



The Psychiatric Nurse Care Coordinator on a Multi-disciplinary, Community Mental Health Treatment Team

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Abstract

Community mental health nurses sometimes join multi-disciplinary teams, but the role has not been defined and studied carefully. This article describes the psychiatric Nurse Care Coordinator (NCC)—a unique position created to support care management, facilitate systematic medication management, and coordinate medical care in the Social Security Administration's 30-site Supported Employment Demonstration. The authors reviewed the study's NCC manual, supervised and consulted with the NCCs weekly over nearly three years, and reviewed data on NCC activities. Although the 984 participants assigned to NCCs experienced numerous mental health, substance use, and chronic medical conditions, only 59% completed intake assessments and engaged over time with NCCs. For those 581 participants, NCCs spent approximately 51% of their time helping with mental health issues, 35% on medical care, and 12% on substance use conditions. The NCC was critically important for complex, high-need individuals.

Keywords Nurse care coordinator · Community team · Medication management · Medical care linkage

Introduction

Nurses play a central role throughout the continuum of healthcare services. The traditional nursing role, drawing on a foundation of medical training, includes providing direct patient care, implementing care plans, and educating patients and family members (Durkin et al., 2018; Feo et al., 2018). These well-defined activities combine clinical and communication skills with compassion and empathy to produce good healthcare outcomes. Although most community

mental health clinics employ nurses, they are not usually integrated into treatment teams. The exception has been assertive community treatment teams that provide intensive, multi-disciplinary community-based care for high-need individuals with serious mental illness (Marshall & Lockwood, 2011). More typically, nurses in community mental health provide ancillary medical screening and oversee medication administration and adherence monitoring.

The lack of nurses in multi-disciplinary, team-based, community mental health treatment raises concerns because nurses are uniquely trained to identify and address comorbid medical and substance use disorders that are strongly prevalent and associated with decreased quality of life and poor treatment outcomes, including early mortality, in individuals with behavioral health conditions (Correll et al., 2017; Lawrence et al., 2013; Nordentoft et al., 2013; Onyeka et al., 2019). The psychiatric nurse care coordinator (NCC) can potentially address this need. This article describes the NCC role and activities within a large Social Security Administration demonstration program.

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Methods

The Supported Employment Demonstration (SED)

Every year, many individuals with mental health conditions apply for Social Security Disability Insurance (SSDI) or Supplemental Security Income (SSI). Up to 65% of these applicants are initially denied disability benefits (Weaver, 2020). However, these denied applicants tend to fare poorly and continue to apply for disability (Bound, 1989), and little is known about whether they could benefit from interventions designed to help them return to employment. The Social Security Administration attempted to fill this gap with the SED, a randomized controlled trial that included 2,960 individuals who had recently been denied Social Security disability benefits in 30 areas across the U.S. The Supported Employment Demonstration (SED) project sought to test the effectiveness of team-based rehabilitation interventions in reducing receipt of disability benefits and improving employment outcomes (Riley et al., 2021). The randomized controlled trial compared three interventions: usual services (patient-initiated treatment as usual), basic services (team-based treatment including team leader and care management enhanced with employment services), and full services (team-based treatment including team leader, care management, and employment services with the addition of an NCC).

Participants in the SED

The SED enrolled, assigned to services by randomization, and followed for three years 2960 eligible participants (Riley et al., 2021). Baseline demographic characteristics showed that the majority were female (57%), White (56%), non-Hispanic (87%), over age 35 (58%), with at least a high school education (81%), living with relatives (69%), never married (55%), unemployed (81%), and poor (Borger et al., 2021). Diagnostically, anxiety disorders (71%), personality disorders (65%), and mood disorders (62%) predominated. Enrollees reported an average of 2.5 mental health conditions and 3.5 physical health conditions. Although the clients generally denied using alcohol and other psychoactive substances at baseline, substance use conditions appeared prominently as soon as clinicians began working with the participants. Standardized measures of mental health, physical health, and work disability were more than one standard deviation below population norms.

An initial review with all clients included obtaining past psychiatric and health records, interviewing the clients, and completing screens for common behavioral health conditions including anxiety, depression, post-traumatic stress disorder, and substance use disorders.

