



Application of the Clinical Nurse Leader Role in an Acute Care Delivery Model

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The authors describe a 6-month pilot project incorporating a modified version of the American Association of Colleges of Nursing's (AACN) clinical nurse leader (CNL) role as a prelude to implementation of the AACN-defined CNL role. The purpose of the project was to evaluate a new nursing care delivery model on a designated nursing unit, incorporating the modified CNL role. The pilot was evaluated using nurse-sensitive indicators. Results showed positive trends for all indicators.

Leadership in nursing is critical to providing the needed guidance for solving the complex problems related to nursing care delivery. Paradoxically, as Woodring emphasizes, "The call for intelligent and courageous leadership remains at least in part, unfulfilled."^{1(p129)} It is crucial for nurses with advanced educational preparation, clinical expertise, and leadership training to manage patient care at the bedside.²⁻⁴ Therefore, new roles in nursing leadership must emerge.²⁻⁴ The American Association of Colleges of Nursing (AACN) has responded by developing the clinical nurse leader (CNL) role as

a leader in the health care delivery system across all settings in which health care is delivered, not just the acute care setting. The implementation of the CNL role, however, will vary across settings. The CNL role is not one of administration or man-

agement. The CNL assumes accountability for client care outcomes through the assimilation and application of research-based information to design, implement, and evaluate client plans of care. The CNL is a provider and a manager of care at the point of care to individuals and cohorts or populations. The CNL designs, implements, and evaluates client care by coordinating, delegating and supervising the care provided by the health care team, including licensed nurses, technicians, and other health professionals.^{2(p2)}

According to the AACN, the CNL functions "as a generalist providing and managing care at the point of care to patients, individuals, families and communities."^{3(p3)} The clinical nurse specialist (CNS) and nurse practitioner (NP) roles are not considered generalist roles filling this need.²⁻⁴ The CNS functions as an expert clinician in a particular specialty or subspecialty of nursing practice;² the NP functions competently as a primary care first-line management expert.³ However, all advanced practice nursing roles share the foundation of a nursing perspective in the care of individuals and families.³ The nursing profession can capitalize on the advanced practice role similarities while maximizing the strengths, contributions, and individuality that each role represents in today's complex and rapidly changing healthcare environment.^{3,4} The CNL role, although similar to other advanced practice nursing roles, differs at the point of care, where the nurse functions as an expert clinician and leader of the nursing team.²

Pilot Implementation

A new nursing care delivery model was developed that synthesized our hospital's vision and mission

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which is “the best patient experience with the best staff.” The foundation of the new care delivery model was supported by the clinical and leadership expertise of advanced practice nurses in a modified CNL role, as an integral component of the model. We were also challenged to include the ideals of Magnet hospitals designated by the American Nurses Credentialing Center, using principles and forces of excellence which promote empowerment through self-governance.

We incorporated attributes of the CNL role as defined in the 2004 AACN white paper, excluding the social service, management, and utilization role components. Because of this CNL role modification, the advanced practice nurses participating in our pilot project were called patient care coordinators (PCCs). These nurses are master’s prepared and have diversified experience, education, and clinical expertise. Their backgrounds include critical care, education, business, finance, and administration. Although there was no formal training for the PCC role specific to the pilot, each PCC became familiar with the CNL role defined in the AACN white paper.

The PCC role was differentiated from the CNL role in the following ways: each PCC was responsible for administrative and personnel management issues related to their assigned staff, which consisted of 2 registered nurses (RNs) and 2 patient care technicians (PCTs) for a 12-hour shift; and the PCCs worked with social workers and utilization review nurses to create an interdisciplinary approach to patient care. Otherwise, it was determined that the PCC role would consist of the specific functions that fit within the intent of the CNL role developed by the AACN. Consequently, each PCC was responsible for reviewing issues related to issues of continuity of care, providing patient education; assisting staff with patient care issues; resolving issues involving all diagnostic procedures and tests; and mentoring and providing on the job training for all staff.

Pilot Unit

The clinical site for the pilot project was a 43-bed cardiac/pulmonary unit in a 321-bed acute care hospital. The patients’ conditions included cardiac and pulmonary diagnoses with varying acuity, from self-care patients to acutely ill patients requiring telemetry monitoring. The purpose of the 6-month pilot project was to evaluate the effectiveness of a nursing care delivery model on a designated nursing unit incorporating the modified CNL role. The

pilot was evaluated using the following nurse-sensitive indicators: nurse job satisfaction, nurse recruitment and retention, patient and physician satisfaction, contract labor usage, and patient length of stay (LOS). Initially, prior to the pilot, employees were given the opportunity to choose whether they wished to participate in the project. Those who chose not to participate were allowed to transfer to other units within the hospital.

Unit Structure

The pilot unit’s architectural structure is 6 satellite pods of 5 or 6 rooms and a small main desk. Pods are small nursing stations on a unit designed to keep each patient’s area more private and free from the distractions happening throughout the unit. For the first 3 months of the pilot project, the PCCs decided to close 13 of the 43 beds for the following reasons: to provide a 1:5 nurse/patient ratio; to create an equitable distribution of patients among the PCCs; to facilitate extensive and on-going training of all staff in relation to the new patient care delivery model and the PCC role. The education process also included discussion about the CNL role, as defined by the AACN.

