



Review Article

Team-Based Depression Care in Primary Care: The Role of Nurse Practitioners

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A B S T R A C T

Keywords:
depression
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Purpose: To investigate evidence of nurse practitioner (NP)-led, NP-delivered depression care to primary care patients and make recommendations based on that evidence.

Methods: PubMed, ProQuest, CINAHL, Scopus, Embase, and Web of Science were searched in January 2022, and reference lists of included studies were hand lists in April 2022.

Results: Included studies (n = 10) involved team-based primary care and 3 team categories emerged: family (F)NP and psychiatric mental health (PMH)NP-led teams (n = 3), PMHNP-led teams (n = 5), and FNP-led teams (n = 2).

Conclusions: There was an association between NP-led, NP-delivered care and improved depressive symptomatology in primary care patients.

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Introduction

The National Survey on Drug Use and Health revealed unprecedented need and utilization of mental health care resources.¹ In 2020, approximately 21 million adults had a major depressive episode.¹ One in 5 Americans reported some form of mental illness during the COVID-19 pandemic.¹ Americans endorsed increased use of prescription medication as part of mental health treatment, and increased use of outpatient mental health services.¹ Despite these increases, it is estimated that only 66% of adults with depression received treatment in 2020.¹ Some reasons for this discrepancy were perceived cost, being uninsured or underinsured, self-management of symptoms, fear of treatment, anticipated stigma, and being unaware of how to access care.¹ The Mental Health Foundation estimates that 25.8%, or 96 million Americans, have experienced wait times of more than a week for specialty mental health treatment.² As a result, primary care is often the entrance point for early diagnosis and treatment of depression.^{3,4}

Delivery of depression care in the United States is complex, often involving both patient- and provider-driven variables. First, the care required for patients with depression is dependent on symptom severity—specifically level of distress, impairment in functioning, or safety concerns.⁵ Second, the care supplied to patients with depression is subject to bed and provider availability. Workforce shortages, variation in health care benefits, and provider participation in both public and private insurance all impact the speed and setting at which diagnosis and treatment occur.⁶ In 2021, the average wait time for mental health and substance abuse treatment was estimated at 48 days.^{7,8}

It is important to note that waitlists for treatment reflect identified patients currently seeking help for depression. According to the National Survey on Drug Use and Health, there remains a significant patient population that is symptomatic yet untreated.¹ A review of evidence conducted in 2002 found that 45% of persons who died by suicide had contact with a primary care provider 1 month before suicide.⁹ Since that systematic review, health care administrators, policy makers, providers, and patient advocacy groups have attempted to prevent missed mental-emotional care in the primary care setting via depression screening and other quality safeguards.

One such safeguard included in the Affordable Care Act is behavioral health integration (BHI) within primary care.¹⁰ BHI typically involves an interdisciplinary team of clinicians (e.g., psychiatrists, pharmacists, nurse practitioners (NPs), nurses, and mental health professionals) to identify, treat, and manage mental health symptoms.^{11,12} BHI is a policy strategy to optimize the existing workforce rather than recruit and train new physicians.^{13,14} Research suggests that high-quality health care teams, assisted by technology (e.g., electronic health record [EHR]), can increase primary care provider patient capacity fivefold.¹⁵ It is estimated that 25% of providers in these care models are psychiatric mental health NPs (PMHNPs) and family NPs (FNPs).¹⁶

NPs are well positioned to meet the needs of BHI. There are more than 355,000 NPs licensed in the United States, with 70% of those NPs delivering primary care.¹⁷ More important, more than 80% of NPs treat patients insured by Medicaid and Medicare.¹⁷ According to a 2016 survey conducted by the American Psychiatric Nurses Association, 25% of NPs originally trained in family medicine, obtained a post-master's certification in psychiatric mental

health nursing.¹⁸ Understanding this common trajectory of NP training, further supports NP utilization and fit within BHI teams.¹⁸ Approximately 27.6% of PMHNPs indicated some consultative liaison work, with 18.9% of providers specializing in this role.¹⁸ To date, there are no systematic reviews examining NP-delivered depression care to primary care patients. Thus, the goal of this review is to evaluate empirical, quantitative evidence of NPs treating depression in the primary care setting and develop recommendations about maximizing NP contributions.

