

# Answering the Call for Quality Nursing Care and Patient Safety

## A New Model for Nursing Education

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Current discussion on the need to dramatically change nursing education and practice is based on clear concerns about the changing nature of healthcare. The increasingly complex healthcare system of our nation provides sophisticated interventions yet concerns about quality persist. A new model of education and practice is proposed and this model is being implemented through a groundbreaking partnership to prepare a master's educated, entry-level, generalist nursing clinician to lead and guide care at the point of care. The competencies associated with this new clinician are discussed and future implications for evaluation and monitoring are shared. **Key words:** *American Association of Colleges of Nursing, Clinical Nurse Leader, nursing education, nursing practice, patient safety, quality care*

### QUALITY AND SAFETY: WHAT IS NURSING'S ROLE?

Nursing, as it has been throughout history, faces yet another crisis related to patient safety and the delivery of quality nursing care. With current and projected registered nurse shortages of an unprecedented nature, pressure is mounting for speedy and lasting solutions to assure the availability of an adequate supply of professional and technical nursing personnel. Simultaneously, a demand for improved patient care outcomes and a safer healthcare delivery system are forcing a re-examination of current nursing education and practice environment models.

Current projections on the demand for nurses anticipate the need to increase the number of registered nurses to 2.8 million

by 2012. The US Bureau of Labor Statistics projects the need for 1.1 million nurses in order to address the increased demand and the projected retirements from the current aging nursing workforce.<sup>1</sup> The Bureau of Labor Statistics<sup>2</sup> further places nursing at the top of the list of needed professionals for the next decade. Buerhaus et al<sup>3</sup> project that an annual 40% increase in RN graduates will be needed to replace nurses expected to be lost to retirement in the coming years. The American Association of Colleges of Nursing (AACN)<sup>4,5</sup> indicates that despite an increase in enrollments in entry-level baccalaureate nursing programs of almost 30% over the years 2001-2003, including a 16.6% increase in 2003, the demand for RNs is far outpacing the need for highly educated nurses. Unfortunately, political and economic forces, echoing strategies employed during past shortages, seek to solve the complex problem by focusing on the production of larger numbers of nurses from community colleges, perceived to be the quickest route to the registered nurse license, rather than focusing on the competencies and education nurses must possess in the healthcare environment today and in the future.

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Clearly, nursing practice is being challenged to evaluate and change how care is delivered. An aging population, growing diversity, technological innovations, and biomedical advances require nurses with highly sophisticated knowledge, education, and skills. Moreover, the dramatically decreased length of stay for patients translates into the need for intense and focused interventions by nurses targeted at addressing issues in an efficient, yet effective, manner. A simple focus on only the number of nurses, rather than the types of skills that nurses should have to intervene effectively, will neither assure safe care nor enhance the quality of care delivered.

#### THE VIEW FROM NATIONAL REPORTS

Current reports to the nation from both the practice and education arenas challenge us to consider how nurses are educated for the complexities of today's healthcare system. In the reports *Crossing the Quality Chasm: A New Health System for the 21st Century*<sup>6</sup> and *Health Professions Education: A Bridge to Quality*,<sup>7</sup> the Institute of Medicine (IOM) of the National Academy of Sciences notes that the American healthcare delivery system and the programs that educate health professionals are in need of fundamental change. The first IOM report challenged all health professionals to focus on the use of evidence to inform practice and to assume accountability for the outcomes of the care provided. This report noted that healthcare organizations and health professionals should all pursue 6 key aims in the delivery of healthcare: safety, effectiveness, patient centeredness, timeliness, efficiency, and equitable care for all. In the second IOM report, the authors call for a transformation in health professions education to better prepare health professionals able to achieve the 6 key aims outlined in the initial IOM report on quality. The follow-up report challenges health professions educators to make fundamental and transformative changes in education to assure the

availability of health professionals who are able to deliver care that is evidence-based, interdisciplinary, patient-centered, focused on quality improvement and are able to use informatics.

