings, FNPs often serve as the primary mental health prescribers due to a shortage of psychiatric specialists (Turi et al., 2023). For mild to moderate anxiety and depression, first-line pharmacologic treatments, particularly selective serotonin reuptake inhibitors (SSRIs) like sertraline, fluoxetine, and escitalopram, are safe, effective, and generally accessible through rural formularies or 340B programs (American Psychiatric Association, 2020; National Institute for Health and Excellence, 2022). Selective serotonin reuptake inhibitors are well tolerated and consistently recommended based on comparative efficacy reviews (Cipriani et al., 2018; Bandelow et al., 2017). If SSRIs are ineffective or poorly tolerated, Serotonin and norepinephrine reuptake inhibitors (SNRIs) such as venlafaxine or duloxetine may be preferred, especially when comorbid somatic symptoms are present (American Psychiatric Association, 2020). Prescribing authority varies by state. In Full Practice Authority (FPA) states, FNPs can prescribe independently, while others require physician oversight delaying access, particularly in rural areas with limited providers (National Council of State Boards of Nursing, n.d.).

Without consistent access to psychiatric consultation, rural FNPs must independently manage complex cases. This includes medication selection, side effect monitoring, and safety assessments, particularly during medication initiation or dose adjustments, when the risk of treatment-emergent suicidality may be elevated (Smiley & Wood, 2022). Close follow-up during the first 4–6 weeks of starting treatment is critical and can be facilitated through telehealth check-ins, phone calls, or collaboration with social workers or care coordinators (Hilty et al., 2022).

Clinical decision support systems and AI-driven platforms can assist with dosing, interactions, and risk management, providing critical support in isolated settings (Martin & Trull, 2026). With thoughtful prescribing and proactive monitoring, FNPs are well-equipped to lead pharmacologic care in underserved areas.

Non-Pharmacological Approaches

While pharmacologic treatments are foundational, nonpharmacologic interventions are essential particularly in rural areas where psychiatric access is limited or patient preference leans away from medication. Family nurse practitioners are well-positioned to offer integrated care that blends clinical knowledge with community-responsive strategies.

Cognitive Behavioral Therapy (CBT) is among the most evidence-based treatments for anxiety and depression. Though in-person CBT access is often limited in rural areas, FNPs can teach core CBT principles, integrate brief strategies into visits, or refer patients to validated digital platforms (Karyotaki et al., 2021). Other brief interventions such as behavioral activation, motivational interviewing, and problem-solving therapy can be adapted to primary care and delivered during short encounters (Santos et al., 2021; Afaq et al., 2024).

Lifestyle changes also play a critical role, particularly in rural areas where formal services may be limited but self-care opportunities are present. Regular physical activity including walking, farming, gardening, or household chores can reduce symptoms, improve mood, and enhance sleep quality (Schuch et al., 2018). Nutrition is another modifiable factor that influences mental health. Diets rich in whole foods, fruits, vegetables, lean proteins, and omega-3 are associated with lower depression and anxiety rates, while processed foods and sugary beverages are linked to increased symptom severity (Marx et al., 2021). Sleep hygiene also affects emotional regulation and cognitive functioning. Family nurse practitioners can provide practical education around consistent sleep routines, reduced screen time, and managing insomnia, which often co-occur with anxiety and depression.

Case Management and Coordination

Effective case management of anxiety and depression in rural populations often requires more than individual clinical encounters; it demands sustained, coordinated care across fragmented systems. In these settings, FNPs serve not only as PCPs but also as key care coordinators, ensuring continuity across multiple services. In communities where specialty mental health services are limited or unavailable, coordination is vital to prevent treatment gaps and minimize symptom escalation. Family nurse practitioners are well-positioned to collaborate with mental health professionals, licensed counselors, social workers, clergy, and peer-led support groups. Even without local psychiatric providers, telepsychiatry partnerships allow FNPs to consult remotely while continuing to manage care (Luxton et al., 2024).

Family nurse practitioners must also be familiar with national and state-specific referral resources. Websites like PsychologyToday.com offer searchable directories of licensed mental health professionals filtered by insurance, specialty, and telehealth availability. National tools such

as 211.org connect patients to housing, food, and counseling services. State-specific networks including departments of mental health can be found via Substance Abuse and Mental Health Services Administration's (SAMHSA's) FindTreatment.gov website. Regional mental health centers maintain directories of behavioral health clinics, substance use programs, and crisis lines, often offering sliding scale and telehealth access. Incorporating these resources in care planning helps bridge service gaps.

Beyond medical coordination, FNPs often address social determinants of mental health, such as housing insecurity, transportation, financial strain, and digital access. These factors significantly affect engagement and adherence. Family nurse practitioners can connect patients to the community resources, provide health education, and advocate for services that reduce these barriers (Morales et al., 2020). Continuity of care remains central. Regular follow-up, whether in-person or virtual, enables FNPs to track symptoms, adjust treatment, and assess risk. Even brief check-ins reinforce consistency, safety, and support.

As trust deepens, engagement improves (Pratt et al., 2021). Seeing the same FNP over time builds familiarity and supports shared decision-making. Empowerment grows as patients learn to manage symptoms, track progress, and make informed mental health decisions. By partnering on goals, reviewing outcomes, and adjusting care collaboratively, FNPs foster ownership and long-term wellness.

