Nurse-Directed Care Model in a Psychiatric Hospital

A Model for Clinical Accountability

MARLENE E-MORRIS, MSN, APRN, BC; BARBARA CALDWELL, PhD, APRN, BC; KATHLEEN J. MENCHER, MSN, APRN, BC; KIMBERLY GROGAN, RN, NACC; MARGARET JUDGE-GORNY, MSN, APRN, BC; ZELDA PATTERSON, MSN, PMHCNS-BC; TERRIAN CHRISTOPHER, MSN, APRN-BC; RUSSELL C. SMITH, MS, LPC; TERESA MCQUAIDE, MSN, APRN, BC

Purpose: The focus on recovery for persons with severe and persistent mental illness is leading state psychiatric hospitals to transform their method of care delivery. This article describes a quality improvement project involving a hospital’s administration and multi-disciplinary state-university affiliation that collaborated in the development and implementation of a nursing care delivery model in a state psychiatric hospital. Description of the Project: The quality improvement project team instituted a new model to promote the hospital’s vision of wellness and recovery through utilization of the therapeutic relationship and greater clinical accountability. Implementation of the model was accomplished in 2 phases: first, the establishment of a structure to lay the groundwork for accountability and, second, the development of a mechanism to provide a clinical supervision process for staff in their work with clients. Effectiveness of the model was assessed by surveys conducted at baseline and after implementation. Outcome: Results indicated improvement in clinical practices and client living environment. As a secondary outcome, these improvements appeared to be associated with increased safety on the units evidenced by reduction in incidents of seclusion and restraint. Conclusions: Restructuring of the service delivery system of care so that clients are the center of clinical focus improves safety and can enhance the staff’s attention to work with clients on their recovery. Implications: The role of the advanced practice nurse can influence the recovery feature article

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of clients in state psychiatric hospitals. Future research should consider the impact on clients and their perceptions of the new service models.

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State psychiatric hospitals continue to provide residential and medical services to a significant number of people with severe and persistent mental illness. Despite the 89% reduction in census due to deinstitutionalizations since 1950, approximately 60,000 individuals with severe and persistent mental illness remain hospitalized in US state psychiatric facilities. Although there has been a nationwide commitment to community mental health, many people who reside in state hospitals have difficulty accessing services because of chronic substance abuse, dual diagnosis, forensic history, or issues of noncompliance. The challenge to hospitals is to provide exemplary psychiatric services to individuals with a complex array of issues, while adhering to prevailing recovery principles that focus on rehabilitation leading to a life in the community. The purpose of this article was to describe a quality improvement project focusing on the process of implementing a new nursing model in 1 building of the hospital to increase the accountability for person-centered interventions. The person-centered interventions are focused on establishing a system of individual supports that strives to assist each person’s effort to recover from the effects of mental illness. Also included are outcome data that show clinical, environmental, and safety improvements that resulted from the facilitation of a therapeutic staff-client relationship.

**HISTORICAL BACKGROUND OF SERVICE DELIVERY IN STATE PSYCHIATRIC HOSPITALS**

Many psychiatric hospitals have found that implementing programming that is genuinely therapeutic with an emphasis on preparation for living in the community has not been sustainable and has led to low morale among service providers. In addition, the flow of resources toward the community has resulted in overcrowding, poorly trained staff, and substandard programming that has threatened the overall standards of hospital care. State institutions, where care is primarily custodial, often have staffing patterns on the units with a high ratio of unlicensed-to-licensed staff. A large portion of the care activities in these hospitals is carried out by unlicensed, untrained, or uncertified personnel. In comparing private with state and county hospitals, nondegree or paraprofessional staff comprised 8.7% of mental health workers, whereas in state hospitals the proportion was 40.9%.