Nursing education, in a similar manner, must be radically transformed to achieve the goals of the IOM reports. Yet discussion continues about the numbers of nurses available to provide care, rather than on the critically important knowledge and skills necessary to achieve these goals. Unfortunately, many programs continue to prepare nurses for a practice that no longer exists. Simply producing more registered nurses from the shortest routes to RN practice will not assure the development of a nursing workforce that is uniquely skilled for today's healthcare environment.

The Joint Commission on Accreditation of Healthcare Organizations (JCAHO) in its document *Healthcare at the Crossroads: Strategies for Addressing the Evolving Nursing Crisis* echoes the need for change.<sup>8</sup> The report calls for the creation of organizational cultures of retention, bolstering nursing educational infrastructures, and establishing financial incentives for investing in nursing. JCAHO, in its role to assure quality, monitors sentinel events—those patient care experiences that result in unexpected morbidity or mortality. JCAHO notes that 25% of sentinel events are nurse-related and that the predominant nurse factors in these events are competence and training of the nursing staff.<sup>9</sup> This again creates an awareness of the need to assess whether a simple focus on the number of professionals should be replaced by a concern for assuring the critical nurse competencies are present to deliver high quality and safe patient care.

Similarly, the American Hospital Association's Commission on Workforce for Hospitals and Health Systems in the report *In Our Hands: How Hospital Leaders Can Build a Thriving Workforce*<sup>10</sup> recommends that healthcare delivery systems foster meaningful work by making work design an organizational priority. The report calls for a focus on

competence, building interdisciplinary educational opportunities, diversifying the workforce, and capitalizing on partnerships with the educational community.

A variety of initiatives have recently provided evidence that there is a growing awareness that education is a critical factor in providing quality patient care. In 1998, the Department of Veteran's Affairs (DVA) signed a memorandum of understanding with the American Association of Colleges of Nursing to enhance opportunities for the DVA nursing workforce to acquire baccalaureate and higher degrees. This memorandum was stimulated by the revision of the qualification standards for advancement in the DVA healthcare system. Nurses must hold a baccalaureate or higher degree to progress beyond the entry level (Grade 1) in the DVA. The DVA allocated \$50 million to support their staff's educational endeavors. In 2000, the Chief Nurse Officer Council of the University Health System Consortium studied the preferred staff educational mix of CNOs in academic health centers—the most complex healthcare systems available for patient care. The CNOs voiced a strong preference for a more highly educated nursing workforce and asked that the UHC engage in efforts to assure that the pipeline of nurses prepared at the baccalaureate level be enhanced and expanded to assure the availability of these nursing clinicians.<sup>11</sup> A recent study of career trajectories and longevity of nurses with varying educational preparation, found that nurses with a baccalaureate have enhanced career satisfaction and have longer careers in nursing.<sup>12</sup> Delgado also reviewed the characteristics of nurses who are disciplined by state licensure boards for practice act violations, including medication errors.<sup>13</sup> She found, as was seen in studies in 6 other states, that disciplined nurses had a statistically significant likelihood of holding the associate degree as their highest educational preparation in nursing.

Finally, Aiken et al<sup>14</sup> identified a strong link between patient care outcomes and the educational mix of nursing staff caring for surgical patients. The study was the first com-

prehensive and statistically refined evaluation of the links between education and patient care outcomes. Aiken and her colleagues reviewed patient care outcomes in the population of hospitals in Pennsylvania among almost 250,000 surgical experiences. They found that for every 10% increase in the proportion of nurses holding Bachelor of Science in Nursing (BSN) degrees in a given institution, there was a 5% decline in mortality for individuals undergoing common surgical procedures. Identical findings were found in failure to rescue care outcomes. This work establishes the link between practice environment, staff educational preparation, and patient care outcomes. Aiken and her colleagues document that nurses play an essential role in the early detection and intervention for adverse occurrences. Good surveillance keeps bad things from happening and, further, surveillance is influenced by nurse staffing ratios, nursing skill mix, and educational levels of the nurse. Clearly, education does make a difference in the delivery of safe, effective, and efficient nursing care.

