Short Report

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The Clinical Nurse Leader – new nursing role with global implications

M. Baernholdt[1] RN, CNL, PhD, MPH & S. Cottingham[2] RN, CNL, MSN

1 Assistant Professor, School of Nursing, Department of Public Health Sciences, University of Virginia, Charlottesville, USA,
2 Clinician II, Emergency Services, Duke University Hospital, Durham, NC, USA

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Aim: This paper describes the development of the Clinical Nurse Leader (CNL©) role and education, the CNL's impact and potential to improve quality globally.
Background: The need for clinical nurse leadership to improve the quality of health care systems while controlling costs is recognized in reports internationally. In the USA, a new nursing role, the CNL, was developed in response to such reports.
Conclusion: CNLs are master's level nurse graduates (although not necessarily recruited from a nursing background) with the skills and knowledge to create change within complex systems and improve outcomes while they remain direct care providers. This innovative role can be adapted worldwide to improve the quality of health care systems.

Keywords: Advanced Practice Roles, Clinical Nurse Leader, Education, Microsystems, Outcomes

Background

Health system performance is receiving increased attention as health care systems across the globe examine ways to decrease cost and improve quality (Bevan 2010). For example, the World Health Organization (WHO) has formed the WHO Health Metrics Network, which assists countries in setting up systems that provide accurate, reliable health information and measures, many of which are impacted by nursing care (WHO 2009). Currently, bedside nurses work in environments where superb clinical skills are insufficient for providing high quality care due to the barriers found within complex, often dysfunctional health care systems (Hall et al. 2008). Therefore, in order to deliver quality care at the bedside, nursing leadership must play a central role in improving quality outcomes (Huston 2008). However, confusion exists about the level and definition of nursing leadership required to improve care (Stanley 2006). The term clinical nurse leadership is commonly used interchangeably with leadership at the administrative or managerial level. In contrast, this paper defines clinical nurse leadership as taking place at the bedside by clinically skilled nurses who have the added knowledge and skills to apply system-level thinking.

Correspondence address: Marianne Baernholdt, School of Nursing, Department of Public Health Sciences, University of Virginia, PO Box 800782, 202 Jeanette Lancaster Way, Charlottesville, VA 22903, USA; Tel: +1 757 870 4978; Fax: +1 434 924 2787; E-mail: baernholdt@virginia.edu.

The need for clinical nurse leadership

In the USA, the recognition of the need for leadership at the point of care was instrumental in creating a new nursing role and education: the Clinical Nurse Leader (CNL©). The development of the CNL was guided by reports from the American Association of Colleges of Nursing (AACN) and the Institute of Medicine (IOM). AACN represents more than 640 schools in the USA with baccalaureate- and higher-degree nurse education programs. In 2000, AACN reports found a need to change practice environments and nursing education in order to improve patient outcomes and keep talented nurses at the bedside (AACN 2009; Tornabeni & Miller 2008). Concurrently, the IOM, a private organization with appointed expert members who provide

Table 1 Findings from Institute of Medicine reports

*A. Six dimensions of health care performance**
1) Safety: patients are as safe in the health care system as they are in their own homes
2) Effectiveness: care is matched to best science in order to avoid over-and underuse
3) Patient-centred care: patient's choices, culture, social context and specific needs are respected
4) Timeliness: reduce waiting time and delays for both patients and health care professionals
5) Efficiency: waste in supplies, equipment, space, capital and ideas are reduced with a subsequent reduction in cost
6) Equity: health care will strive to close racial and ethnic gaps in health status
B. Health Professions Core Competencies†
1) Quality Improvement
2) Interdisciplinary team care
3) Patient-centred care
4) Evidence-based practice
5) Informatics utilization

*Adapted from IOM (2001) *Crossing the Quality Chasm* and †IOM (2003) *Health Professions Education: A Bridge to Quality*.

advice on health matters to the US government, published reports that called for changes in the health care system and health professions education (IOM 2001, 2003). See Table 1 for concepts from these reports.

IOM's recommendations to improve health care systems and capacity and capability of front-line health care workers are echoed in reports from the United Kingdom and Australia (Armstrong et al. 2007; Bevan 2010). Nursing professional organizations, regulatory bodies and policy makers debate whether an expansion of existing nursing roles and education or a completely separate education is warranted. In the USA, AACN decided after much consideration to create a new separate Master's degree for a generalist advanced practice nurse. The CNL was the first master's prepared role to be added to the nursing profession in more than 35 years (Tornabeni 2006).

The health care system consists of four levels: the patient; the microsystem, a unit with a care team; the organization where the microsystem is housed; and the environment such as policy, payment, regulation and accreditation (Berwick 2002). Patients and health care providers interact at the microsystem level; therefore efforts at improving care quality should be directed towards the microsystem. AACN envisions the CNL as a team leader at the microsystem level who incorporates knowledge about the organization and the environment into bedside care delivery (AACN 2009).