The Nurse Care Coordinator (NCC) Role

The SED modeled the NCC role on the clinical care coordinator roles developed in the Texas Medication Algorithm Project (Rush et al., 2003) and the Mental Health Treatment Study (MHTS) (Drake et al., 2013), both of which used nurses to coordinate and facilitate evidence-based care in community mental health settings. In the Texas project, nurses helped patients and doctors adhere to specific algorithms for treatment of schizophrenia, bipolar disorder, or depression. In the Mental Health Treatment Study, NCCs provided and coordinated care for individuals with serious mental illness who were receiving SSDI benefits. The participants had a high prevalence of comorbid medical and substance use conditions, and the study found that these conditions were major barriers to employment (Milfort et al., 2015). The study interventions, which included supported employment as well as NCCs, had positive results on return to work, but the design did not permit a component analysis of the effect of the NCCs. The SED design therefore addressed this question by including two treatment conditions: one with and one without an NCC.

Following a detailed manual, the NCCs in the SED performed specific functions within a multidisciplinary team: (1) medication management support and preparing participants for visits with psychiatric care providers; (2) medical care coordination, collaboration, and advocacy; and (3) educating participants and treatment teams regarding management of medical, substance use, and mental health conditions. The NCCs tried to optimize clinical care and thereby help the participants to obtain and succeed in employment. The NCC manual emphasized a person-centered approach to care, prioritizing the participants' stated goals and shared decision-making. A senior SED implementation team nurse (DB) provided monthly training, supervision, and technical assistance, including discussions regarding individual participants, evidence-based practices, and challenges. In addition, each NCC had access to the SED implementation team psychiatrists to discuss complex participants and comorbidities. The three psychiatrists each had over 20 years of experience, treating patients and supervising programs at community mental health centers, while also participating in research projects that included the design and implementation of services for patients in community mental health settings.

Medication management supports included: (1) conducting initial and ongoing assessments of full-service participants assigned to the team; (2) communicating regularly with on-site and off-site psychiatric care providers prescribing medications for the team's participants; (3) offering information to psychiatric care providers and primary care providers and team members, gathered through assessments

and discussions with participants, to optimize care; and (4) participating in treatment planning and ongoing team meetings.

Working with psychiatric and primary care providers, NCCs facilitated an evidence-based approach to medication management. Standards for medication management support followed evidence from major pharmacotherapy trials, expert reviews, and clinical practice guidelines endorsed by medical specialty societies. Encouraged practices included medication-assisted treatment for alcohol use/dependence and opioid use/dependence, tobacco cessation treatment, monitoring of metabolic parameters, managing metabolic conditions, and assessing and managing chronic pain. Discouraged practices included antipsychotic polypharmacy, antipsychotic medications for insomnia, maintenance benzodiazepine use, and combining benzodiazepines with opioid pain medications. To illustrate the NCC approach to medication management, Table 1 lists activities, standards of care, and documentation expectations related to shared decision-making.

To communicate with psychiatric care providers, NCCs forwarded a standardized medication report to providers prior to every medication management visit. NCCs helped clients to complete standardized screens for depression, anxiety, trauma, attention-deficit hyperactivity disorder, and substance use. The reports contained: (1) information about the current diagnoses, current medications, and prior psychiatric medication trials from past medical records and participant reports; (2) results of validated structured assessments of clients' symptoms, vital signs, and blood work results; and (3) factors that could influence the provider's decision-making in accordance with current guidelines, suggesting best practices and flagging avoidable practices. Clients completed standardized depression and anxiety symptom rating scales at every visit and other screens at least annually and as needed using clinical judgment. In addition, NCCs actively supported clients' efforts to navigate the medical care system, for example, by attending medical visits, providing advocacy, and helping with treatment adherence. Because many of the clients in the SED were not receiving behavioral health care and expressed ambivalence or reluctance about receiving medical care, the NCCs also participated in strategies to engage and retain them in care.

The Westat Institutional Review Board approved and monitored the study.