#### **RECONCEPTUALIZING NURSING: THE NEED FOR NEW NURSING PRACTICE AND EDUCATION MODELS**

If competence, education, and skills do play a critical role in achieving safe patient care outcomes, these concerns must inform any efforts to transform the education of nurses or to create a more sophisticated cadre of nursing clinicians for today's healthcare environment. The issues facing nursing education and practice today evolve from a growing understanding of the complexity of the healthcare system. Assuring the best possible patient care outcomes and understanding how to effectively and efficiently use nurses on the basis of their levels of knowledge, education, and skills will be of prime importance. The nursing workforce must be reconfigured to provide the right practitioners at the right locations performing the right functions. Moreover, the knowledge base for

nurses must be enhanced to assure that their education prepares them appropriately and adequately for the practice challenges they will face now and in the future. For AACN, this reality created a clear understanding that new education and practice models must be forged to produce a workforce that can address complex needs and serve as the surveillance system in healthcare.

### **THE RESPONSE FROM EDUCATION AND PRACTICE: THE CLINICAL NURSE LEADER<sup>SM</sup>**

Moving forward, AACN is taking steps to reconceptualize the education of professional nurses. In an effort to address the challenges raised by the IOM, JCAHO, and others, AACN undertook a historic initiative to transform professional nursing education and create a nursing workforce capable of meeting the healthcare demands of contemporary and future health systems. The work of two task forces over a 4-year period, focused on education and regulation, reconceptualized the nursing role and identified the competencies needed for nurses to provide high quality patient care today and in the future. As a central part of this work, AACN engaged in discussions with representatives from practice seeking recommendations and evidence of innovation that could shape and transform professional nursing education. A number of representatives from practice environments reported that the dynamics of healthcare had led them to experiment with new expressions of nursing practice in which senior, very experienced, and highly educated nurses were assuming a new role charged with leading the design, implementation, and evaluation of patient care.

These new roles were direct patient care focused, and the nursing professionals in these roles were instrumental in assuring the translation of evidence into practice while evaluating the outcomes of the interventions by themselves and staff they oversaw. At both the University of Pittsburgh Medical Center and the INOVA Health Care System, nurse ex-

ecutives developed these roles to move nursing care from a focus on tasks and instrumental activities to a more comprehensive outcome and evaluation focused care dynamic. Through a series of meetings, consultations, and dialogues with varied communities of interest and reaction panels, intense reviews of the literature on nursing and healthcare, and surveys of leaders in education, other healthcare disciplines, and practice, AACN determined that these practice experiments, which were also occurring in sites across the country, provided evidence of the need for a new, more highly educated entry-level generalist clinical nurse capable of addressing the demand to direct, oversee, and evaluate care.

In its work to detail the critical characteristics, competencies, and education needed for practice in this newly emerging role, expert consultation was sought from a number of communities and a document was created describing the competencies for this new nurse role. The AACN Board of Directors, after reviewing the work and recommendations of the two task forces, determined that AACN should take a leadership role in facilitating the creation of a new entry-level, generalist clinician and a working paper titled *The Role of the Clinical Nurse Leader* was approved and shared with the nursing community. This working paper described the role and the competencies that should be present to fill this role. The document made clear that this professional nurse could not be educated in a traditional, 4-year baccalaureate program but would instead need a lengthy didactic and clinical training experience appropriately credentialled at the master's degree level. Moreover, it was determined that the introduction of the Clinical Nurse Leader role could not occur in the absence of a simultaneous change in both the educational experience and the practice dynamics and would require committed partnerships between practice and education.

AACN pledged to assume leadership for this initiative and to engage appropriate stakeholders to ensure the development of a new legal scope of practice and credential for the

new nursing professional. To that end, education and practice partnerships were developed and a series of invitational conferences for practice partners were held for the purpose of developing and implementing new education-practice models. Uniform outcome measures were identified, and partners committed to participating in rigorous outcome studies.

