A CONCEPTUAL FRAMEWORK FOR A CLINICAL NURSE LEADER PROGRAM

MARGARET M. MAAG, EdD, RN,* ROBIN BUCCHERI, DNSC, RN,† ELENA CAPELLA, EDD(C), RN, AND DIANA L. JENNINGS, PHD, RN

Developing a map to guide the design of a novel educational program for nursing students can assist educators in piecing together identified conceptual variables in a logical and reasonable manner. We developed a conceptual model for a clinical nurse leader (CNL) program to present to a school of nursing faculty and a state board of nursing for approval and adoption. The concept map was created following a literature review and analysis of the American Association of Colleges of Nursing description of the CNL. Following the identification of certain variables, such as theories underpinning nursing practice, clinical processes, and education, each team member researched identified variables of the conceptual diagram, wrote a thoughtful explanation of the components, and frequently met with the others to discuss each element of the model and the relationships among the variables. Over time, an emerging model developed and was adopted by the school of nursing and approved by the state board of nursing. An explanation of the components of the conceptual framework and their relationship to the CNL role may assist educators in developing and implementing other emerging CNL programs. (Index words: Clinical leadership; Conceptual model; Nursing education; Team research; Theories) J Prof Nurs 22:367-72, 2006. © 2006 Elsevier Inc. All rights reserved.

THE CLINICAL NURSE leader (CNL) role is an ▲ innovative nursing one originally proposed by the American Association of Colleges of Nursing (AACN) Task Force on Education and Regulation for Professional Practice in response to reports published by the Institute of Medicine, the Joint Commission on the Accreditation of Health Care Organizations, and the Robert Wood Johnson Foundation (AACN, 2003). Clinical nurse leader educational programs are now becoming a reality, with more than 75 institutions of higher education collaborating with health care agencies across the nation to develop curricula and implement pilot programs for CNL students (Wood, 2005).

*Assistant Professor, School of Nursing, University of San Francisco, San Francisco, CA.

†Professor, School of Nursing, University of San Francisco, San Francisco, CA.

‡Clinical Faculty, School of Nursing, University of San Francisco, San Francisco, CA.

§Clinical Faculty, School of Nursing, University of San Francisco, San Francisco, CA.

Address correspondence and reprint requests to Ms. Maag: Adult Health Department, School of Nursing, University of San Francisco, 2130 Fulton Street, CO 305, San Francisco, CA 94117.

E-mail: margaret.maag@gmail.com

8755-7223/\$ - see front matter

According to the AACN (2003, p. 1), "The proposed role would be a leader in the health care delivery system across all settings in which health care is delivered, not just the acute care setting." Faculty members and health care agency personnel are undertaking the development and realization of appropriate courses and mentorships for the new nursing program. To guide the formation of a CNL curriculum, we created a conceptual framework (CF) for a second-degree CNL pilot project at the University of San Francisco's (USF) School of Nursing. We followed the CNL educational guidelines of the AACN (2004) while constructing a unique conceptual model for the USF's CNL program. The purpose of this article is to illustrate and share a CNL CF developed to guide and support an original CNL program.

We identified the AACN's concept of the CNL's preparation as being a joint venture between practice and education. Therefore, while using the educational model of the AACN (2004) as a guidepost, we focused on two clinically based premises, the Transition Theory (TT) and the Symptom Management Model (SMM), as a foundation to build the USF's CNL conceptual model. Placing the established TT and the SMM in this context leads educators to develop a "curriculum that will teach systematic [sic] thinking, outcome management and complexity of care, and look at risk and populations at

368 MAAG ET AL

risk" (Wood, 2005, p. 1). Furthermore, CNL students will have access to (1) diverse practice sites that model methods of disease prevention and the encouragement of health; (2) clinical mentors who role model clinical nursing practices, such as clinical nurse specialists; and (3) health care providers caring for people of all ages and socioeconomic backgrounds. Rising from the concept map's foundation are the basic ideas of leadership, clinical outcomes management, and care environment management. These three concepts dovetail with the "Ten Assumptions for Preparing the Clinical Nurse Leader" of the AACN (2004) and are topped with the idea of highly talented CNL students being (1) self-regulated learners who incorporate an active learning paradigm, (2) reflective during and following instruction, and (3) able to demonstrate use of evidence-based nursing research while studying for this advanced practice position.