AACN's white paper on the CNL role and education describes the CNL as a lateral integrator in a multifaceted clinical leadership role. Lateral integration refers to coordination and facilitation of care provided by multiple services and disciplines across the continuum of care (Tornabeni 2006). The CNL can improve outcomes through coordination and facilitation of care for a specific group of clients within a patient care unit or setting (Tornabeni & Miller 2008). The CNL does not focus on a specific clinical group of patients such as cardiovascular patients. The CNL *does* focus on the group with the most complex problems such as multiple chronic diseases or with the least financial and social resources. The complex patients require care coordination to decrease length of stay and education to improve self-management. The CNL has to develop and implement evidence-based protocols that span several professional disciplines and care settings in order to change processes such as discharge planning and patient outreach programs. The CNL evaluates these protocols by implementing outcome measures such as number of readmissions or visits to emergency department for preventable problems.

CNL programs and curriculum components

CNL programs have several educational models in the USA (AACN 2009). All CNLs receive a generalist master's degree, but students have different backgrounds prior to beginning CNL programs. Some are nurses with a bachelor degree in nursing, while others are non-nurses with a bachelor or higher degree in another field. This flexibility in point of educational entry allows for easy adaptability to other countries' nursing educational structures.

All CNL graduate curricula expand on the skills and competencies of baccalaureate nursing students. Depending on prior education, the CNL student will need a foundation in liberal arts and sciences, professional values and core nursing knowledge (AACN 2009). Some CNL classes overlap with other graduate curricula, for example, classes in pathophysiology, pharmacology, epidemiology, evidence-based practice and health policy, while courses in leadership development and care environment management are unique to the CNL program.

The leadership courses teach leadership skills and interpersonal development. The care environment management classes emphasize understanding of systems and teach students how to implement or change system processes at the microsystem, organizational and policy level. Through these courses, CNLs develop skills in communication, critical thinking and interaction modalities. They are taught how to access, evaluate and dissemi-

Table 2 Essential CNL Curriculum Components*

1. **Nursing Leadership:** how to work effectively with others to improve quality.
2. **Providing and Managing Care:** how to coordinate the health care team and maximize the abilities of the nurse providing direct patient care.
3. **Care Environment Management:** how to use knowledge about team coordination and strategies for making change at the microsystem level.
4. **Clinical Outcomes Management:** how to use knowledge from the biological sciences for illness/disease management.
5. **Health Promotion/Risk Reduction:** how to use knowledge management to understand cause and effect relationships including the ways that culture, ethnicity, and socio-economic variations affect health status and response to health care for individuals and populations.
6. **Evidence-Based Practice:** how to use critical thinking and analysis of research findings to plan evidence-based interventions.
7. **Quality, Safety and Risk Management:** how to anticipate and avoid risks to patient safety, for example using Root Cause Analysis, Failure Mode Effects Analysis and other tools for quality improvement.
8. **Health Care Technologies:** how to utilize information technology (IT) systems and databases to establish trends in order to improve plans of care.
9. **Health Care Systems and Organizations:** how to use systems theory and complexity theory to deliver microsystem care, suggest policy changes in the organization and for understanding state/national health care policy.
10. **Health Care Finance and Regulation**: how to use knowledge and understanding of health care costs to enhance efficiency in care delivery.

*Reprinted with permission from AACN, Baernholdt et al. 2009 pg. 125.

nate knowledge at the system level. They learn how to challenge current policies, procedures and practice environments using change theory and the theory of diffusion of dissemination (AACN 2009; Baernholdt et al. 2009). The essential CNL curriculum components common to all types of CNL programs are listed in Table 2.

Another special feature of the CNL program is the clinical education. In order to open a CNL program, a School of Nursing has to develop partnerships with practice sites such as hospitals, clinics, etc. (AACN 2009). The practice partners are actively involved in curriculum design and provide settings for the 500 clinical hours that AACN requires. CNL students are preceptored one-on-one for a minimum of 300–400 clinical hours. For the non-nurse students, the number of clinical hours ranges from 800–1000. This partnership between the nursing practice arena and nursing education helps bridge the gap between theory and practice.

The possibility of using the CNL to change microsystems outside of the USA was incorporated into one CNL program at the University of Virginia where all students are required to take a course on culture and health, and also have an option in their community health course to elect an international practicum in Guatemala, South Africa, Lesotho, Denmark and Honduras. Through their coursework and international experiences, students apply skills honed in the CNL curriculum within another culture and health care system.