Methods

A comprehensive literature search was performed using the following databases: Web of Science, Cinahl, PubMed, Embase, SCOPUS, and Proquest. The initial search of all fields (titles, abstracts, other) included the following keyword terms: “Nurse practitioner” + “Depression” + “Primary care.” Articles were included for synthesis if they were 1) published between 2014 and 2022, 2) published in English, 3) conducted within the United States, 4) focused on NPs treating depression in the primary care setting, 5) peer reviewed, and 6) reported quantitative findings (eg, improvement of depressive symptoms). The search timeframe was selected to examine the role of the NP after the 2014 regulatory changes of Medicaid expansion¹⁰—specifically, to examine the role of the NP during a flux of patient access and capacity. Using the online software Covidence, the primary author independently reviewed articles for inclusion by screening titles and abstracts. The primary and secondary author reviewed full text articles for data

extraction and synthesis. The reference lists of included studies were also hand-searched to identify any relevant but omitted articles, completed during this time frame.

Results

Literature Search

The original search yielded 806 articles. Sixty-eight duplicates were removed, leaving 738 records for inclusion criteria screening. Twenty studies met inclusion criteria. After full text review, 12 of 20 studies were excluded based on the following: 1) wrong outcome ($n = 7$), depression was not a primary or secondary outcome, 2) wrong patient population ($n = 2$), studies involving patients with neurodegenerative disease or terminal illness, 3) wrong setting ($n = 2$), a focus on long-term care, inpatient, or specialty setting, and 4) a duplicate of an already included study ($n = 1$). The hand search yielded 2 additional records ($n = 2$). The Figure illustrates the PRISMA screening guidelines.¹⁹

Description of Included Studies

The combined search strategies produced 10 studies, which are summarized in the Table. Of the 10 studies included in this review, 9 were pretest–posttest survey^{20–28} and 1 was a randomized controlled trial (RCT).²⁹ Sample sizes of the pretest–posttest group ranged from 10 to 5,187 patients, and duration of the studies varied from 1.5 to 36 months. The RCT sample size was 1,395 patients and