The CNL CF is composed of three distinct tiers (see Figure 1). The bottom tier, forming the foundational base of the framework, consists of the TT and the SMM. These two theories provide conceptual support from the ground up—permeating all three tiers of the framework—to enable CNLs efficiently oversee, implement, and direct the delivery of care in their respective health care environments. A strong foundation in clinical knowledge pertaining to the assessment, diagnosis, and management of physiological and psychological symptoms in a culturally sensitive way among clients,

and particularly to those of diverse ethnic and socioeconomic backgrounds, is pivotal to the initial development phase of CNLs. Nursing leadership, care environment management, and clinical outcomes management are embodied within the middle tier. The top tier contains self-regulated learning (SRL) and encompasses active learning, reflection, and evidence-based practice (EBP). The arrows provided in the CF image (see Figure 1) indicate the connectivity and relationship of the three concepts. Each tier of the framework supports the others in formulating the overall conceptual model for the CNL. A description of the newly formulated CNL CF for the USF School of Nursing will begin with the bottom tier.

Bottom Tier

The bottom tier of the CNL CF consists of the TT and the SMM (see Figure 1).

The Transition Theory

The TT, an emerging middle-range theory, provides a framework with which CNLs will be able to assist vulnerable patients during changes in their health and illness status. Middle-range theories evolved in the early 1990s, focusing on nursing practice phenomena and clinical processes (Meleis, 1987). Heralded for their contribution toward knowledge development in nursing, they are characterized by limited scope, decreased level of abstraction, and the ability to cross a wide array

Clinical Nurse Leader Conceptual Framework

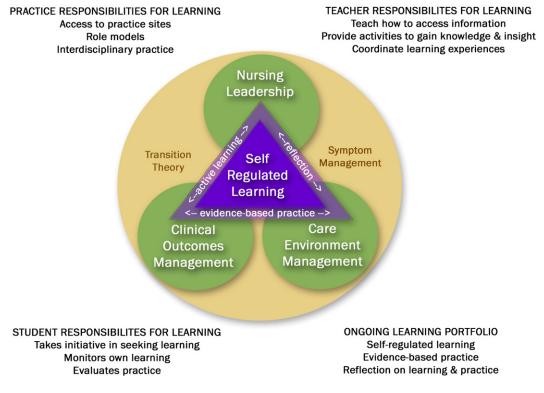


Figure 1. A graphic depiction of the CNL CF.

of nursing specialty fields and care environments (Meleis, 1997).

By identifying the properties inherent during the process of transition, CNLs will be cognizant of changing conditions and develop appropriate nursing interventions to meet the unique needs of vulnerable patient populations and their families. Crucial to the achievement of optimal health care outcomes is the development and implementation of culturally sensitive strategies in the delivery of care. Given the projected increased proportions of ethnically diverse patient populations in the United States over the next decade, CNLs need to be cognizant of and culturally sensitive to patients in transition who have differing perspectives regarding health and illness.

The TT posits that individual, community, and societal factors regarding culture, educational, and socioeconomic status directly influence the types, patterns, and properties of transitions (Meleis, Sawyer, Im, Messias, & Schumaker, 2000). These factors in turn influence patterns of response such as process and outcome indicators. For example, mastery of skills to achieve a successful transition is reflective of a desired outcome indicator whereas the perceptions of those experiencing transitions identify process indicators. An optimal outcome indicator is defined as overall wellbeing and health. Responsible for the development, implementation, coordination, and management of the delivery of care by multidisciplinary health care professionals, the TT will provide CNLs with culturally sensitive knowledge to assist ethnically diverse patients as they transition from a state of illness to an optimal health status.

Symptom Management Model

Formulated by the University of California, San Francisco, School of Nursing's Symptom Management Faculty in 1994, the revised, evidence-based SMM provides a framework that acknowledges the (1) interrelatedness of the symptom experience, (2) components of symptom management strategies, (3) outcomes, and (4) symptom status. Embedded within these four dimensions are the acknowledged domains of nursing—person, environment, health, and illness (Dodd et al., 2001). The symptom experience involves one's perception, response to, and evaluation of an illness episode. Management strategies for the delivery of care include queries regarding who, what, when, where, how, to whom, how much, and why. The outcomes portion of the model, relative to symptom status, addresses functional and emotional status, mortality, morbidity and comorbidity, quality of life, and costs. Adherence to recommended health care treatment modalities, a crucial factor that determines outcomes, is controlled by patients and/or their families and may be influenced by providers and health care agencies. Person variables pertain to demographic, psychological, sociological, physiological, and developmental factors. Environmental factors include physical,

social, and cultural variables. Health and illness variables encompass risk factors, health status, disease, and injury. Application of the SMM will enable CNLs effectively evaluate patient symptoms and develop as well as implement management intervention strategies to achieve optimal symptom outcomes. The distinguishing factor that is unique to CNLs as compared with other advanced practice nurses is their leadership expertise in the development, implementation, coordination, delegation, and supervision of care among multidisciplinary health care professional team members.

