Emergency departments across the country are in a state of crisis. The impending shortage of nurses and nurse educators, increasing complexity of illness, and uncertainty regarding the future of health care are just some of the issues being faced today. In addition, as outcomes become an increasingly critical measure of success, the education level of nurses has come under examination. Studies have shown that higher levels of education result in improved outcomes, leading several professional organizations to recommend a baccalaureate degree as the minimum degree for entry-level practice. These recommendations include requiring nurses licensed after 2012 to earn a master’s degree within 10 years and transitioning advanced practice degrees from master’s to doctoral degrees. As health care becomes increasingly complex, the bedside nurse not only needs to be skilled in practice but needs to be knowledgeable about policy, outcome evaluation, and evidence-based practice. In response to these concerns and others raised by professional and credentialing organizations, the role of the Clinical Nurse Leader (CNL) was developed.

The CNL was the first new nursing role successfully introduced in decades. Unlike other advanced nursing roles in which specialties are chosen, the CNL is a master’s-prepared generalist role and can therefore work in multiple environments. One of the main goals of the American Academy of Colleges of Nursing (AACN) in developing the role was bringing leaders to the microsystem, or unit, level. These “leaders” could improve outcomes by bringing evidence-based practice and quality improvement to the bedside. The role of the CNL includes several responsibilities, which are outlined in Table 1. These responsibilities address the call for a higher level of nurse education at the bedside, requiring CNLs to serve both the patient and the profession. The aim of this article is to explain the differences between the CNL and Clinical Nurse Specialist (CNS), apply the CNL’s skills to specific ED concerns such as fragmentation of care, overcrowding, and outcomes; and make recommendations for implementing the CNL role in the emergency department.

CNL or CNS?

Before discussing the difference between a CNL and a CNS, it is important to understand the difference between a microsystem and a macrosystem. A microsystem is a team of people working together regularly to provide care to a population of patients. The microsystem shares aims, processes, information, and outcomes. It can evolve over time and is often embedded in larger organizations. Each hospital unit could be considered a microsystem, with various committees and teams creating other microsystems as well. A macrosystem, or macro-organization, is composed by the microsystems it oversees. The microsystem might have its own protocols (eg, ED triaging protocols or oncology chemotherapy administration protocols), but there are macrosystem policies, procedures, and protocols uniting and regulating each building block.

There are many similarities between the CNL and CNS. Both roles emphasize the importance of evidence-based practice, coordination of the health care team, and education of staff and patients. There are, however, some important differences. The CNS is an advanced practice role, requiring either a master’s or doctoral degree. Education for the CNS includes both broad preparation and specialized experience in a subspecialty. The CNS is an expert in evidence-based practice in his or her specialty, often conducting research. In addition, the CNS can perform comprehensive assessments, developing differential diagnoses and managing illness. Finally, the CNS serves as an agent of change, often acting as a consultant or researcher.

The CNL, by comparison, is a master’s-prepared advanced generalist. Education and preparation are broad with no specialization. Evidence-based practice is assimi-
lated and applied to the microsystem in which the CNL functions. The CNL assumes responsibility for the cohort of patients in his or her microsystem, developing and implementing processes directly affecting this population. Instead of diagnosing and managing illness, the CNL is a provider, manager, and lateral integrator of care. It is also a goal of CNL education to develop horizontal leadership. Table 2 further shows the differences between and similarities of the two roles.

Emergency departments can benefit from both roles. The CNS can help serve the macrosystem, integrating evidence-based practice on a larger scale. There is an ability to flex between the macrosystem and microsystem, especially when a unit has the need for advanced practice nursing to diagnose and treat a specific patient population. By contrast, a CNL can function as a unit-based leader, working to laterally integrate care by serving as a patient advocate in the health care team. The CNL can help implement macrosystem-level changes at the microsystem level, serving as educator and leader in the process.