Results

As shown in Table 2, of the 984 clients assigned to teams with an NCC, over two-fifths failed to complete the intake or declined clinical services. An additional fifth were not taking psychiatric medications, and another small group who

Table 1 Medication management support: standards for shared decision making

Goals and preferences	The patient's goals and preferences related to psychiatric medications should be identified. The patient's decision making preferences should be explored, considering the spectrum from full patient autonomy to complete prescriber responsibility	The record should include evidence that the prescriber, nurse care coordinator, or other clinical staff member asked the patient to identify goals for medication treatment prior to initial prescription(s)
Information regarding medication options	Medication treatment options are offered to the patient, including review of pros and cons of different medications	There is evidence that the prescriber, nurse care coordinator, or other clinical staff member educated the patient regarding the potential impact of medication treatment and reviewed pros and cons of at least 2 medication options for a target symptom or behavior. Examples include consideration of anticipated metabolic side effects associated with psychotropic medications and need for careful weight monitoring and management
Joint decision	The patient is involved in final decision making and can choose which medication(s) to take	The record notes the patient's preference for medication treatment from among the options offered. Also acceptable if no evidence of patient preference when the prescriber, nurse care coordinator, or other clinical staff member notes that the patient prefers complete prescriber responsibility for medication decisions

Table 2 Level of engagement of clients in medication management among 984 individuals enrolled in full service teams

	<i>N</i>	%
No or incomplete data	109	11.1
Client did not complete the initial intake assessment	139	14.1
Client completed the initial intake assessment but declined follow up with clinical staff	158	16.1
Client completed initial intake assessment but is not taking psychiatric medications	210	21.3
Client completed initial intake assessment, is taking psychiatric medication but did not give permission for staff to talk with prescriber	57	5.8
Client completed initial intake assessment, is taking psychiatric medication, gave permission for staff to speak with prescriber	311	31.6

Table 3 Medication management activities documented in records of 368 Full Service clients taking psychiatric medications

	<i>N</i>	%
Assessment & treatment planning: record showed evidence of		
Initial psychiatric assessment	296	80
Medical History	319	87
Psychiatric diagnosis	331	90
Assessment of substance use	225	61
Target symptoms(s)/behaviors	283	77
Review of relevant laboratory, vital signs, and/or other tests	205	56
Shared decision making: record showed evidence of		
The client's stated goals and preferences related to psychiatric medications	258	70
The client receiving information regarding medication options	243	66
The client's participation and joint decision making with prescriber about specific medications	254	69
Medication management: record showed evidence of		
Target symptoms/behaviors for each psychiatric medication	203	55
Check-ins within 7 days following new psychotropic medication prescriptions	81	22
Timely follow-up visits	184	50
Use of rating scales	203	55
Monitor metabolic parameters	93	25
Assessment of side effects	247	67
Assessment of medication response	251	68
Assessment of adherence	247	67
Coordination with behavioral health treatment team	222	60
Coordination with primary care provider and other specialists	144	39

were taking medications did not give NCCs permission to communicate with their providers. Thus, less than a third agreed to participate in medication management.

For the 368 participants taking psychiatric medications, Table 3 on medication management services shows that the great majority received full assessments and participated in shared decision-making with the NCCs. Most also received many services, such as assessment of symptoms and side effects, but other services, such as metabolic screening, were relatively rare. In addition, less than half received coordination with primary care providers.

Table 4 illustrates the variable use of several best practice guidelines in the NCC manual. Among participants using psychiatric medications, most received evidence-based

Table 4 Evidence of best practices provided to Full-Service clients taking psychiatric medications (total *N*=368)

	Had the condition		Condition received best practice	
	<i>N</i>	%	<i>N</i>	%
Alcohol use/dependence	125	34	22	18
Opioid use/dependence	128	35	23	18
Tobacco use	134	36	90	67
Metabolic conditions	139	38	59	42
Chronic pain	119	32	108	91

services for tobacco use and pain, but few received such practices for alcohol and drug conditions. These findings accord with time spent on different conditions: NCCs spent 46–56% of their time supporting mental health needs, 33–38% on medical care, and 6–17% on substance use issues.