Middle Tier

The middle tier of the CNL CF consists of three knowledge constructs: nursing leadership, care environment management, and clinical outcomes management (see Figure 1).

Nursing leadership

Clinical nurse leaders provide clinical leadership through direct care at a client's bedside. The term *leadership*, in relation to this new role in nursing, pertains to CNLs' ability to use personal knowledge and skills to constructively and ethically advance the delivery of client care to meet desired goals (AACN, 2004). Clinical nurse leaders oversee the coordination of care and actively provide direct client care through the implementation of EBP to ensure that clients benefit from current research findings in care delivery.

Promoting EBP requires CNLs to use leadership skills to influence interdisciplinary team members. Skills in communicating, coordinating, planning, and implementing care in collaboration with a variety of health care professionals are essential to providing optimal care in today's complex health care environment.

Leadership is an essential competence and a cornerstone of the CNL curriculum. The development of leadership skills, such as an understanding of how to effectively influence others, integrate care, and advocate for a client's interests, is incorporated into all aspects of the curriculum.

Care Environment Management

Another part of the knowledge construct triad for this framework is care environment management. Care environment management encompasses all the knowledge (e.g., health care policy, health care informatics, fiscal management, and cultural diversity), theories (e.g., systems theory and change theory), skills (e.g., teaching, delegating, supervising others, communication, group dynamics, and case management), and processes (e.g., ethical decision making, conflict resolution, and continuous quality improvement/risk reduction) needed by CNLs to effectively coordinate nursing care and manage resources in today's dynamic health care environment. There are six components in this construct. These components include (1) team coordination (e.g., delegation, supervision, interdisciplinary care, group process, personnel management skills, and

370 MAAG ET AL

conflict resolution), (2) health care finance/economics, (3) health care systems and organizations, (4) health care policy, (5) continuous quality improvement/risk reduction, and (6) informatics (AACN, 2004).

Clinical nurse leaders will be able to go beyond the traditional nursing leadership skills of delegation and supervision to initiate change through lateral leadership. Lateral leadership is the ability to help other people work together in creative ways to reach common goals. It encompasses the use of knowledge, skills, and prior experience to (1) model an innovative vision for solving problems, (2) create a receptive culture for change, (3) empower people to participate in designing changes and setting goals and deadlines for proposed changes, and (4) use creativity to find win-win solutions for everyone involved (Sloane, 2003). For example, an urgent care clinic needs to cut its budget by 10% and demonstrate a decrease in complications for diabetic clients, as this population accounts for an overly high percentage of clinic visits. Clinical nurse leaders working in the clinic would have the background in diabetes education, group process, conflict resolution, health care finance, and continuous quality improvement to take the initiative to bring other health care team members together and creatively solve the identified problems.

Clinical Outcomes Management

A fundamental facet of the CNL role is the clinical outcomes management of population-based health care provided by various health care sources for dynamic communities, clinical populations, and individuals of all ages and cultural backgrounds. Clinical nurse leaders are responsible for direct outcomes associated with client care across a range of settings, and this role is achieved by being well versed in face-to-face and distant communication, reasoning skills, and demonstration of ethical principles, such as social justice, to analyze health care outcomes for vulnerable groups (Bartels, 2003).

Clinical nurse leaders fulfill this role by learning to be resourceful, adaptable, and knowledgeable about delegation and coordination of team members (Stanley & Tornabeni, 2004). Clinical nurse leaders gather and synthesize data to design, implement, and achieve positive client outcomes through the attainment and dissemination of evidence-based knowledge via several modalities (e.g., information, education, and health care technology). Furthermore, CNLs are accountable for overseeing the evaluation of point-of-care outcomes and planning for the improvement of clinical and cost outcomes identified as not meeting specific standards of care.

Clinical nurse leaders will achieve the necessary skills to be exceptional clinical outcomes managers by receiving the core elements of nursing science and liberal arts education rich in creative and critical thinking, scientific reasoning, and lifelong learning. Moreover, CNLs will obtain specific curricular essentials during their education to be effective clinical outcomes managers. The necessary curricular elements include, but are not limited to, illness/disease management, knowledge management, health promotion and risk reduction, and EBP (Stanhope, 2004).

Top Tier

The top tier of the CNL CF illustrates the pedagogical model of SRL and the three linking characteristics, active learning, reflection, and EBP, that are woven within the practice of SRL (see Figure 1).