**TABLE 1**

<table>
<thead>
<tr>
<th>Responsibilities of CNL</th>
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<tbody>
<tr>
<td>Clinician</td>
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<tr>
<td>Outcomes manager</td>
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<tr>
<td>Client advocate</td>
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<tr>
<td>Educator</td>
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<tr>
<td>Information manager</td>
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<tr>
<td>Systems analyst</td>
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<tr>
<td>Risk anticipator</td>
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<tr>
<td>Team manager</td>
</tr>
<tr>
<td>Member of a profession</td>
</tr>
<tr>
<td>Lifelong learner</td>
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</table>

Applying the CNL to Emergency Care Challenges

**FRAGMENTATION**

Several of the issues afflicting emergency departments are well documented. These issues are intensified by the fragmentation of health care. In addition to dealing with internal fragmentation issues arising from increasing specialization and split roles and responsibilities, the emergency department suffers from variances in state and federal regulatory agencies, regional EMS policies, and the difficulty coordinating public safety and disaster responses. The 12-hour shifts used in many hospitals to combat nursing shortages and staff retention issues can also negatively affect continuity of care. This fragmentation negatively affects the efficacy, quality, and timeliness of emergency care.

One of the assumptions of the CNL role is that, for care to be client centered, it must be intradisciplinary and interdisciplinary. Being at the bedside allows the CNL to better advocate within the team and combat fragmentation by serving as a central figure who can direct the patient’s care. The CNL can serve as the unifier among the different disciplines caring for the patient, including physicians, pharmacists, therapists, and other nurses, ultimately improving the safety and appropriateness of patient care. For example, a CNL assigned to an urban California emergency department identified a gap in allergy documentation. Contributing factors included limited communication among ED staff, little to no interaction with pharmacy, and three different locations for charting. By collaborating with a multidisciplinary team including nurses, physicians, pharmacists, and technical support, a plan was established to improve patient safety by addressing allergy documentation. By addressing the fragmentation of the patient’s chart and improving interactions with the pharmacy, significant improvements were made. Before CNL involvement, 20.1% of allergies were reconciled, with an estimated 500 allergy-related medication errors of varying severity annually. Three months after CNL intervention, allergy reconciliation had improved to 76.9%, with a 95% drop in potential errors.

**OVERCROWDING**

ED overcrowding is not a new issue. Patient volume increased 23% between 1997 and 2007 and is expected to continue to rise. Of the 117 million people seen in emergency departments in 2007, 77% were discharged home, reflecting the issue of ED utilization for low-acuity problems or primary care. Overcrowding strains resources, lowers quality of care, and delays treatment for critically ill patients. Although plenty of research focuses on the impact of the uninsured on ED overcrowding, little has been done to investigate nonurgent use by persons with primary care physicians. Research has shown central themes contributing to this use, including the inability to obtain an appointment, referral to the emergency department by the physician’s office, and convenience and access to care. In addition to issues related to access to primary care, limited inpatient beds, staffing issues, and the aging population contribute to overcrowding. Many emergency departments become boarding units, holding admitted patients and further exacerbating overcrowding issues.

Although the CNL practices at the microsystem level, he or she has a responsibility to assist not only the client
but the community. Health literacy is critical to encourage independence and disease prevention in the general public, and the CNL must educate both providers and consumers in the process of becoming health literate. By assisting consumers to become health literate, the CNL is addressing ED overcrowding. A better educated population can result in better self-care, disease prevention, and access to health care. In addition, the CNL is educated in risk anticipation. There is inherent risk in ED overcrowding. As previously discussed, high numbers of nonurgent ED users pull resources from the critically ill and injured. There is the potential for deterioration of any patient sitting in the waiting area until a bed is available. There is also the possibility that long waits will result in patients leaving before undergoing a medical screening examination, also resulting in increased risk to both the patient and the department. From a fiscal standpoint, many emergency departments need to see a certain volume of patients daily to cover the costs of running the department. A high “left without being seen” number affects the department’s ability to be financially stable.