The nurses were also trained to perform order-entry functions necessary for their direct patient care assignments. There was also intensive on the job training of the nurse aids, unit secretaries, and phlebotomists preparing them to function in a multitask role consisting of nursing assistant, phlebotomy, and secretarial components.

Staffing

The staffing pattern for the day shift for 30 patients consisted of: 6 RNs, 6 PCTs, 1 unit secretary, and 3 PCCs. The staffing pattern for the night shift was the same as the day shift except that the staff nurses rotated the team leading responsibilities in the absence of the PCCs. All of these changes supported the following project goals of providing: increased direct patient care, timelier implementation of physician orders, and immediate knowledge for the nurses of all aspects of patient care, and preparation for an electronic medical record in the following 12 months.

There was a total of 11 PCTs distributed between two 12-hour shifts. The normal patient caseload for each PCT was 8 patients. Prior to the pilot, the nursing assistant work load was very heavy and could go as high as 20 patients based on census and staff availability; however, their normal caseload

was 11 patients. Conversely, the phlebotomist role had large periods of down time because their sole job was blood collection. The unit secretary role was absorbed by the PCT role except for 1 secretarial position on the day shift for processing complicated physician orders and admissions.

During the pilot, in addition to the PCTs, there were a total of 12 RNs for a 24-hour period. The nurse-to-patient ratio per 12-hour shift was 1:5. Three months after implementation of the pilot, the number of patients increased to 43; however, the 1:5 nurse-to-patient ratio was maintained. Prior to the pilot, staffing the pattern varied and consisted of RNs and LPNs who staffed the unit in a 24-hour period. Many of the RNs and LPNs were agency nurses who outnumbered the regular staff on any given shift. This inequity caused resentment among the regular nursing staff as use of contract nurses often affected quality and continuity of care in a negative way. The nurse-to-patient ratios were inconsistent, ranging from 1 to 7 per 12-hour shift.

Because the PCCs were responsible for reviewing issues related to continuity of care, regular meetings, at least 5 days per week, were conducted with the vice president of quality management, social workers, utilization review nurses and the PCCs. The purpose of these meetings was to collaborate on patients' plans of care and to identify problems resulting in increased LOS and issues related to continuity of care post discharge. The vice president of quality management, who is a physician, was used as the liaison to resolve physician-related issues identified during these meetings.

The PCCs did not have formal training specific to leadership in relation to the new care delivery model used in this pilot project. They also did not have formal advanced educational preparation for the CNL role. However, they were knowledgeable about overall principles of leadership based on previous master's level course work in nursing and business programs. Also, one PCC had supervisory experience in a hospital setting.

Staff Empowerment

The PCCs evaluated the pilot unit in relation to staff empowerment. Studies have shown that perception of workplace empowerment is a significant predictor in psychological empowerment, organizational commitment, autonomy, job strain, and collaborative behaviors.⁵⁻⁷ Empowerment is a means of giving employees the authority, skills, and freedom to perform their tasks,⁸ and leadership is responsible for employees' empowerment.^{4,9,10}

As part of their leadership role, the PCCs determined the need to address issues related to staff empowerment that could impact success of the pilot. As a result, they developed a series of action plans to facilitate staff empowerment using principles of self-governance and self-scheduling. Using these plans, staff nurses were placed in charge of organizing and distributing their schedules. Scheduling conflicts also were resolved by staff using the peer system.

At the same time, the PCCs supported staff in their decision to operate the unit under a closed system, which meant a no-float policy. This recommendation was made because staff wanted complete control of their practice environment. To promote the principles of self-governance, staff members were also encouraged by the PCCs to participate in the nursing practice, education, research, and quality councils.

Communication and dissemination of information are also necessary for empowerment; therefore, it is essential that leaders share valuable information with everyone.⁴ The PCCs held monthly meetings with the staff to facilitate open communication and discussion of unit goals and concerns.

Quality Assurance

The PCCs gave staff the responsibility for monitoring their quality assurance initiatives, including making improvements as necessary. For example, the nurses participated in unit-based quality improvement task forces consisting of small teams of nurses, patient care technicians, and other departmental members. Those teams met frequently to evaluate system issues and implement positive changes. As a result, new policies and procedures, enhancing the quality of care delivery, were implemented. These strategies supported the aspect of the Magnet Hospital Recognition Program focused on quality and staffing levels in nursing. Studies show that appropriate staffing levels can have a positive impact on quality, cost, and patient outcomes.¹⁰⁻¹² When nursing staffing levels are optimized, fewer complications, fewer adverse events, shorter lengths of stay, and lower mortality rates tend to occur.¹⁰⁻¹²

Benchmarking Data

The following benchmarking data were collected before and after the project: nurse recruitment and retention, nurse job satisfaction, patient LOS, patient fall rate, use of contract nursing staff, and cost per patient day.