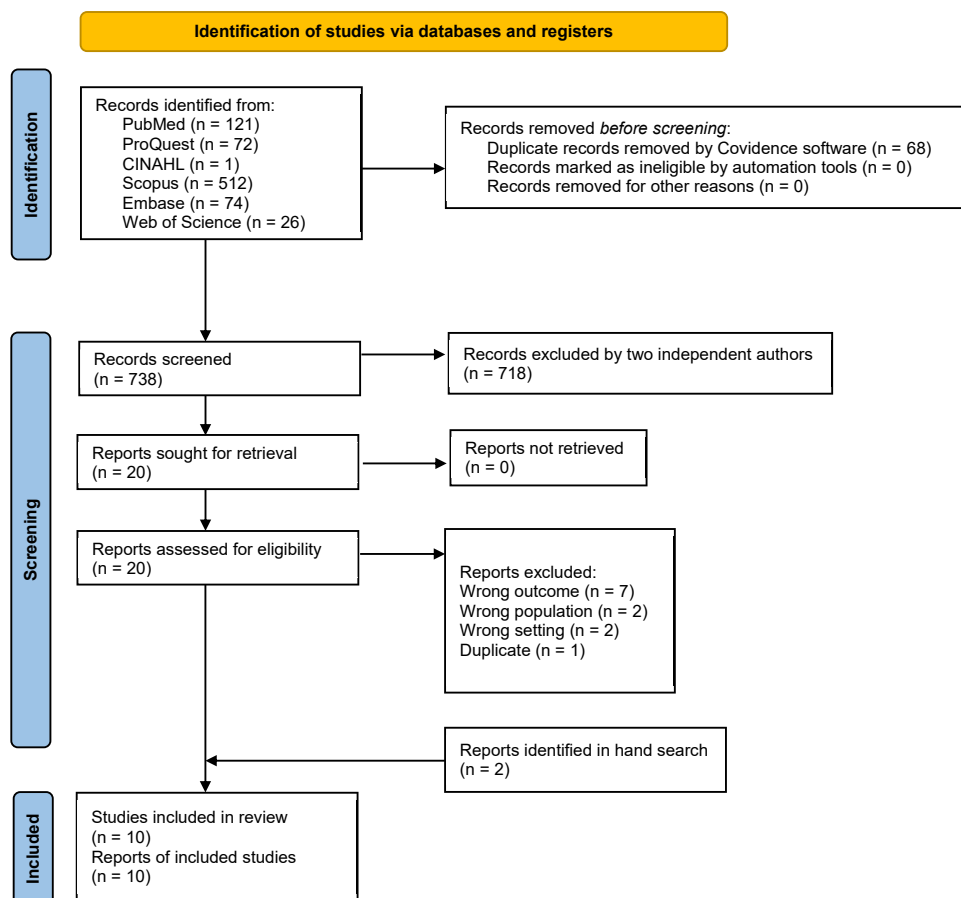


Figure. PRISMA Flow Diagram
Note. Adapted from Page et al.¹⁹

occurred over 51 months.²⁹ As synthesized in what follows, included studies examined team-based depression care within primary care, the role of the NP, support for the NP within the team, NP interventions, and depression outcomes based on the level of NP involvement in patient care (Table).

Team-Based Depression Primary Care

The Role of NPs in Team-Based Depression Primary Care

Although all 10 studies included in this review involved team-based primary care, the role of the NP varied between the care teams. Three categories of teams delivering depression care were identified: 1) FNP and PMHNP-led; 2) PMHNP-led; and 3) FNP-led. The first team category utilized FNPs as lead primary care providers and PMHNPs as lead psychiatric consultants (n = 3).^{20,24,26} Psychiatric consultants were defined as psychiatric prescribers, not to be confused with other therapeutic support personnel such as therapists, social workers, or psychologists.³⁰ The second team category used PMHNPs as psychiatric consultants but did not explicitly credit FNPs for rendering primary care (n = 5).^{21,23,27-29} The final team category used FNPs as the lead provider of primary care for patients with chronic illness and concurrent depression (n = 2).^{22,25}

Support for NPs Within Team-Based Depression Primary Care

Support for NPs within team-based depression primary care included the following: 1) interdisciplinary clinical staff, 2) education and treatment protocols, 3) dedicated time for team meetings, and 4) EHR availability.

The level of clinical and administrative support provided to NPs was dictated by the composition of each treatment team. Although all 10 studies listed a mix of interprofessional staff, the description of available personnel varied in detail. Only 3 studies listed the full-time and part-time status of team members^{26,27,29}; however within these 3 studies, a theme emerged of limited prescriber hours and increased area of coverage. One study described the practice staff as 5 full-time support staff, and 5 part-time clinical staff (1 primary care physician, 3 FNPs, 1 PMHNP, and 1 RN case manager), all working 16 hours or less.²⁶ Another study described the mental health team as composed of a part-time geriatric psychiatrist (8 hours per week), a full-time PMHNP, and a full-time clinical social worker.²⁹ The last study had 1 part-time PMHNP working 1 day a week, alternating between 2 clinic sites; 1 part-time psychiatrist working 1 day a month, alternating between 2 clinic sites; and a half-time licensed clinical social worker and care coordinator who rotated between 2 sites on a weekly basis.²⁷ Onsite provision of care was predominant and found in 7 of 10 studies.^{21,22,24,26-29} The 3 remaining studies used both onsite and remote/co-located NPs in the provision of care.^{20,23,25}

To support NPs, FNP, and PMHNP-led teams (n = 3) and PMHNP-led teams (n = 5) used supplemental education and treatment protocols. Eight of 10 studies indicated that supplemental education was provided to team members before the start of the study period.^{20,22-24,26-29} PMHNPs were credited in providing that training in 2 of those studies.^{20,28} Eight of 10 studies used a referral protocol to initiate PMHNP consultation or care.^{20,21,23,24,26-29} The 2 studies that did not refer to PMHNPs were the FNP-led teams. Referral to a specialist was not required as FNPs addressed both physical health and mental health care.^{22,25} One of the FNP-led teams referred patients with depression to adjunct therapy delivered by licensed clinical social workers.²²