Prior to the pandemic, NCCs spent 30–34% of their time coordinating care directly with participants and family/supporters; 19–23% of their time meeting or communicating with multi-disciplinary team members; 16–18% of their time completing administrative duties related to the SED study; 13–15% of their time completing medical record and other documentation requirements; 11–14% of their time coordinating care with psychiatric and primary care providers; and 4–6% of their time coordinating care with non-providers. Approximately 30–35% of their time was providing services in the community, e.g., accompanying clients to appointments with providers, conducting home visits, helping with transportation to clinic visits, or assisting other team members' efforts to outreach clients who were unable or unwilling to come to the clinic to engage in care, and 65–70% of their time in the clinic. In-person services of course diminished rapidly during the pandemic.

The NCC positions experienced heavy turnover. Of 31 original NCCs (one site had two nurses rather than one), 11 (35%) remained in the position throughout the study, 14 (46%) had two or three nurses in the position, and 6 (19%) positions had four or more nurses in the position.

The following vignette, an amalgam of actual clients, describes how NCCs applied principles of medication management support to gain trust and facilitate care: Alfredo was a 26-year-old male who informed the NCC during his initial assessment that he was not interested in finding employment and instead was seeking to obtain his GED and gain custody of his children from the state. He was homeless and not engaged in medical or psychiatric treatment. His initial assessment indicated diagnoses of bipolar I disorder, post-traumatic stress disorder, attention-deficit hyperactivity disorder, and alcohol use disorder. He reported a history of childhood abuse and exposure to domestic violence in the foster care system. Initially, Alfredo missed multiple appointments with the team and his psychiatric provider, expressing mistrust of treatment providers but indicating a desire to take stimulants and benzodiazepines. The NCC and treatment team maintained a schedule of regular outreach to Alfredo through phone calls, texts, and meetings at a local coffee shop. Several months later, after experiencing an assault at a homeless encampment, Alfredo reached out to the NCC, who accompanied him to the ER for an evaluation. Following this, Alfredo agreed to develop a plan of care that included appointments with primary care and psychiatric providers. He continued to distrust the new providers, however, and only followed through when the NCC reminded

him of upcoming appointments, arranged for transportation to the appointments, and met him at the provider's office. Based on trust built during these interactions, the NCC completed screens and assessments, submitted medication reports to the psychiatric care provider, and communicated directly with the psychiatric care provider for follow-up. Alfredo also became open to speaking with other members of the team, beginning to discuss education, employment, and housing.

Discussion

Although SED clients reported multiple, long-term mental health and medical conditions at baseline—and a majority revealed substance use disorders after entering the study—most were not receiving any treatment, including psychiatric medications, at baseline. Further, only a minority chose to receive free, evidence-based help with medication management and medical care from an experienced registered nurse. Instead, NCCs often encountered mistrust, ambivalence, and reluctance to use medical and behavioral health services. Nurses therefore worked with other team members to engage participants through outreach, crisis interventions, and practical assistance. Their persistence sometimes built trust slowly, and the need for acute medical care sometimes motivated broader participation in services.

For the minority of clients who participated in nursing services, NCCs followed manualized care, within the limits of what clients and their providers allowed. Collaborations with providers and other medical personnel were successful when their collaborators worked in the same program (i.e., integrated care within a single center) but were often difficult when they worked in separate programs or settings (i.e., fragmented care across agencies). Conflicting clinical and administrative priorities, limited time, fragmented service organizations, financial pressures, and technology requirements, in addition to a lack of adequate information about the participants' overall care in a fragmented system, often constrained psychiatric care providers. Many nurses left the nurse care coordinator positions for other jobs.