Analysis of nurse empowerment and job satisfaction was determined in the pilot using a combination of the Conditions of Work Effectiveness Questionnaire (CWEQ-II), the Job Activities Scale (JAS), and the Organizational Relationship Scale (ORS). These tools were developed and validated in the research of Laschinger et al. If staff scores highly on these scales, it can be concluded that they perceive themselves as working in an empowered work environment.^{5,14-16}

Patients' satisfaction with their overall nursing care was collected each month during the pilot project from their patients' responses on a private survey from a national organization. In addition, at the conclusion of the pilot, physicians were surveyed about their satisfaction with overall nursing care, including information given to them about their patients. The survey consisted of a 5-question Likert scale developed for this project. The questionnaires were distributed to 45 doctors, 22 of whom responded. LOS data were collected for 6 months during the pilot and compared with data from the same time frame of the previous year. Data related to contract nurse usage before and during the pilot were also compared.

Results

The pilot project began with a dearth of regular nursing staff; however, by the end of third month of the pilot, all RN positions were filled and, to date, all RN positions remain filled. Nurse job satisfaction, measured by the CWEQ-II, showed an upward trend over pre-pilot figures. This is consistent with the upward trends in nurse job satisfaction shown in Magnet hospitals.¹³⁻¹⁶

During the initial month of the pilot, patients' attitudes toward their overall nursing care were rated at 83.1%. Patients' attitudes regarding nurses keeping them informed was rated at an 85% overall average at the end of the pilot. During the initial month of the pilot, patients scored the nursing staff at 77% for keeping them informed. Another positive trend was reflected in patients' responses on nursing skill levels. During the first month of the pilot, nursing skill levels were rated at 83% compared to 89.5% average by the end of the pilot. Patients' satisfaction was positively trended in all areas related to nursing care. These ratings were consistently above the national industry average.

Before the pilot project, several physicians verbally indicated that they did not have confidence in the quality of the nursing care. At the end

of the pilot project, data related to physicians' satisfaction with nursing care showed that 95% of the 22 physicians who responded were very satisfied with nursing care and how well the nurses kept them informed about their patients' conditions. There was also a positive result with nurse/physician collaboration resulting from this project. This was evidenced by a discernable difference in collegiality between nurses and physicians after the pilot. It is believed that this collegiality was a reflection of a positive culture change during the pilot due to the effects of the new nursing care delivery model and the PCC role.

Prior to implementation of this project, the LOS was 4.06 days for the same 6-month period during the previous year. During the pilot, the LOS was reduced to 4.05 days. This represents a 9% decrease or 0.41 days representing a cost savings of \$416,150.00. Also, during the 6-month period of the pilot, the staff processed the majority of the hospital's medical/surgical patients as followed: 39% of admissions, 33% of transfers, 33% of the discharges, and 48% of the transfers off the unit. Also, use of agency nurses on the pilot unit was reduced 50%; however, agency nurses were used early in the pilot to supplement staffing to facilitate training of regular staff. By the end of the pilot, use of contract staff had been eliminated, representing a cost savings of \$120,165.00.

Unanticipated results from this project included negligible use of restraints and fewer falls in comparison to the overall hospital patient fall rate. No cardiac/pulmonary arrests occurred after the first month of the project because of more timely interventions preventing the need to rescue. Prior to implementation of the project, restraint use was 110 episodes for the same 6-month period during the previous year. During the 6-month pilot, there were only a total of 68 episodes of restraint use, representing a 38% reduction in restraint use.

Conclusions

As a result of this pilot, nurses' satisfaction was positively impacted with the proactive leadership of the PCCs in fostering the collaborative process, encouraging education, and providing resources. LOS was also affected by the CNLs' timely interventions and assistance in expediting procedures; their problem solving and rapid identification of inadequacies in the patient care process; and their facilitation of communication among care givers including their mentoring, coaching, and leadership functions. Reliance on agency staff

was drastically eliminated through self-scheduling and the attractive work environment created by the new nursing care delivery model. The professionalism of the nursing staff was facilitated through the team-centered, self-governing approach embodied in the new nursing care delivery model and modified CNL role evaluated in this project.

The PCCs were able to negotiate and improve work-related processes within the context of their immediate working environment and within the entire hospital organization. Through their leadership the PCCs: enhanced interdepartmental collaboration; identified and resolved system issues; facilitated staff nurses in expanding their critical thinking skills, leading to a greater autonomy in their nursing practice; and contributed to the increase in patients' satisfaction with their nursing care.

Implementation of even a modified version of the CNL role has shown positive and cost-effective

clinical outcomes. Based on these results, it is projected that implementation of the CNL role, as defined by the AACN, will result in enhanced empowerment and autonomy for the advanced practice nurse at the bedside. This will necessitate redefining traditional healthcare provider roles and relationships, which in turn will create a different set of norms and expectations regarding the new CNL role within the hierarchical frame of the hospital.

In Fall 2005, the hospital implemented another CNL pilot project using the CNL role developed by the AACN. In conjunction with this pilot project, the hospital has partnered with a major university in Northeast Florida to serve as a clinical site for their CNL Masters Program, which also began in Fall 2005. Data from the original pilot project will be compared to the new pilot using the same nurse-sensitive indicators. It is anticipated that the positive trending shown in the original pilot will continue.

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