In 1998, the state of New Jersey, in an effort to respond to the emerging focus on recovery for clients with mental illness, formed a multidisciplinary state-university affiliation to improve the quality of care at the state psychiatric hospitals. The multidisciplinary team included advanced practice psychiatric nurses (APNs), psychiatric rehabilitation instructors, and psychiatrists. From the state university school of nursing, there were 4 APNs, hired as consultants, who worked collaboratively with 4 APNs from the state hospital on new projects. Using multiple approaches, the goal of the affiliation is to improve the quality of care by replacing the custodial model of care delivery with one that is collaborative, person centered, and recovery based. In 2006, a formal expression of such a goal was presented by the New Jersey Department of Human Services Division of Mental Health Services. The plan outlines a 3-phase process that guides the state system as it embarks on a transformation process toward wellness and recovery. Recovery is defined as “a journey of healing and transformation for persons with mental health disability to be able to live a meaningful life in communities of his or her choice while striving to achieve the full human potential of personhood.” This paradigm has at its core a vision that recovery from mental illness is possible and that much of the care now being provided in the inpatient setting can be provided in the community.

This new vision has encouraged the mental health system to assess prevailing practices and attitudes in light of client-identified themes that promote hope and a more positive self-identity. State hospitals are also considering how the implications of recovery concepts can be understood and blended into acute medical and psychiatric services. Numerous studies have reported that clients who are successfully recovering from the effects of a long-term mental illness cite the presence of an individual in their life who is a consistent and a reliable source of emotional support. This more personal “therapeutic alliance” has been shown to be an integral component of successful clinical interventions. In hospital settings, it is often the case that although professional support is ubiquitous, this more personal connection can be lost. In fact, the clients who are most likely to have formal counseling are only those who are immediately problematic.

**THE MODEL**

In the development of the nursing model, several key factors were considered. First, the therapeutic nurse-client relationship would be the vehicle by which the transformation in care delivery would take place. This required the establishment and maintenance of a primary relationship between the staff and the clients that would remain consistent. Second, the APNs could focus their expertise in their established role as change agent, educators, and the professional who interfaces with the treatment team. The APNs, bridging communication to and from the team and other nursing staff, would play a key role in assisting staff to develop and sustain a therapeutic relationship as they work with clients. Third, the model had to effectively incorporate the high ratio of paraprofessional to professional staff found on the units. This required a push to utilize the paraprofessional staff in a more effective and efficient manner and to reestablish the professional nurse as the one who assesses, plans, directs, and evaluates the nursing care being provided. To emphasize this point, the model was entitled the “Nurse-Directed Care Model” (NDCM).

The NDCM combines components from primary nursing and team nursing models. It provides structure, accountability, coordination, and communication between the client, significant others, and paraprofessional and professional staff. In addition, the NDCM provides for ongoing clinical supervision by the unit APN to help staff link the day-to-day interventions to the client’s treatment plan goals.
The theoretical framework of the model is based on Dorothea Orem’s Self-care Deficit Theory in which nurses’ actions focus on health restorative functions and clients play a major role in collaborating and partnering with staff. Orem’s general theory integrates other related theories such as “self-care,” “self-care deficit,” and “nursing systems.” Both the client and the nurse collaborate to assess the individual’s self-care deficit to determine the types of intervention that are needed to promote health and wellness. Nursing as a clinically focused discipline must advocate for client autonomy and work collaboratively with clients in developing realistic and attainable recovery goals. This theoretical framework is applicable to psychiatric settings and the NDCM, in that it fosters the collaboration of clients and staff in the process of restoring health. It also provides guidelines to help nurses determine in partnership with the clients their recovery and self-care needs to maintain their optimum level of functioning and autonomy.

Clients need to be involved in their own goal development. The guiding principles of the NDCM are centered on specific roles and establishment of key personnel. The APN functions as the clinical expert who participates in all aspects of the therapeutic milieu providing education and clinical supervision to all levels of nursing staff. The registered nurse, in addition to providing recovery oriented nursing care, focuses on directing, supervising, and evaluating the care provided to clients by the paraprofessional staff. The paraprofessional staff functions as care extenders.

The structure of the model is as follows:

- All clients and staff on the units are divided into 2 NDCM teams.
- Registered nurses (RNs) are assigned as NDCM team leaders.
- Licensed practical nurses (LPNs), under the direction of an RN, function as assistant team leader.
- Each paraprofessional staff is assigned to a group of 4 to 6 clients (subteams), with a focus on clinical, environmental, and behavioral aspects of care and receives clinical supervision from the RN and unit APN.
- The NDCM assignment sheets, which include team list and subteams, are developed and are used daily.
- Team lists are posted on the wards visible to everyone, including clients.
- Medications and treatments are administered by the RN or LPN of their team.
- Daily work sheets for paraprofessionals outline priorities of observational and direct care.