Measuring Outcomes and Patient Engagement

Ongoing monitoring is a cornerstone of effective mental health management depression, particularly in rural settings where continuity of care can be challenged by distance, resource limitations, and fragmented systems. Family nurse practitioners are central to maintaining that continuity by tracking progress, adjusting treatment, and fostering patient engagement over time.

Standardized tools like the Patient Health Questionnaire-9 (PHQ-9) for depression and Generalized Anxiety Disorder-7 (GAD-7) for anxiety offer validated ways to measure baseline severity and treatment response (Kroenke et al., 2001; Toussaint et al., 2020). These instruments provide objective data to support clinical decision-making, helping FNPs evaluate medication or therapy effectiveness and determine when adjustments or referrals are needed. Routine use of these tools also promotes transparency and shared decision-making. When patients review progress alongside providers they gain insight into their mental health, build agency, and recognize early signs of relapse. This proactive model is especially useful in rural settings, where follow-up may be delayed.

To improve engagement, FNPs can tailor their approach to the realities of rural life. Flexible care models, including virtual visits, phone check-ins, and extended hours help sustain continuity even when traditional scheduling isn't feasible. With consent, FNPs can involve trusted supports like family, community leaders, or clergy to reinforce care and provide culturally relevant encouragement (Morales et al., 2020). Technology offers additional support. Mobile apps, patient portals, and remote monitoring platforms allow patients to track mood, sleep, or medication use between visits. For many, this self-monitoring fosters ownership and strengthens the therapeutic

alliance.

While engagement is key, patient privacy is equally critical especially in close-knit rural communities. Family nurse practitioners must maintain strict confidentiality standards and ensure patients understand their rights under HIPAA. Informed consent is essential when sharing information with families, care teams, or outside services. Outcome measurement should extend beyond symptom scales. It includes improvements in daily functioning, overall quality of life, and patient confidence in managing their mental health. Family nurse practitioners combine standardized tools with compassionate, ongoing support, ensuring care remains both evidence-based and deeply personalized.

FNPs as Leaders in Rural Mental Health Care

Family nurse practitioners practicing in rural communities are uniquely positioned to lead mental health initiatives that address anxiety and depression. Their dual role as PCPs and community advocates enables them to impact both individual outcomes as well as broader health systems and policies that shape access to care. In rural areas FNPs often assume behavioral health roles traditionally held by psychiatrists or psychologists. They lead collaborative care models, coordinate integrated behavioral health services, and champion efforts to expand mental health access in underserved regions (Morales et al., 2020). Through consistent presence and community trust, FNPs reduce stigma and make mental health care more approachable and acceptable.

Leadership also involves staying current with emerging innovations. Many FNPs now incorporate AI-supported prescribing platforms, clinical decision tools, or telepsychiatry partnerships to strengthen rural care and support safer prescribing, improve diagnostic accuracy, and enable personalized treatment even in isolated settings. Thoughtful and ethical application of such tools enhances care without compromising the relational foundation of practice.

Leadership extends beyond clinical practice. Family nurse practitioners serve as policy advocates, promoting FPA, broadband expansion, and equitable telehealth reimbursement. By engaging on local boards, in community outreach, and collaborating with public health stakeholders, they help shape systems-level change that serve entire communities. Whether advancing structural change, coordinating interdisciplinary teams, or integrating new technologies, FNPs are transforming rural mental health delivery. Grounded in accessibility, cultural humility, and evidence-based care, FNPs are poised to lead the way in closing the rural mental health care gap.

Discussion

Family nurse practitioners play a pivotal role in addressing the growing mental health crisis in rural America. Anxiety and depression, though common and treatable, are often inadequately managed due to geographic isolation, provider shortages, and stigma. As trusted community-based providers, FNPs are uniquely positioned to close these gaps by delivering comprehensive, accessible, and culturally responsive care.

Health professional service areas are overwhelmingly concentrated in rural America. As of 2024, over 60% of nonmetropolitan U.S. counties lack a single practicing psychiatrist, according

to the Health Resources and Services Administration (HRSA, n.d.). This disparity contributes to persistent mental health crises in rural regions. Compounding this issue, suicide rates remain disproportionately high in rural areas, reaching 17.8 per 100,000 compared to 14.2 in urban settings, with some frontier counties exceeding 25 per 100,000 (Centers for Disease Control and Prevention, 2023; HRSA, n.d.).

Family nurse practitioner role extends well beyond individual encounters; they serve as frontline clinicians, care coordinators, educators, and advocates. By incorporating validated screening tools, evidence-based treatments, and telehealth, FNPs are able to provide more consistent, patient-centered care even in regions lacking formal mental health structures. Emerging tools, such as AI-supported decision aids and remote monitoring platforms, further expand the FNP's capacity to deliver safe, personalized care. These technologies strengthen clinical decision-making, improve early risk detection, and expand access to services, particularly in areas where psychiatric consultation is limited or unavailable.

However, sustainable improvement requires system-level change. Policy reforms to expand FPA for nurse practitioners, investment in rural broadband infrastructure, and reimbursement for integrated care models are critical to closing structural gaps. Equally important are community-based initiatives aimed at reducing stigma, promoting mental health literacy, and normalizing conversations about mental wellness.

Through their clinical expertise, adaptability, and community ties, FNPs are well equipped to transform rural mental health care. By blending innovation with compassion, and clinical rigor with cultural awareness, they are reshaping the future of mental health care delivery across rural America.

Conflict of Interest

The authors declared no conflict of interest, financial or otherwise.

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