CNL and other nursing roles

In introducing a new nursing role in any health care system it is necessary to delineate it from other nursing roles. Compared with a typical US staff nurse role, the CNL has competencies and knowledge at the graduate level (Haase-Herrick & Herrin 2007). Compared to the Nurse Practitioner (NP) and Clinical Nurse Specialist (CNS), the CNL is a generalist, whereas the CNS and NP specialize. The CNL also generally, has a more robust knowledge of health care financing, quality, safety and statistics. Another difference from the NP and CNS roles is that the CNL role includes management components. In order to be an effective team leader the CNL needs knowledge about management principles, but the CNL does not have a manager's responsibility of overseeing the administration of nursing unit(s). The clinical leadership and management roles are often two full-time jobs where one complements the other (Hendren 2009). Where the nurse managers have ideas as to what outcomes their units should have, the CNL is the person who makes them happen.

When comparing the CNL role to other advanced roles, it is important to note that there is great variation in how health care systems worldwide define the role of the NP and CNS. The differences are found both in the scope of practice and the educational requirements. Some argue that the recent focus on improvement of health care systems and quality should be used to solidify the NP role (Browne & Tarlier 2008). Others ponder on how to reach the goal of bringing the advanced practice nurses to the graduate level in all countries (Pulcini et al. 2010). Such diverse places as Canada, Pakistan, Hong Kong and the Netherlands offer master's level degrees for NPs, while the United Kingdom has a mix of NP courses offered at the graduate and undergraduate level depending on the educational setting. The differences in scope and education of other advanced practice nurses stress the importance of considering what is already in place before introducing a new education. Whether a post-graduate certificate or a whole graduate degree is most appropriate for the CNL role depends on a country's existing regulations for advanced practice nurses' scope of practice and education.

Impact of the CNL role on organizational, patient and nurse outcomes

Currently there are 90 schools of nursing with 192 practice sites in 35 states and Puerto Rico that offer CNL programs, and over 700 nurses have obtained CNL certification through the Commission on Nurse Certification (Rosseter 2009). However, the number of nurses with a CNL education who practice in a designated CNL role is unknown. The CNL role is not yet widely disseminated, but some US health care systems plan to include CNLs into their staffing mix. For example, the Veterans Health Administration (a national health care system that serves former armed forces personnel) is actively recruiting CNLs to work in all their approximately 1400 sites nationwide by 2016 (Rosseter 2009).

As the CNL course is a relatively new education, the impact of the CNL role has yet to be determined. However, early studies suggest that where CNLs are incorporated into the staffing mix, outcomes improve (Rosseter 2009). While the evidence is sparse, early findings suggest that the use of CNLs may increase patient, nurse and physician satisfaction, decrease fall rates, pressure ulcers, and nosocomial infections, lower readmission rates, improve financial gains, bridge communication gaps, improve hand-off of care, promote teamwork and critical thinking, and decrease nurse turnover (Hix et al. 2009; Rosseter 2009; Stanley et al. 2008).

As the CNL role is implemented in more health care systems and institutions, the need to develop indicators that capture the CNL's contribution is needed. One such indicator is degree of care coordination and another is level of teamwork within and across settings. The outcomes described above are used globally to assess health care performance and quality improvement. Hence health care systems outside the USA could benefit from the skills that CNLs provide.

Conclusion

The CNLs' strong clinical knowledge, leadership skills, ability to coordinate, manage and evaluate care for groups of patients in complex health systems across the continuum of care, and the ability to think at a system level are competencies that can be incorporated into new or existing nurse education models worldwide. However, ways to measure the impact of CNLs on quality, safety and cost outcomes have to be refined or developed. The USA has established a graduate CNL degree with several entry points such as with and without a prior nursing degree, but with an undergraduate degree. Other countries can use similar models adapting the education and role to fit their nursing educational programs and health care system needs.

Policy makers and professional governing bodies must embrace broadening existing nursing education and practice roles to include components of the CNL role for successful implementation of this increased scope of nursing practice. Depending on a country's nursing education system, the CNL components can be a postgraduate certificate or a whole graduate education. Having nurses who think at a systems level; and employ clinical leadership at the practice setting are innovative strategies that hold the promise for improving health care globally.

Implications for health care policy and practice

Health care policy implications

1 Reduction of health care costs, particularly in the context of national health care systems.
2 Improvements in existing patient safety and quality of care indicators and development of new indicators such as care coordination.
3 Increased nurse satisfaction and retention.
4 Solidifies scope of practice and education of all advanced practice nurses.

Health care practice implications

1 Broadens nursing education to include thinking on a systems level.
2 Employs clinical leadership by nurses in direct patient care.
3 Provides support and education for nurses at the microsystem level, which is the site of patient and caregiver interaction.

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Author contributions

MB was responsible for conceptualization and drafting of the manuscript. SC was responsible for technical support and made critical revisions important for intellectual content.

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