This structure makes it possible for the same groups of clients and staff to consistently work together across all 3 shifts and thereby facilitate the development of a therapeutic bond and a good working alliance between clients and staff. Because the units are divided into 2 teams, each team leader is in charge of a smaller group of clients and can plan and direct the care for the same group each day. This fosters a working relationship where (1) staff has knowledge of the treatment goals for the clients over time, (2) there is consistency in client-staff assignment, and (3) there is improved communication between clients and staff, and among staff. The goal is that nursing care would progress beyond custodial care to a more recovery-focused approach in which each client is known and valued for his/her uniqueness and individualized strengths and is given an opportunity to partner with staff in the achievement of his/her recovery goals. It is through knowing each client as an individual that appropriate interventions can be developed and behavioral change can take place.

The NDCM expands the parameters of the current role and function of each level of staff, particularly the LPN and paraprofessional. The LPN, formerly utilized primarily as a medication nurse, is now expected to function in the role of team leader, in the absence of the RN. The paraprofessional staff’s role is also pushed beyond the limits of assisting primarily with activities related to daily hygiene to one where they are expected to become more involved in all aspects of the care for their core group of clients. They will be expected to participate in their assigned clients’ treatment team meetings and know the client’s discharge goals and barriers and partner with clients to teach skills necessary to overcome those barriers. They will also be expected to utilize specific interventions to help clients maintain or regain control.

Morris and Stuart, in their outline of the educational needs of frontline staff in behavioral health practices, states that “Learning should not take place in a vacuum.” For mastery to occur, staff must be given the opportunity to practice and apply what they are being taught in actual clinical settings. In this model, the integration of information into clinical practice takes place in the formal clinical supervision meetings led by the APN and client care manager on each unit. In these meetings, team leaders and paraprofessional staff discuss care delivery issues and evaluate clinical intervention for their clients. Typically, during these meetings, there are didactic instructions, discussion of specific client care issues, and issues related to management of the milieu. Interventions are developed and linked to the overall treatment plan, and recommendations are made on how to assist clients through the use of the therapeutic relationship as a vehicle to bring about behavior change. Although the unit APN is available to assist staff individually as he/she works with their clients, these formal group supervision meetings provide an opportunity for other members of the team to be part of the discussion and the development of interventions for a particular client.

METHODS

This quality improvement project implementation phase lasted about 9 months and was first piloted in 1 building, with the plan to extend the use of the model hospitalwide. To ensure success, the APNs, client care managers, and assistant directors of nursing from the designated building and the state-university affiliation APNs formed a leadership group to oversee the implementation plan for the building. To ensure standardization across units, this nursing leadership group developed a manual that outlined all aspects of the model, including role, function, and expectations of each level of staff. The manuals were distributed to all units to be used as a resource. The nursing leadership group also collaborated with the licensed staff in the development of shift-specific NDCM daily assignment sheets. Each assignment sheet lists the team leaders for the shift and the client-staff subteams. The leadership group met weekly to coordinate the process, problem solve as barriers emerged, and to plan and conduct ongoing training.
Each step of implementation was done simultaneously on each unit in the building. All staff training was provided by members of the leadership group. For the licensed professional staff, education included topics such as leadership skills, characteristics of effective team leaders, effective communication techniques, and components of delegation responsibilities. For the paraprofessional staff, training topics included components of a helping relationship, therapeutic communication, and role expectations for the direct care provider with a focus on recovery-oriented behaviors.