Self-Regulated Learning

Self-regulated learners actively plan, manage/monitor, support, and assess their learning goals through an ability to understand and control their own learning behavior. These learners are often considered "expert learners" who take an enthusiastic and accountable role in their learning. They demonstrate increased selfconfidence, self-efficacy, and self-initiative while learning organizational, affective, rehearsal, and comprehension-monitoring strategies to enhance their learning moments (Heck & Wild, 2000). Independent learners take responsibility for their own knowledge construction through the process of active discovery, critical and creative thinking, and reflective practice that includes self-questioning. These learning characteristics will enhance CNLs' ability to research evidence that accurately supports and promotes current nursing practice. Educators may foster self-regulation of learning by providing learning tools, such as concept mapping, that set the stage for learners to truly understand presented concepts and increase metacognitive skills (August-Brady, 2005).

Through the keen implementation of a plan for learning and by actively monitoring his or her progress, a student is intrinsically motivated because he or she witnesses the progress in the learning process. Clinical nurse leaders will recognize the value of broadening their learning by including a variety of resources and the enhancement of personal development through the merit of self-regulation. Furthermore, CNLs will achieve an awareness of their own cognitive processes and will begin to understand and implement the essential learning strategies necessary for skill attainment, problem solving, and decision-making skills. The philosophical shift from an objectivist to a constructivist model of learning supports the concept of SRL because the student takes ownership of obtaining higher-order thinking skills, becomes an astute problem solver, observes the "cause and effect" of education, and makes meaning of what he or she possesses in a portfolio of previous learning experiences and prior knowledge (Jonassen, Peck, & Wilson, 1999; Wilson, 1997).

Active Learning

Active learning, an educational concept embedded within the model of SRL, is poignantly described by Silberman's "Active Learning Credo" (as cited in Heck

& Wild, 2000, p. 1): "What I hear, I forget. What I hear and see, I remember a little. What I hear, see, and ask questions about or discuss with someone else, I begin to understand. What I hear, see, discuss, and do, I acquire knowledge and skill. What I teach to another, I master." Active participation/experimentation in learning circles promotes a "locus of control" by a student, enhances the retention of knowledge, and is part of the learning cycle (KU QuarkNet Summer Institute, 2002). An example of an active learning assignment is the development of an electronic portfolio that students will develop at the onset of the CNL program at the USF. The electronic portfolio will serve as a repository where the CNL students may showcase best projects throughout the CNL educational experience and share with educators, peers, and prospective employers.

Reflection

Reflection is an integral tool of SRL and is based on the work of Schon (1983, 1987) and Saylor (1990). Reflection is the process that CNLs use to analyze their own beliefs, feelings and experiences, research findings, and theoretical models of care to develop a reflective practice. According to Schon (1987), there are two types of reflective practice: reflection-in-action and reflectionon-action. Reflection-in-action (e.g., thinking on your feet) is the dynamic problem-solving process that CNLs will use in clinical settings when faced with new or uncertain patient care situations. Reflection-on-action is the retrospective process that CNLs use to look back over their clinical experience to evaluate (e.g., through self-evaluation and supervision) whether they provided the most appropriate research-based interventions for safe and effective nursing care.

Reflection requires CNLs to examine discrepancies between their beliefs and their actions. It involves comparing their nursing interventions in a clinical situation with professional standards. Reflection also requires CNLs to evaluate established client outcomes. For example, after providing nursing care, CNLs reflect on which client outcomes were successfully met and which ones were not. Only by analyzing the nursing care they provide and the outcomes of that care can CNLs learn how to become more competent practitioners.

Reflection is an important part of developing EBP. Clinical nurse leaders must use reflection before and after they implement research into practice to develop a true reflective EBP.

Evidence-Based Practice

Evidence-based practice is the process that professional nurses use to make clinical decisions based on systematic review of the best available research evidence (Stetler et al., 1998). Clinical nurse leaders evaluate and identify best research to update their clinical expertise and combine profound knowledge with an understanding of patient preferences to implement individualized nursing practices. The competencies associated with implementing EBP are critical analysis

and decision-making skills applied to the interpretation and use of current research, evaluation of practice, and ongoing monitoring of patient response. Clinical nurse leaders are experts on the conscientious and judicious use of current evidence to reach informed decision making.