Designated time for treatment team meetings was a common support for FNP and PMHNP-led (n = 3) and PMHNP-led teams (n = 2). Five studies prioritized weekly or biweekly treatment team meetings for case review.^{20,24,26,27,29} Of the studies that prioritized

the need for treatment team meetings, 2 studies also incorporated the full team in 15-minute huddles when members were onsite.^{26,27} One study reported that case review occurred; however, the frequency of case review and the details of the collaboration were not provided.²⁸ The FNP-led teams (n = 2) did not report designated treatment team meetings, instead opting to collaborate via EHR chart notes and virtual or phone communications.^{22,25} Two studies did not report team meetings as a NP support.^{21,23}

EHR availability was reported in 6 of 10 studies included in this review, primarily by the FNP and PMHNP-led teams and the FNP-led teams.^{20,22,24-26,29} Whereas 1 PMHNP-led team conducted both onsite and offsite care,²³ and another PMHNP-led team indicated that case review occurred,²⁸ EHR utilization was not reported.^{23,28} The final 2 studies did not indicate EHR use.^{21,27}

NP-Delivered Interventions by Team Category

FNP and PMHNP-Led Teams. NP-delivered interventions included the use of standardized, valid, and reliable instruments to diagnose depression and increased care management compared with care as usual. Of the 3 FNP and PMHNP-led care teams, all 3 studies used the Patient Health Questionnaire-9 (PHQ-9) to measure patient-reported depressive symptoms.^{20,24,26} The PHQ-9 was the predominant instrument used in this review (n = 9)^{23,25-32} because it has demonstrated validity and reliability (internal consistency alphas of 0.86 and 0.89, and test-retest reliability 0.84).³¹ Within this team category, NP follow-up frequency ranged from weekly contact over 16 weeks,²⁰ to increased contact over 8 weeks, up to 1 year,²⁴ to frequent contact over 1 year.²⁶ Two of 3 FNP- and PMHNP-led studies also used NPs to render brief counseling in addition to medication management.^{24,26} One study used a social worker to deliver brief, cognitive behavioral therapy (CBT).²⁰

PMHNP-Led Teams. The depression instruments used in the 5 PMHNP-led team studies were the PHQ-9, the Beck Depression Inventory- II or BDI-II (internal coefficient alpha of 0.90 and test-retest reliability 0.73–0.96),³² and the Hamilton Rating Scale of Depression or HAM-D (internal coefficient alphas 0.76–0.81, and test-retest reliability of 0.87).³³ Within this team category, NP follow-up frequency was weekly,²¹ monthly,²³ a target to treat model,^{28,29} or consultation only/limited direct patient contact.²⁷ NPs rendered CBT in addition to medication management in 2 studies.^{21,29} Two studies did not offer therapy outside of medication management and increased follow-up,^{23,28} and 1 study used a social worker to render CBT.²⁷

FNP-Led Teams. Of the FNP-led team studies (n = 2), both studies used the PHQ-9 to identify and diagnose patients with depression.^{22,25} NP follow-up frequency ranged from 2 to 5 weeks²⁵ and monthly²² over a 6-month period.^{22,25} One study had licensed clinical social workers render CBT in addition to medication management; the remaining study did not offer supplemental CBT.^{22,25}

Summary of NP-Delivered Depression Outcomes

All 10 studies included in this review evaluated patient depression using standardized, valid, and reliable instruments to screen for depression (PHQ-9, BDI-II, and HAM-D). Although various members of the treatment team issued these instruments, FNPs and PMHNPs interpreted and operationalized positive scores. Five studies reported clinical improvements in depressive symptoms (no P value reported).^{20,24-27} Of these 5 studies, 3 were FNP- and PMHNP-led,^{20,24,26} 1 was PMHNP-led,²⁷ and 1 was FNP-led.²⁵ Five studies reported statistical improvement in depressive symptoms (P value reported).^{21-23,28,29} Four of these studies examined PMHNP-led teams,^{22,23,28,29} and 1 examined FNP-led teams.²²

Table 1
Summary of Reviewed Articles (n = 10)