Because this is a quality improvement demonstration project, several clinical and environmental indicators were identified to measure changes resulting from the implementation of the NDCM. Baseline measures were obtained at the initial phase of the implementation process, and follow-up measures were done 9 months later. The members of the nursing leadership group interviewed staff and clients to assess their knowledge of treatment plan goals and other clinical issues and to observe the condition of the clients’ living environment. Responses to the surveys were chart congruent in that the information was verified for accuracy by reviewing the medical record and posted NDCM master list and assignment sheets. A total of 141 staff on the day and evening shifts were targeted for the evaluation process. This included 32 RNs, 17 LPNs, and 92 paraprofessional staff. Premeasures were completed on 32 staff (23%). A total of 53 staff (37.5%) and 19 of their clients were interviewed for the postmeasures. The original survey contained an 8-item questionnaire. The postmeasures included an expanded version of the original survey, to include questions to assess the staff’s knowledge of their assigned clients discharge goals, level of supervision, and their attendance in their treatment team meetings.

RESULTS

Data were analyzed using SPSS (version 12.0; SPSS Inc, Chicago, Illinois), with t tests primarily used to assess differences between the premeasures and postmeasures. In comparing the premeasures and postmeasures, 2005 to 2006, the NDCM survey results indicated an improvement in almost all aspects of care. Indicators of staff knowledge of their clients’ relevant clinical information (Figure 1) included staff knowledge of their assigned clients’ name, discharge goals and barriers, present level of clinical supervision, participation in treatment planning meetings, and de-escalation techniques. As seen in Figure 1, staff’s ability to state the name of their assigned clients, their barriers to discharge, and specific de-escalation interventions appeared to show improvement. Significant differences were found for de-escalation, 50% in 2005 versus 90% in 2006 ($t_{28} = 2.96$, $P < .01$). The other measures added in 2006 will act as baseline measures for ongoing evaluation. An area identified for further improvement was staff attendance in their assigned clients’ treatment team meetings (22.6% in 2006).

Environmental observations noted in Figure 2 focused on the living environment of the clients. Areas of interest were number of times clients took showers during the week, the appropriateness of clothing for the season, having adequate amounts of clothing in their locker, clients’ living environment was clean and neat, clients’ display of personal items in their living area, odor-free living area, and clothing neatly stored in clients’ lockers. Storage of clothing and presence of odor in the clients’ rooms were added in 2006. As seen in Figure 2, the NDCM survey results indicated improvement in almost all environmental aspects. In 2005, 77.4% of clients had showers, 37.5% in 2005 versus 77.4% in 2006 ($t_{10} = 3.42$, $P < .001$); adequate clothing, 22% in 2005 versus 80% in 2006, ($t_{51} = 5.9$, $P < .001$); and living environment is neat, 38% in 2005 versus 94% in 2006, ($t_{51} = 5.4$, $P < .001$).

A secondary and positive indicator of clinical improvement since the implementation of the NDCM was a reduction in the incidences of seclusion and restraint as noted in Figure 3. Incidences of seclusion and restraints were compared between building A (demonstration unit), which had full implementation of the NDCM, and another building in the hospital, building C, which did not have full implementation of the model and total incidents hospital-wide. The actual numbers of seclusion and restraint and the numbers with corrections for time and census among all three are noted in Figure 3. In 2005, during the initial implementation phase, the total number of seclusion and restraint episodes hospitalwide (550 beds) was 71: building A (144 beds) had 16 episodes, and building C (97 beds) had 25 episodes. In 2006, postimplementation (6 months), the seclusion and restraint numbers hospitalwide was 124;
building A had 22 episodes, and building C had 64 episodes. Adjusting for the number of beds and duration of assessment (4 vs 6 months), the changes in rates of seclusion and restraint were hospitalwide, 15% increase; building A (NDCM), 10% decrease; building “C” (non-NDCM), 69% increase. Whereas the overall rates of seclusion and restraint increased, building A was able to maintain its rates of seclusion and restraint with a slight decrease. Although other factors may contribute to this overall improvement, the structure, accountability, and the establishment of a helping, therapeutic relationship between client and staff may have played a role in the sustained reduction of seclusion and restraints incidences noted in building A.