Throughout the development process, the AACN Board of Directors remained committed to several key principles, including:

- It is neither feasible nor productive, at this point in time, to engage in efforts to differentiate the license for current BSN and ADN graduates.
- Continuation of the baccalaureate nursing education, as the minimum credential for practice as an entry-level professional registered nurse should be supported.
- The set of expectations, as outlined in the working paper on *The Role of the Clinical Nurse Leader*, cannot be achieved in a baccalaureate nursing education experience.
- AACN should continue to provide leadership and invest resources in the creation and evaluation of a new model, or models, of nursing practice and nursing education at the master's degree in nursing level that results in a new nursing professional (CNL).
- The model(s) to be created and evaluated will result in a new nursing professional for generalist practice, as described in the CNL paper, who is prepared at the master's degree level.

#### **THE CLINICAL NURSE LEADER: WHAT IT IS AND WHAT IT IS NOT**

The Clinical Nurse Leader, as currently conceptualized, will function as a leader in the healthcare delivery system. Functioning at the microsystems level, this individual will practice in all care settings, implementing the role in a manner appropriate to varied settings while overseeing the clinical plans of unit-based clients to improve care and reduce cost.

This responsibility includes improving clinical or client outcomes and enhancing nursing practice through the identification and application of evidence effective care to clients and families. The CNL will have accountability for the care of a defined group of patients within a clinical unit, serve as a formal leader, and foster lateral integration of care.

The CNL must possess the expertise to be an exemplary nurse leader in the provision of nursing care to groups of patients. He/she maintains a comprehensive understanding of patient situations with the ability to access appropriate resources to obtain additional theoretical or technical information as needed. The CNL must also have skill that will allow completion or supervision of treatment modalities including pharmacological management. Knowledge of agency standards, professional issues and healthcare policy will enable the CNL to make decisions that are congruent with professional concerns, including facilitation of quality patient care. Through role modeling, coaching and demonstration, the CNL will also focus on the health promotion/disease prevention interventions for a specified group of clients while fostering the learning of nurses and other healthcare providers (Table 1).

The Clinical Nurse Leader role is not an add-on to the existing staff or care delivery structure but rather a clinically integrating role that transforms existing structures to achieve patient-centered, evidence-based, outcome-oriented nursing practice. The implementation of the CNL role within a new practice delivery model cannot occur absent efforts to dramatically revise the care patterns of all providers in the care unit or agency.

The CNL is not prepared as an advanced practice nurse (APN). The APN is prepared with specialist education in a defined area of practice. The CNL is a generalist in contrast with the specialized focus of the practice by clinical nurse specialists (CNS). Moreover, the CNL with their focus on the unit and a defined group of patients will work closely with the CNS to assure a comprehensive focus on patient care using the specialty population focus

**Table 1.** Fundamental aspects of the Clinical Nurse Leader role

## The Clinical Nurse Leader:

- Leads individualized, evidence-based, highly effective care to patients and families.
- Creates an environment of clinical excellence that results in improved individual and group clinical outcomes on an identified care unit (eg, hospital unit, public health track, school, occupational setting, etc.).
- Has clinical responsibility and authority for decision making regarding patient care.
- Engages in peer practice with health professionals for coordination/collaboration of the total care dynamic.
- Is accountable for the identification and improvement of outcomes for practice unit-based clinical populations (eg, patient categories, developmental groups, or whole communities).
- Participates in making patient assignments, developing nursing orders and participating with peer partners in the overall plan of care for groups of clients on a unit.
- Engages in autonomous and accountable evidence based practice to make critical decisions about the care of patients.
- Asks pertinent questions, completes assessments and uses critical thinking to ascertain patient priorities.
- Delegates care effectively and helps other nurses and healthcare providers to integrate essential information so they can prioritize and provide care to maximize outcomes.
- Provides clinical leadership within the unit by developing and guiding a clinical team (eg, promotion of professional development, assurance of continuing education, acknowledgement of clinical excellence and collegiality).
- Assumes leadership in self-governance activities.
- Assumes leadership in unit-based planning.
- Engages staff in review of cost data and implementation of strategies to improve cost-effectiveness and reduce inefficiencies, including product-testing.
- Possesses effective communication skills needed to educate and interact with patients, nurses, and other members of the healthcare team.
- Collaborates in orchestrating multidisciplinary interventions.
- Reports and documents patient care.
- Delegates, educates, and guides staff nurses and other assisting nursing personnel on the clinical/care team.
- Manages information and integrates it with clinical practice (collects and reviews data).
- Reviews research and other forms of evidence regarding identified clinical problems.
- Communicates research findings and other forms of evidence and assist clinical team to incorporate this material in practice.
- Review effectiveness of practice modifications in collaboration with clinical team.
- Develop and review population-based care protocols, standards, and practice guidelines.

and expertise of the CNS to develop a partnering for better patient care outcomes.

