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Brief Report

Psychiatric Nurse Practitioners as Leaders in Behavioral Health Integration

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A B S T R A C T

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With up to 70% of primary care visits prompted by psychosocial concerns, busy primary care clinics are increasingly addressing complex behavioral health (BH) needs. Substantial evidence demonstrates that the integration of BH into primary care improves access and outcomes, yet clinics face significant challenges in real-world implementation. This collaborative care integration project used psychiatric mental health nurse practitioner faculty as integration and BH specialists at an urban primary care clinic serving a diverse and largely indigent population. The project weathered leadership changes, information system shortcomings, and a shift to telehealth during coronavirus disease 2019. The initial outcomes include increased levels of integration and improved depression and diabetes metrics.

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With up to 70% of primary care visits prompted by psychosocial concerns, busy primary care clinicians must be able to recognize and manage complex behavioral health (BH) needs.¹ Integrating BH into primary care, although widely discussed as an effective strategy to improve access and outcomes,² can be challenging for fast-paced primary care clinics where personnel have varying levels of BH training and experience.

This report adds to the limited literature on BH integration efforts led by psychiatric mental health nurse practitioners (PMHNPs)^{3,4} by focusing on a primary care clinic serving an urban, ethnically/culturally diverse population. We describe a practice improvement initiative in which PMHNP faculty partner with primary care nurse practitioners (NPs) to improve BH outcomes at a Federally Qualified Health Center in the city's most highly concentrated area of poverty where 70% of patients lack stable housing, and many suffer from comorbid substance use, mental health, and chronic medical conditions. Using the framework of the collaborative care (CC) model,⁵ PMHNPs function as educators, project leaders, and psychiatric consultants to primary care providers.

Using PMHNP Expertise to Enhance an Evidence-Based Model

Among numerous approaches to integrating BH into primary care, the University of Washington's CC model has the most substantial evidence for improving depression and anxiety outcomes and improving the control of multiple medical conditions.^{6–8} The CC model provides a framework for the reorganization of roles and workflows in primary care to provide patient-centered and population-based care that relies on measurement-based

treatment to target.⁵ Adding the roles of BH care manager (CM) and psychiatric consultant to the existing primary care provider (PCP) forms an interprofessional team triad that allows for standardized depression screening, follow-up, and collaboration to provide evidence-based treatment.

Primary care patients with a positive depression screening confirmed by PCP diagnosis are quickly connected with the CM, who provides brief counseling, monitoring of patient status, and coordination of medical and psychosocial treatments. The psychiatric consultant supports both the CM and PCP through a structured weekly case review of all CC patients to identify patients who are not improving based on a Patient Health Questionnaire-9 (PHQ-9) score and CM reports and recommends evidence-based interventions that reduce clinical inertia and improve patient outcomes.⁹ Although PMHNPs serve capably as project leaders and psychiatric consultants, they remain underused in the current systems.^{4,10}

Project Planning and Implementation

PMHNP faculty collaborated with clinic leadership to conduct a needs assessment of the current level of integration. Initially, the clinic had colocated but largely separate medical and BH teams, corresponding to level 3 of the Substance Abuse and Mental Health Services Administration's 6 levels of integrated care.¹¹ BH documentation was inaccessible to medical providers with minimal communication between teams. Depression screening, treatment, and BH referral were ad hoc at the PCPs' discretion with no standardized process or communication between the existing BH and primary care teams.

PMHNP faculty addressed educational gaps through team trainings on BH conditions, CC integration, and the PMHNP role. Faculty worked closely with leadership and care teams, including primary care NPs, to develop comprehensive integration plans including workflow and practice changes, team members' role development, tracking of key patient outcomes, and continuous quality improvement.

In the new integrated care team, a social worker served as the collaborative CM and PMHNPs as psychiatric consultants who collaborated with each patient's established PCP. The clinic began the implementation of systematic depression screening for primary care patients with chronic medical conditions using the self-administered PHQ-9. Patients who scored higher than 10 on the PHQ-9, which indicates moderate to severe depressive symptoms, and were willing to work with a CM were enrolled in CC. The CM engaged patients in weekly symptom monitoring, care coordination, and brief cognitive-behavioral interventions to identify goals and enhance coping and self-efficacy.

Weekly systematic team case reviews for the entire CC panel allowed PMHNP faculty to provide consultation to primary care at the individual and population level, building PCPs' capacity for managing BH conditions. PMHNPs were also available for curbside or e-consults to primary care and for CM coaching and supervision between team meetings. For patients with no improvement in PHQ-9 scores despite PCP and CM treatment or those with severe, unclear, or atypical symptomatology, PMHNP faculty could evaluate patients directly for brief treatment and stabilization before return to CC management in primary care.