CNLs have been key in improving throughput in other areas of the hospital. Using their knowledge of risk anticipation, mass customization, and client advocacy, they can be extremely effective. A perioperative CNL at one facility served as the lead on a project designed to improve operating room throughput by streamlining the admission process. Through research, collaboration, and restructuring, the team was able to increase its percentage of on-time starts from 12% to 89%. The mean turnaround time decreased by 24.7%. This also resulted in financial benefits, allowing the department to schedule more procedures and decrease overtime worked by staff. Patient satisfaction scores improved, raising the facility’s overall score from the 84th percentile to the 97th percentile. A CNL using the same skills in an emergency department could lead a multidisciplinary team to find new ways to improve throughput. As ED volume continues to rise, structural changes will have to be made. Whether a facility is considering nursing-based patient care initiatives, placing a medical provider in triage, or creating holding areas for admitted patients, involving a CNL could greatly improve the chance of success.

**EDUCATION**

Although all aspects of health care can anticipate change in the near future, emergency departments can expect increased challenges as the population ages, medical issues become more complex, and the number of patients requiring routine medical and psychological care increases. Nurse educators, therefore, are faced with the difficult task of preparing staff for anything and everything. High turnover has an impact on education as well, increasing the workload of the educator and decreasing the overall experience level in the department. Research has identified critical thinking and basics such as triage and medication safety as priorities in ED education. Nurse educators and managers have to determine ways to maintain these competencies and expand on them.

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**TABLE 2**

Comparing CNL and CNS roles

<table>
<thead>
<tr>
<th>CNL</th>
<th>Both CNL and CNS</th>
<th>CNS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master’s-prepared generalist</td>
<td>Advanced practice nurse with subspecialty</td>
<td>Broad education with specialized experience</td>
</tr>
<tr>
<td>Broad education with no specialization</td>
<td>Work in a wide range of settings</td>
<td>Serves as expert clinician/resource to subspecialty, developing and managing differential diagnoses</td>
</tr>
<tr>
<td>Provides, manages, and laterally integrates care</td>
<td>Support evidence-based practice</td>
<td>Works at microsystem and macrosystem level, using expertise to influence at system level</td>
</tr>
<tr>
<td>Functions at microsystem level</td>
<td>Develop comprehensive patient care plans</td>
<td>Generates and evaluates research for incorporation into practice</td>
</tr>
<tr>
<td>Evaluates and implements evidence-based practice at microsystem level</td>
<td></td>
<td>Designs, implements, and evaluates patient- and population-specific policies</td>
</tr>
<tr>
<td>Manages/delegates comprehensive care for a set of individuals</td>
<td></td>
<td>May report to Specialty Administrator or CNO</td>
</tr>
<tr>
<td>Reports to Unit Manager or equivalent</td>
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</tbody>
</table>
CNLs are poised to assist ED management teams with this challenge. Because the CNL’s education emphasizes leadership, evidence-based practice, and outcomes, he or she can absolutely serve as a resource for staff. As the AACN states, the CNL role demands critical thinking, communication, and strong assessment skills. Qualities including compassion, intelligence, confidence, and understanding must be demonstrated. These skills and the knowledge of how to best achieve outcomes make the CNL a prime mentor. Novice nurses can be mentored in a way that allows them to learn both in theory and in practice. The CNL can work closely with the nurse educator, reinforcing new procedures and protocols and acting as a resource. Implementation of the CNL role has also shown better core measure compliance, improved nurse turnover, and higher staff and physician satisfaction. In other facilities, skeptical nurses quickly embraced the CNL role, stating that they feel safer having someone with whom they can review patient care.

COST AND QUALITY

As a health care safety net, emergency departments serve all patients regardless of their ability to pay. As the underinsured population expands and reimbursement policies change, it becomes more difficult to provide low-cost care. In addition, pressure is mounting to prevent events such as nosocomial infections, patient falls, and pressure ulcers because of lack of reimbursement by Medicaid and Medicare for such events. Although patient outcomes are absolutely a measure of quality of care, negative incentives such as these temporarily reduce deficits without necessarily improving long-term quality of care. While the financial challenges affecting hospital units vary, they share the common challenge of cutting costs while delivering improved outcomes.