Most Americans with mental health conditions do not participate in mental health services (Wang et al., 2005). For many of these individuals, the problem is lack of access, but others report stigma, fears regarding mental health treatments, legal sanctions regarding substance use, and other barriers (Ali et al., 2015; Carpenter-Song et al., 2010; Luhrmann, 2008). SED participants experienced high rates of conditions known to predict poor engagement in care: poverty, anxiety, substance use, antisocial personality, and chronic trauma (Borger et al., 2021). Although NCCs fulfilled their roles admirably, many or most of the SED clients were avoiding rather than seeking services. The

majority also declined vocational services, despite joining an employment study (Metcalf & Drake, 2021). Extensive research shows that people with poverty, personality disorders, chronic trauma, and substance use conditions tend to use services sporadically when they are in crisis but avoid long-term relationships, treatment adherence, and follow-ups (Adler, 1990; Koekkoek et al., 2010; Linehan, 2020). These individuals live at the margins of society, experience stigma regarding their struggles, and mistrust professionals whom they perceive as judgmental and not understanding them (Jenkins & Csordas, 2020; Myers, 2015; Ortnier, 1998). Some perceive their conditions in religious or other non-medical terms (Kleinman, 1988).

Why did clients join the SED but reject valuable nursing services? Consistent with research on hierarchy of needs (Kenrick et al., 2010) and social determinants of health (World Health Organization, 2014), many clients were pursuing daily survival by addressing basic needs, such as food security, stable housing, transportation, and minimal income. Anecdotally, many SED clients joined the study to gain housing, insurance, medical care, or financial benefits and had little interest in behavioral health services. Although biomedical theories do not explain their avoidance of services (Mishler, 1981), anthropologists have extensively studied people who experience lives of severe poverty, trauma, substance misuse, and lack of education and employment (Good, 1994; Jenkins, 2015; Lührmann, 2008; Myers, 2015; Ortnier, 1998). These individuals often reject behavioral health and medical services, which may seem to them antithetical to their world view, struggles to survive, and mistrust of authorities.

Rejection of services was an unexpected experience for many NCCs. Like other community mental health professionals (and employment specialists), they are accustomed to helping people who want services. People who decline services or fail to attend appointments are typically discharged from behavioral health programs rather than outreached for 3 years—one of the many aspects of SED that contravened real-world practice. Dissatisfaction with the experiences of outreach and rejection may have led to the high rate of turnover among NCCs.

These findings should not gainsay the importance of the NCC model. Experienced nurses coordinating an effectively designed workflow in psychiatric ambulatory care, including client education, medication management, shared decision-making, and quality of care, are undoubtedly valuable (Deegan, 2010; Torrey et al., 2017). But implementing such a nursing role for people who do not want services in the current fragmented systems of outpatient community health care remains an enormous challenge. Anecdotally, while some NCCs found the role rewarding, others disliked the complexity, location outside of a medical context, and difficulty communicating with participants and providers.

Limitations

This report addresses process rather than outcomes. Outcome data from the SED will not be available until 2023. Nevertheless, this study of implementation may substantially explain outcomes, since only a minority of eligible participants in SED received NCC services. The study sample of people with disability denials was unique, but experiences reported here may generalize to other populations that live largely outside of the treatment system, such as people released from incarceration, in homelessness settings, and in rural areas that lack behavioral health professionals. The NCC role was also unique. Other than assertive community treatment, few behavioral health teams contain a full-time nurse. Another limitation of the study was high NCC turnover.

Conclusions

The NCC role provided experienced, well trained, skilled nurses to engage and educate SED participants, coordinate care, facilitate shared decision-making, and enhance evidence-based medication management for individuals in community mental health centers—hypothetically, an ideal service for people with extensive needs trying to navigate the fragmentation in community mental health services. The NCCs helped many SED clients, especially some with complex medical, substance use, and mental health conditions, but most of the SED clients declined NCC services. Rather than discarding the NCC model, we recommend testing it with a more appropriate, real-world sample of behavioral health clients who are choosing and participating in services.

Author contributions DB provided training and monthly supervision to the nurse care coordinators, helped to collect all data, and participated in conceptualizing and writing the article. DH provided consultations to the nurse care coordinators on medical issues and participated in conceptualizing and writing the article. TS provided consultations to the nurse care coordinators on diagnostic and pharmacological issues and participated in conceptualizing and writing the article. JM managed and analyzed all data on nurse care coordinator activities and participated in writing the article. BD was co-PI on the Supported Employment Demonstration, oversaw the implementation team, and participated in conceptualizing and writing the article.

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Declarations

Conflict of interest The authors declare that they have no conflict of interest.

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