**FACILITATORS/BARRIERS IN THE PROJECT**

The major shift from custodial care to recovery-oriented nursing care was a process that involved all members of the hospital staff. The overall support by the executive management committee (chief executive officer, medical director, nursing administrator, etc) at the hospital was instrumental in facilitating the planning and implementation of the project. The success of the model was fostered by the addition of the client care manager position on each unit that focused the clinical and administrative responsibility for care delivery. Table 1 provides an outline of the evolution of the client care manager’s role. Crucial to the success of the NDCM was the utilization of the APNs (both university consultants and hospital APNs). Table 2 highlights the targeted roles of the APNs in this project. The formation of a buildingwide nursing leadership group (client care managers, assistant directors of nursing, and APNs) was also a key factor that contributed to the success of the development, implementation, and evaluation of the process. This group planned the process, addressed barriers as they emerged, conducted all trainings, and guided staff through each phase of the process. This group also held regular meetings with all levels of staff, including off-shift supervisors. All were kept informed of the changes; this promoted buy-in at each step of the process.

Staff reaction to the model was mixed. The NDCM required a certain level of flexibility on the part of nurses when there are less than 2 RNs on duty. The licensed professional staff felt their workload was being increased. For example, they were reluctant to become more involved in the administration of medication, feeling that this was the territory of the LPN. Team leaders, both RNs and LPNs, tended to resist assuming a leadership role, including delegating or holding paraprofessional staff accountable. An additional barrier included not having an APN on all units, with some units sharing an APN. Furthermore, the
Inconsistency in staffing due to “floating” practices undermined the principle of a consistent client-staff assignment. Finally, high census and acuity levels would often derail the functioning of the model, leaving the units unable to move beyond the usual mode of operating.

The paraprofessional staff was open to the NDCM; however, they voiced concern that other assignments such as more task-related activities, such as transporting clients frequently, kept them away from fully participating. There also exist some resistances by staff to engage in meaningful one-on-one conversation with clients. Some staff who had worked for many years in the state system found it difficult to embrace this new model of care delivery, and many transferred out of the building. Many of the new staff assigned to the building was accepting of the added role expectations.

The following quotes from staff will highlight improved staff morale after implementation of the model:

Nurses: Does this model promote quality patient care?

I am more able to focus on the patients... I am more familiar with their diagnosis and treatment... more able to track them.

I am more familiar with their medications and their behaviors... more able to prevent escalation [of problem behaviors].

Direct care provider (paraprofessional): What do you like about the model?

I know my patients’ needs. When I come in, I know what kind of help each of my patients needs... If they need assistance with their laundry... what groups they are assigned... do they need to be encouraged to attend group. I know my patients.

Despite the success of the NDCM, the sustainability of the gains will require a considerable effort, constant vigilance, guidance, and support at the unit level to prevent a reversal to “business as usual.”

CONCLUSIONS

In a large state psychiatric facility that is attempting to shift from a custodial to recovery model, we found that progress can occur with a firm commitment from the administrative and management group. We implemented a model of care delivery that promotes recovery through enhanced client-staff relationship. This model can be generalized to other hospitals, and plans are being made to adopt the model to other psychiatric facilities in the state. Further refinement of the NDCM could include an expansion beyond the discipline of nursing to include, for example, the assignment of a social worker on each team who will participate in the clinical supervision meetings and impart information about discharge plans for clients and the skills needed to achieve successful community placement.

Preimplementation and postimplementation measures suggest that the NDCM successfully improved staff’s knowledge of relevant clinical information about their clients, including specific de-escalation interventions. There was also improvement in client living environment and overall unit safety evidenced by reduction in incidences of seclusion and restraint. This reduction could be a combined result of the established therapeutic alliances and the improvement in staff knowledge on helping their clients maintain and regain control through the use of de-escalation techniques. This echoes Delaney and Johnson’s findings that a key factor in creating and maintaining a safe milieu was the “connections formed with client, an attunement with their affect, and an understanding of what they need and how that need was being expressed.”

The journey toward recovery takes place in an environment where people feel safe and are able to be involved in a trusting relationship with another person. The inpatient setting can be a place to begin the process of creating new meaningful connections, or it can reinforce a sense of isolation, fear, and mistrust. Recovery often takes place through a helping relationship where hope is nurtured and people learn to value themselves. The NDCM that was instituted in this state hospital was an attempt to foster and nurture a therapeutic alliance where healing can take place.
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