Reference	NP Role	Supports for NPs					NP Delivered Interventions			Outcomes
		Team Members	Education	Referral Protocol	Team Meetings	EHR	Tool	Follow Up	Adjunct Therapy	
Birch et al., 2021 ²⁰	FNP and PMHNP as lead	Integrated, Interprofessional team triad of a Behavioral health care manager, Psychiatric consultant (PMHNP), and primary care provider, including FNPs	Yes, PMHNP Provided	PHQ-9 scores greater than or equal to 5	Weekly case review	Yes	PHQ-9	Weekly for 16 weeks	-	Of 27 patients completing the 16 week program, 78% reported a 50% reduction in depression and 37% were in remission with a PHQ-9 score of below 5.
Reising et al., 2021 ²⁴	FNP and PMHNP as lead	Integrated, Interdisciplinary team of FNPs, PMHNPs and LCSWs	Yes	PHQ-9 scores greater than or equal to 5	Weekly case consultation	Yes	PHQ-9	Increased contact over 8 weeks, up to 1 year	FNP Brief Counseling prior to referral	22% of cohort participants reached a goal of 50% reduction in depressive sx in 8 weeks during the treatment period.
Schentrup et al., 2019 ²⁶	FNP and PMHNP as lead	Interprofessional team of board-certified FNPs, PMHNPs, pharmacists, case managers, non-clinical staff, physicians, and nurses	Yes	PHQ-9 scores greater than or equal to 10	Bi-weekly face-to face case review, 60 min, 15-minute daily team huddle	Yes	PHQ-9	Frequent contact over 1 year	PMHNP provided Brief Counseling	PHQ-9 scores - 50% of patients with depression experienced a reduction in symptoms, and 35% had a reduction in depression that warranted a change in PHQ-9 category of symptom severity. Results were not statistically significant.
Abrams et al., 2015 ²⁹	PMHNP as lead	Integrated, Interdisciplinary teams of psychiatrists, PMHNPs, social workers, PCP physicians, community providers	Yes	PHQ-9 scores greater than 5	Weekly team meetings, 90 min	Yes	PHQ-9	Reassess every 3 months at a minimum	PMHNP provided CBT - Problem Solving Therapy	Medication only and Medication with psychotherapy groups were significantly correlated with PHQ-9 scores at the highest level (p < 0.001), while social services intervention (p = 0.012) and psychotherapy alone or in combination with other treatments (p = 0.035), correlated with PHQ-9 scores at lower levels of significance.
Hart Abney et al., 2019 ²¹	PMHNP as lead	Integrated, Interprofessional PCP office, PMHNP facilitated care for this program	Yes	BDI-II scores of 20 or above	Not specified, NP delivered treatment at an inter-professional PC Office; Additional therapy was available upon request	Not specified	BDI-II	Weekly for 7 weeks	PMHNP provided CBT- COPE program	100% of participants reported a reduction in depression, Pretest CA=.94, Post-test CA=.98, Baseline mean BDI II score 33.00 +14.64. Post COPE mean BDI II score decreased significantly 11.30+11.66. Paired t(9) = 5.33, p<.0001, Mean decrease in BDI II score was 21.70 with CI 95% ranging from 13.43-29.97.
Powers et al., 2020 ²³	PMHNP as lead	Teams of primary care providers, care managers, and NPs and physician assistants as psychiatric consultants	Yes	PHQ-9 scores greater than or equal to 5	Not specified	Not specified	PHQ-9	Follow up at 4 weeks, then monthly, average length of tx 3.5 months	-	Across 8 clinics, treatment was associated with a reduction of depression sx by 5 points on the PHQ-9 from baseline to the last recorded encounter. Suicidality also reduced from 32% of patients at baseline to 20% of patients at the last recorded encounter. Longer treatment and more encounters were associated with reductions in depression. Average length of treatment was 3.5 months. PHQ-9 16.1 at baseline to 10.9 at last measurement, SD=6.7, CI=95%
Talley et al., 2021 ²⁷	PMHNP as lead	Integrated, Interprofessional team of a psychiatrist, PMHNP, clinical social worker, care coordinator and primary care provider.	Yes	Treatment resistant depression or a positive score on the Mood Disorder Questionnaire	Weekly onsite team huddles in AM and PM. PMHNP was onsite 1 day a week.	Not specified	PHQ-9	NPs utilized as consult to PCP or direct care for identified Bipolar patients	-	PATH Clinic- PHQ-9 scores declined in more than 60% of patients in each group, including group 4 who declined services. Meaningful improvement defined as >50% reduction in PHQ-9 or score <10. Substance use improved but was not significant across groups. HRTSA Clinic- more than half of patient in Group 1,2, and 4 met criteria for meaningful improvement of depression. Significant reduction in substance use in group 1 & 4.