Lessons Learned

Lessons from this practice improvement project can be loosely grouped as team and communication challenges and logistical challenges. Team and communication challenges included frequent staff turnover and workflow development between BH and primary care. Logistical challenges included electronic health record (EHR) limitations, regulatory physician collaboration requirements, changing billing landscapes, and the coronavirus disease 2019 crisis. PMHNPs and a CM who are well-versed in CC and committed to partnering with primary care were essential to the program's success. The ability of advanced practice psychiatric nurses to pivot and use clinical, administrative, and interprofessional care expertise addressed each new challenge that arose.

Team and Communication Challenges

Shortly after the project's implementation, the clinic underwent significant turnover in clinic leadership, providers, and staff, similar to the turnover faced in many primary care settings. Having PMHNP providers experienced in integration provided the flexibility to reorient, retrain, and rework aspects of the program. Because BH and integration experiences vary widely, frequent contact, clarification, and documentation of language and goals between changing stakeholders and interprofessional team members increased the alignment of priorities.

Standardizing communication between BH and primary care was critical to the success of this initiative. Dedicated time for systematic case review allowed for PMHNP consultation and team treatment planning based on PHQ-9 scores, chronic condition metrics, and barriers and facilitators to patients' goals (eg, addressing anxiety about increasing antidepressant dose). PMHNPs provided primary care clinicians and the CM immediate evidence-based recommendations for medication initiation or changes, therapeutic interventions, and referral resources. Developing clear e-referral and

communication processes also provided the necessary structure for enhanced teamwork between primary care and BH.

Phone contact, videoconferencing, e-consultation, and onsite collaboration were key collaboration strategies that enhanced fidelity to the CC model. Ready availability of a PMHNP in person or through technology expanded the capacity for BH care in the clinic through both direct patient care and as a supportive expert resource to busy primary care teams. With repeated similar cases and informal consults, PCPs and CMs gained familiarity with BH interventions and medications and had less need for specialist input, allowing PMHNPs to provide direct care for only the most complex cases.

Logistical Process Challenges

EHRs vary in functionality for team communication and panel management, both of which are essential to CC. The clinic's EHR did not have population-level tracking functionality for patients' key metrics including last contact, medication changes, PHQ-9, or health data, so spreadsheet software was used to manually track the population. This allowed PMHNPs to easily supervise patients' progress and helped the interprofessional team recognize when changes in care were needed. Developing EHR workflows, and sometimes work-arounds, was necessary for processes such as scheduled prompts for PHQ-9 screening, referral to the CC program, and psychiatric e-consultation.

California law requires NPs to practice under an agreement with a collaborating physician. This project faced the unexpected loss of its collaborating psychiatrist midstream, which was followed by bureaucratic delays in establishing a new collaboration. This loss meant that PMHNPs were temporarily limited to working within their registered nurse scope for clinical care. This is not an unusual example of how physician collaboration requirements that restrict NP autonomy can impact critical access to care for vulnerable populations.¹² Negotiating clear expectations for each party with realistic timelines for the notification of termination of a relationship may prevent sudden loss of such necessary partnerships.

CC has been shown to be cost-effective in multiple studies,^{13,14} but this relies on personnel experienced in integrated care billing and coding. Many patients with the greatest need at this clinic site were underinsured, requiring efforts to clarify billing and aid patients in signing up for California's Medicaid program. The participation of PMHNPs well-versed and invested in CC helped begin the work of developing clear integrated care billing practices that will support CC sustainability.

Finally, the coronavirus disease 2019 crisis stressed the supports of an already vulnerable patient population facing job losses, increased food insecurity, and the challenges of social distancing without stable housing. Fortunately, CC promoted trusting relationships between patients and the CM through regular phone contact. As telehealth became the clinic's primary method of contact during shelter-in-place orders, CC patients were already familiar with phone sessions, and the CM was well-positioned to assess patients and provide education and interventions.

Outcomes

This practice improvement project advanced the clinic's level of integration from minimal collaboration in a shared location (level 3 of the Substance Abuse and Mental Health Services Administration's 6 levels) to a high degree of collaboration with some ongoing challenges (level 5 of 6). The clinic began with depression screening, diagnosis, and treatment that relied solely on PCP time and skill level and lacked a system for routine depression screening, tracking, and follow-up. The project implemented systematic BH screening, consultation, and team-based treatment planning.