#### **ESTABLISHING PARTNERSHIPS FOR A NEW DYNAMIC**

In its leadership role, AACN appointed a task force to implement a demonstration initiative for practice and education partners

who are committed to creating new education programs and new practice opportunities. The task force comprises representatives from education and practice and brings to its charge a wide array of experience in healthcare education, practice, and administration. In June 2004, the first invitational conference of education/practice partnerships was held in Washington, DC. Representatives

from 77 education–practice partnerships, totaling almost 350 individuals, attended that conference after having expressed a commitment to both the development of a new educational program and a new practice model. This meeting included discussion of the curricular, practice, and evaluation components of the demonstration. Funded in part through a grant from the Agency for Healthcare Research and Quality, this meeting set as a fundamental goal the development of clear expectations for creating evidence that a new clinical model and a newly conceptualized professional nursing role would have a direct effect on patient care outcomes and quality. Attendees at the meeting engaged in extensive dialogue and discussion regarding the fundamental elements that must be present for achieving higher quality patient care—the premise upon which this new initiative is framed.

#### **EDUCATION FOR THE CLINICAL NURSE LEADER**

As noted earlier, CNL education is built on the assumptions that the CNL educational program will culminate in a master's degree in nursing. The CNL graduate will be a generalist able to provide care at the point of care. The graduate will be prepared in clinical leadership for setting specific practice throughout the healthcare delivery system and will be eligible to matriculate to a practice- or research-focused doctoral program.

All CNL programs, including those designed for post high school entry or second-degree programs, build upon the competencies in the *Essentials of Baccalaureate Education for Professional Nursing Practice*.<sup>15</sup> Students graduating from a CNL program will have a strong liberal education background in the arts and sciences and will have content at the graduate or undergraduate level in the areas of: anatomy and physiology, microbiology, epidemiology, statistics, and healthcare policy. Additional

graduate level content will build on undergraduate foundation in health assessment, pharmacology, and pathophysiology. All graduates of CNL programs will demonstrate achievement of the 5 IOM health professions core competencies: quality improvement, interdisciplinary team care, patient-centered care, evidence-based practice and utilization of informatics. A strong foundation in policy/organization, outcomes management, nursing leadership, and care management is expected in every program. In addition, all educational programs, working with their practice partners, will designate a clinical mentor/preceptor for each CNL student. Following completion of all didactic and clinical course work, the CNL education program will include a minimum of a 10–12 week immersion experience in full-time practice in the CNL role with a designated clinical preceptor and a faculty partner. This immersion experience will include weekly opportunities with other CNL students, faculty and mentors to dialogue on issues and assess experiences, particularly the implementation of the role. The CNL graduate will be eligible to sit for the CNL-certification examination following the extended preceptorship or immersion experience.

#### **REQUISITE CHANGE IN THE PRACTICE ENVIRONMENT MODEL**

Changes in the practice environment will be a necessary condition for the full implementation of the Clinical Nurse Leader role. Clear and comprehensive assessment of present delivery models is a prerequisite to new practice model development. In its work to construct both new education and practice expectations, the task force charged with implementation of the CNL demonstrations created a framework for practice—titled The Partnership Model—and established principles that must be embedded in any new practice sites for the CNL. Present delivery systems will need to examine in detail the care and service delivered by the nurse and

other providers, quantifying what consumes the nurse's day and what nonnursing tasks are being performed. The utilization of roles and their function should also be examined. Documentation tools should be reviewed for effectiveness. Barriers to workflow and other time wasters/redundancies, as well as system failures should be identified. New models should flow from a design team charged with looking at the roles of caregivers and assigning appropriate functions to each role. Workflow will need to be reorganized to ensure that each role is functioning at its highest level. Clear and specific job responsibilities and job descriptions will need to be created. Staff will need to be educated to changes in role and educational requirements needed to strengthen those roles. Specific outcome measures will be necessary to assure systematic evaluation of new model implementation.