Weber et al., 2020 ²⁸	PMHNP as lead	Integrated, interdisciplinary team of primary care providers, a registered nurse care coordinator, patient case manager, behavioral health providers and a PMHNP	Yes, PMHNP Provided	PHQ-9 scores greater than or equal to 5	Case review occurred, frequency of case review and details not specified	Not specified	PHQ-9, then HAM-D	Reassess every 3 months for 1 year	Reduction in depression from baseline to 12 month reassessment. All predictors were significantly associated with the outcome (p<0.0001). Baseline HAM-D 14.2007, 95% CI, 13.2530, 15.1483, 3 mos HAM-D 11.4814, 95% CI, 10.6539, 12.3088, 6 mos HAM-D 8.7620, 95% CI, 7.7154, 9.8086, 12 mos HAM-D 3.3234, 95% CI, 1.3770, 5.2697
Palmer et al., 2015 ²²	FNP as lead	Multidisciplinary team of nurses, physicians, NPs, pharmacists, and physician assistants.	-	-	No team meetings specified; team members reviewed EHR chart notes	Yes	PHQ-9	Every 4 weeks after medication initiation and titration for 6 months	Collaborative depression care resulted in high rates of screening and identification of depression, high rates of antidepressant use and improved depression scores. In patients scoring PHQ-9 >15, mean change 5.3934, 95% CI 3.8452 -6.9417, F[3, 258] = 27.552, p = .000, X ² [n=967] = 157.666, df=3, p = .0001
Richardson et al., 2014 ²⁵	FNP as lead	NP-led, integrated, interdisciplinary team of a clinical pharmacist, registered dietitian, and case manager. Collaboration with PCP did occur.	-	-	No team meetings specified, collaboration occurred messages and EHR review	Yes	PHQ-9	Every 2-5 weeks for 6 months	50% of patients reached HbA1c <8%, 95.6% of patients reached BP <140/90 and 57.8% of patients reached LDL-C <100 mg/dl. Self efficacy improved. Small but insignificant improvements in depression recorded. Baseline mean=0.44, SD=1.34, median<0.001, Postintervention mean=0.18, SD=0.73, median<0.001

BDI-II = Beck Depression Inventory 2nd version; BP = blood pressure; CA = Cronbach alpha; CBT = cognitive behavioral therapy; CI = confidence interval; COPE = Creating Opportunities for Personal Empowerment program; df = degrees of freedom; EHR = electronic health record; FNP = family nurse practitioner; HAM-D = Hamilton Rating Scale for Depression; HgA1C = Hemoglobin A1C; HRTSA = Heart Failure Transitional Care Services for Adults; LCSW = licensed clinical social worker; LDL-C = low density lipoprotein cholesterol; NP = nurse practitioner; OR = odds ratio; PATH = Providing Access to Healthcare; PCP = primary care provider; PHQ-9 = Patient Health Questionnaire - 9; PMHNP = psychiatric mental health nurse practitioner; SD = standard deviation.

Discussion

Guided by the Future of Nursing 2020–2030 report recommending optimal utilization of the NP workforce,³⁴ the focus of this review was to examine the delivery of depression care by NPs in primary care and develop recommendations about maximizing NP contributions to mental health services. Included studies revealed evidence of team-based care efforts, reflective of the ACA and Medicaid expansion. NPs were identified as both leaders and members of primary care teams. NPs were supported in these roles via interdisciplinary clinical staff, education and treatment protocols, dedicated time for case review, and EHR availability; this support appears to be relevant to improving patient outcomes. Interventions delivered by NPs included the use of standardized, valid, and reliable instruments to screen for depression, and increased care management compared with care as usual. Lastly, the studies included in this review found an association between NP-led, team-based care and improved depressive symptomatology.