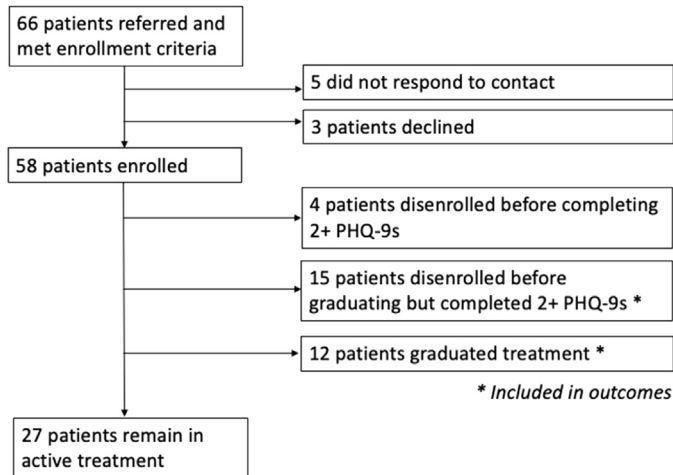


Figure 1. The progression of patient involvement in the CC program.

Primary care and BH teams that initially functioned separately successfully moved to CC workflows with dedicated team communication processes and panel tracking.

In a population with high no-show and attrition rates, preliminary findings of this quality improvement project indicate that patients experience beneficial mental and physical health outcomes, indicated by the reduction in PHQ-9 and A1c scores, even if they do not complete all treatment. A total of 58 patients have been enrolled in CC, with 27 remaining on the current panel, 12 who graduated after meeting treatment goals, and 19 disenrolled for other reasons (Figure 1). Within 16 weeks of treatment, every patient who had completed multiple PHQ-9s reported a reduction of depression symptoms (Figure 2). Seventy-eight percent of these patients reported a 50% reduction in symptoms, and 37% were in remission as defined by a PHQ-9 score below 5. Additionally, this project provided access to escalated care for the evaluation of patients with unremitting or complex symptoms who did not show improvement in CC, a service that previously was not available at this clinic. Of 11 patients with diabetes who graduated or disenrolled, the average hemoglobin A1c level dropped 1.56 mmol/mol (standard deviation = 2.4 mmol/mol) in the same period, representing a significant improvement in the control of blood glucose concentration.

Future Implications

Increasing the level of BH integration in primary care requires extensive thought, assessment, planning, interprofessional collaboration, flexibility, continuous improvement, and persistence. This project models how BH access and outcomes can be improved by empowering PMHNPs not only as psychiatric specialists providing direct patient care but also as expert consultants and leaders in the improved delivery of evidence-based BH services in primary care. Successful outcomes of this project resulted from the combination of the evidence-based framework provided by the CC model; the clinical skills, ability to collaborate with interdisciplinary teams, and capabilities in systems change brought by PMHNP faculty; and the commitment and clinical expertise of PCPs and other team members. Through the partnership of advanced practice primary care and psychiatric nurses, quality BH integration can become a reality. Longer-term evaluation of outcomes on larger populations may provide evidence of the replicability of this project in improving access, quality, and fiscally responsible care to vulnerable populations.

The disruption in the PMHNPs' ability to use their NP scope of practice because of the lack of a psychiatrist collaborator speaks to

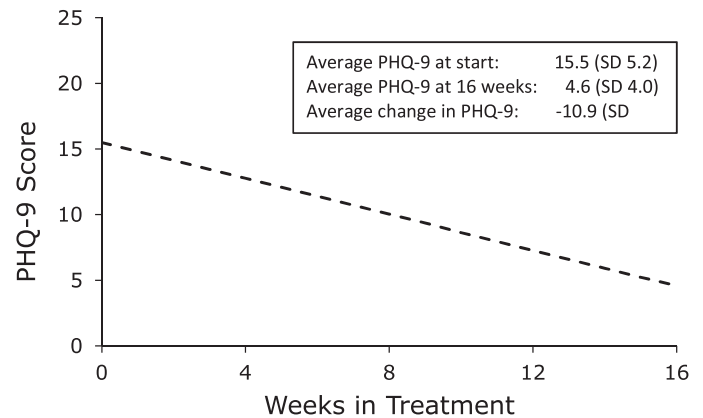


Figure 2. The average change in the PHQ-9 depression measure over the course of treatment.

the ongoing need to allow full practice authority for NPs nationwide. Given significant workforce shortages in both BH and primary care, optimal utilization of NPs across health care systems is needed to meet our nation's growing health care needs.

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