#### MOVING AHEAD: PARTNERSHIPS FOR THE FUTURE CNL

Clearly, this new initiative is bold, some might say brash, but focused on a central concern for the nursing role in assuring quality in patient care. A continued focus on reinforcement of the current education and practice dynamics will simply provide additional

opportunity to maintain a status quo that is both unsatisfactory, and as noted in numerous reports, not assuring that patients receive the optimum or highest level of care possible. The sophisticated technological and scientific breakthroughs of healthcare today are only effective if a workforce of professional nurses is available to assure the highest level of sophistication in its work. This CNL initiative is designed to assure that this will occur.

It is clear that nursing education must inevitably and powerfully change if we are to adequately prepare the next generation to participate as full partners in shaping the future and improving patient care outcomes. Improving the quality of education in order to meet the demands, challenges, and opportunities of the future will require internal motivation, a collaborative culture, and the continuous cycle of using data to improve teaching and learning. Becoming better will definitely require doing things differently. Refusing to do things differently will certainly lead to a sustained level of unacceptable patient care outcomes and a failed healthcare delivery system. Yesterday's habits invariably produce yesterday's results. In the words of John F. Kennedy, "Change is the law of life and those who look only to the past or to the present are certain to miss the future."

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#### REFERENCES

1. Hecker DE. *Occupational Employment Projections to 2012*. Washington, DC: US Department of Labor, Bureau of Labor Statistics; 2004.
2. US Bureau of Labor Statistics. *Monthly Labor Review*. Washington, DC: US Department of Labor; 2004.
3. Buerhaus P, Staiger D, Auerbach D. Is the current shortage of hospital nurses ending? *Health Affairs*, 2003;22(6):191-198.
4. American Association of Colleges of Nursing. *Working Paper: The Role of the Clinical Nurse Leader*. Washington, DC: American Association of Colleges of Nursing; 2003.
5. American Association of Colleges of Nursing. *2003-2004 Enrollment and Graduations in Baccalaureate and Graduate Programs in Nursing*. Washington, DC: American Association of Colleges of Nursing; 2004.
6. Institute of Medicine. *Crossing the Quality Chasm*. Washington, DC: The National Academies Press; 2001.
7. Institute of Medicine. *Health Professions Education: A Bridge to Quality*. Washington, DC: The National Academies Press; 2003.
8. Joint Commission on Accreditation of Healthcare Organizations. *Healthcare at the Crossroads, Strategies for Addressing the Evolving Nursing Crisis*. Chicago: Joint Commission on Accreditation of Healthcare Organizations; 2002.
9. Joint Commission on Accreditation of Healthcare Organizations. *Sentinel Events: Cause and Planning Improvement*. 2nd ed. Chicago: Joint Commission on Accreditation of Healthcare Organizations; 2004.
10. American Hospital Association Commission on Workforce for Hospitals and Health Systems. *In Our Hands: How Hospital Leaders Can Build a Thriving*



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- Workforce*. Chicago, IL: American Hospital Association; 2002.
11. Goode CJ, Pinkerton S, McCausland MP, Southard P, Graham R, Krsek C. Documenting chief nursing officers' preference for BSN-prepared nurses. *J Nurs Adm*. 2001;31(2):55-59.
  12. Rambur B, Palumbo MV, McIntosh B, Mongeon J. A statewide analysis of RNs' intention to leave their position. *Nurs Outlook*. 2003;51;182-188.
  13. Delgado C. Competent and safe practice: a profile of disciplined registered nurses. *Nurse Educ*. 2002;27(4):159-161.
  14. Aiken LH, Clarke SP, Cheung RB, Sloane DM, Silber JH. Educational levels of hospital nurses and surgical patient mortality. *JAMA*. 2003;290:1617-1623.
  15. American Association of Colleges of Nursing. *The Essentials of Baccalaureate Education for Professional Nursing Practice*. Washington, DC: American Association of Colleges of Nursing; 1998.