Of the existing literature examining primary care and depression, no systematic review, to our knowledge, has focused on the role of the NP.^{30,35,36} Although 1 review,³⁷ examined BHI from 2009 to 2014, and extrapolated that the role of the NP needed to be further differentiated within the literature, our review is the first to examine the role of FNPs and PMHNPs rendering depression care in primary care. High-quality research (eg, RCTs) on NP-delivered care to patients with depression is still limited. Although our review found evidence of improved identification and description of the NP role in the primary care setting, few studies focused on individual NPs treating patients with depression due to the nature of team-based care. As a result, even practice environments known for NP autonomy, such as federally qualified and CBT-led health centers, failed to isolate NP-delivered care, leaving NP contributions unclear and potentially uncredited.

The findings of our review have several policy implications. The National Academy of Medicine described NP optimization as practicing to the full, independent, scope of the NP license, practicing in a variety of roles including that of the consultative liaison, and being visible, recognized, and reimbursed for patient outcomes tantamount to that of physicians.³⁴ Our review shows that the role of the NP is varied, the role is distinct from team members, and the role is becoming more visible within the literature. Research suggests that NP autonomy favorably impacts teamwork within primary care.¹⁴ To date, only 26 states, the District of Columbia, and 2 US territories afford full independent NP practice.³⁸ Scope of practice restrictions have been identified as a barrier to timely access to care and higher downstream healthcare cost^{39,40}; therefore, improved autonomy and unrestricted NP practice would contribute to better quality of care.

Our review has practice implications for patient safety. All 10 studies in this review used standardized, valid, and reliable instruments to screen for depression and increased care management to deliver high-quality depression care in the primary care setting. These results challenge the existing idea that mental-emotional care is often missed in primary care. According to a sample of primary care providers surveyed in 2017, time constraints and the severity of physical health comorbidities can lead to missed mental-emotional care.⁴¹ As outlined in this review, the support and structure of NP-led, team-based primary care may be one way to ensure high-quality depression care is routinely administered. More research is needed to determine whether NP-led, team-based primary care can address other facets of missed opportunities for mental-emotional care.

Our review has research implications. Given the limited number of studies available, and the low rigor of existing literature, more research is required to properly capture and credit the contributions

of NPs treating depression in primary care. Only 1 RCT met inclusion criteria. Included studies were mostly descriptive in nature, with relatively small sample sizes. Large-scale studies with strong methodological designs are needed to produce conclusive evidence of NP treatment effectiveness. It is estimated that by 2025, one-third of all primary care providers will be NPs¹⁷; therefore increased research on this critical segment of the primary care workforce is warranted. Future studies must continue to identify the roles, responsibilities, and autonomy of NPs, but future studies must also be more specific in the description of care environments to better standardize research for comparison and generate consensus on a path forward to BHI. For example, the national survey tasked to assess prevalence and treatment of depression, the National Survey on Drug Use and Health,¹ failed to isolate treatment in primary care settings, instead opting to define outpatient settings as either specialty or nonspecialty. Nonspecialty settings for adults are described as “Doctor’s office not affiliated with a clinic, Outpatient medical clinic, or Some other place.”¹ Effective measurement of depression care within primary care, starts with proper practice environment identification.

Limitations

The review has several limitations. First, we included studies that grouped NPs with other providers; therefore, our ability to extrapolate information about NP-specific care for patients with depression may be diminished. Second, we only included studies completed in the United States; thus, models of NP care used in other countries were missed. Finally, we included pretest–posttest study designs that consistently lacked a control group and failed to control for confounders. Although these quasi-experimental designs have limitations, they are pragmatic and used frequently in quality improvement studies. RCTs, which are ideally the highest level of evidence, are not always feasible in the real world for providers or patients. Some studies included in the final synthesis do not exemplify the highest level of evidence; nonetheless, these were the only studies that met inclusion criteria. More rigorous research on the role of the NP providing depression care in primary care settings is needed.

Conclusions

There is limited evidence on NPs delivering care to patients with depression in autonomous PCP roles. Our review found that within the primary care setting, the role of the NP is varied, is distinct from team members, and is becoming more delineated within the literature. Primary care teams led by FNPs and PMHNPs were effective in identifying and treating patients with depression, thereby reducing the opportunity for missed mental-emotional care. Primary care settings and states should continue to expand the scope of practice of NPs in the delivery of depression care. To that end, future research should isolate NP-led, NP-delivered primary care to patients with depression to evaluate and credit the NP workforce accurately.

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