Several publications have described the impact that CNLs have had on outcomes and cost savings. Some of the costs are implied, such as staff satisfaction and retention; others are evident, including decreased overtime and decreased length of stay. One CNL implemented a postsurgery transfusion protocol, resulting in a 20% decrease in blood transfusions. This, in turn, impacted costs of care by decreasing length of stay and the cost of the blood product itself. Fairbanks showed significant financial impact by improving patient turnaround, allowing more patients to be scheduled for procedures, and requiring less staff overtime. The previously discussed CNL-driven allergy reconciliation intervention resulted in a drastic reduction in allergy-related medication errors. By use of cost estimates of medication errors provided by the Institute of Medicine and Lada and Delgado, this reduction of errors potentially resulted in a cost savings of $568,800 to $4.1 million annually. Most of the literature discussing CNL outcomes refers to short time periods, generally because of the length of time CNL students spend on their immersion projects. Further analysis is necessary to show long-term cost benefits to the CNL role.

Recommendations for Implementation of ED CNL

Practice transformation frequently encounters resistance along the way. As emergency departments and hospitals across the country struggle to operate within financial and personnel constraints, the business case for change becomes increasingly important. The AACN has developed several tools to assist the ED leadership team and CNL in role implementation. Following the 8 stages of change outlined by Kotter, they offer several references and resources to address the 8 steps of change. Approaches to these stages may vary from facility to facility, but identifying a need for change, developing a strategy, implementing the change, and reinforcing it are goals for all.

One challenge of implementing the CNL role is educating others. Awareness is low, and confusion with the CNS role makes it even more challenging. One of the simplest ways to educate team members is through immersion. Several facilities’ first experience with the role is with CNL students completing their immersion projects. As described in multiple publications, these students’ first experiences yield impressive results, including improved outcomes, cost savings, and patient satisfaction. In addition, this immersion allows the CNL to discuss his or her role with staff and show firsthand the benefits of the role. By directly interacting with staff, even those reluctant to accept the role are more likely to embrace it. Collaborating with 1 of the more than 90 CNL programs across the country to bring CNL students to a facility is a very effective way to introduce the role. As the student becomes more visible and shows results, he or she is helping to build a case for implementing the role upon degree completion.

A main concern with the implementation of a new role is the financial impact. Can the budget support another employee? Will it affect another aspect of the budget? Several facilities have decided that the benefits outweigh the costs. Sherman showed that Chief Nursing Officers (CNOs) who have implemented the CNL role did so to address organizational needs, redesign the delivery of care, improve nurse-physician relations, promote nursing professional development, and
improve patient care. The CNOs believed that the move toward pay for performance in acute care validated the financial value of the CNL. Finally, the CNOs believed that the role could be kept budget neutral and provided little risk to the facility. 11,17,24 It is also important to consider the literature showing cost savings, as described earlier, including decreased length of stay, decreased overtime, and decreased costs related to medication errors. 11,17,24

The most applicable data can be gathered by a CNL completing his or her immersion in an emergency department, showing the direct benefit to the unit and the organization.

Conclusion

By utilizing the many aspects of the role, the CNL can be an asset to the emergency department. Although it is important to remember the differences between the CNL and the CNS, the two can work in tandem to improve care. If the role is implemented in the emergency department, the CNL can bring new light to issues including care fragmentation, overcrowding, and care outcomes. As health care continues to evolve and outcomes become a larger measure of success, it is crucial that nurses aspire to a higher level of education. It is important for agencies to support their staff in this endeavor and encourage them to pursue avenues that embrace their strengths. Embracing the CNL role can allow nurses to empower not only themselves but their patients and their agencies by bringing evidence-based practice to the bedside.

REFERENCES

Call for Disaster/Emergency Preparedness Manuscripts

Manuscripts are being solicited for a special issue of the *Journal of Emergency Nursing* focused on Disaster and Emergency Preparedness. Submissions addressing the emergency nursing impact of a disaster, lessons learned, or preparation of nurses to respond to disasters are of particular interest. The deadline for submission is August 1, 2013. Queries may be directed to PeggyMcMahon@cs.com.