Conclusion

The USF's CNL conceptual model is a design supported by established theories that may assist educators with designing, implementing, and assessing a curriculum that supports the AACN's call for a multifaceted educational endeavor. Nurse researchers may use this new CF when conducting future studies surrounding nursing education and clinical practice. We described the CNL role and how it relates to a CF for this novel program. The development process of the CF included thoughtful consideration of, but not limited to, learning theories, management models, EBP, and nursing leadership. Hopefully, this CNL map will assist other educators with preparing tomorrow's CNLs to be, as Peters (as cited in Erickson & Ditomassi, 2005) stated, "the rock of Gibraltar on rollerblades" in busy and diverse health care landscapes or support Stewart's (as cited in Erickson & Ditomassi, 2005) historical call for "intelligent and courageous leadership" in planning for the nursing profession to move beyond the antiquated World War II era. Despite what critics think (Erickson & Ditomassi, 2005), CNL programs are here and therefore require attention to sound yet creative curriculum designs to provide innovative multidisciplinary educational experiences for the pioneers of a challenging and new nursing role.

References

American Association of Colleges of Nursing. (2003). AACN takes steps to create clinical nurse leader role. Retrieved June 26, 2005, from http://www.nursezone.com/job/MedicalNewsAlerts.asp?articleID=11386&page=On+the+job&profile=Nursing+news&headline=AACN+Takes+Steps+to+Create+Clinical+Nurse+Leader+Role.

American Association of Colleges of Nursing. (2004). Working paper on the role of the clinical nurse leader. Retrieved June 26, 2005, from http://www.aacn.nche.edu/Publications/WhitePapers/ClinicalNurseLeader.htm.

August-Brady, M. M. (2005). The effect of a metacognitive intervention on approach to and self-regulation of learning in baccalaureate nursing students. *Journal of Nursing Education*, 44, 297–304.

Bartels, J. (2003). Beginning the work: Implications for curricular change. Speaker Presentation at the American Association of Colleges of Nursing, Clinical Nurse Leader Pre-Conference 2003, October, Washington, DC. Retrieved February 1, 2005, from http://www.aacn.nche.edu/cnl/PowerPointPresentations.htm.

Dodd, M., Janson, S., Facione, N., Faucett, J., Froelicher, E. S., Humphreys, J., et al. (2001). Advancing the science of symptom management. *Journal of Advanced Nursing*, 33, 668–676.

372 MAAG ET AL

Erickson, J. I., & Ditomassi, M. (2005). The clinical nurse leader: New in name only. *Journal of Nursing Education*, 44, 99–100.

Heck, J., & Wild, M. R. (2000). EDUC 120: Orientation to expert learning. Retrieved February 1, 2005, from http://vcs.ccc.cccd.edu/crs/star/educ120/intro2EL.htm.

Jonassen, D. H., Peck, K. L., & Wilson, B. G. (1999). Learning with technology: A constructivist perspective. Upper Saddle River, NJ: Prentice Hall.

KU QuarkNet Summer Institute. (2002). Active learning. Retrieved February 1, 2005, from http://classrooms.usd383. org/fredn/portfolio/educational_philosophy.htm.

Meleis, A. I. (1987). Revisions in knowledge development: Being vs. becoming or being and becoming. *Health Care for Women International*, 8, 199–217.

Meleis, A. I. (1997). Theoretical nursing: Development & progress. 3rd ed. New York: Lippincott.

Meleis, A. I., Sawyer, L. M., Im, E., Messias, E. K. H., & & Schumaker, K2000). Experiencing transitions: An emerging middle-range theory. *Advances in Nursing Science*, 23, 12–28. Saylor, C. R. (1990). Reflection and professional education:

Art, science, and competency. *Nurse Educator*, 15, 8–11.

Schon, D. (1983). The reflective practitioner. New York: Basic Books.

Schon, D. (1987). Educating the reflective practitioner. San Francisco: Jossey-Bass.

Sloane, P. (2003). The leader's guide to lateral thinking skills: Powerful problem-solving techniques to ignite your team's potential. London: Kogan Page.

Stanhope, M. K. (2004). CNL curriculum framework: Conceptual design. Speaker Presentation at the Clinical Nurse Leader Implementation Conference, Washington, DC. Retrieved February 1, 2005, from http://www.aacn.nche.edu/cnl/index.htm.

Stanley, J., & Tornabeni, J. (2004). Changing the face of nursing: Education and practice partnership model. Speaker Presentation at the American Nurses Association Convention, Portland, Oregon. Retrieved February 1, 2005, from http://www.aacn.nche.edu/cnl/index.htm.

Stetler, C. B., Brunell, M., Giuliano, K. K., Morsi, D., Prince, L., & Newell-Stokes, V. (1998). Evidence-based practice and the role of nursing leadership. *Journal of Nursing Administration*, 38, 45–53.

Wood, D. (2005). Clinical nurse leader role moves into pilot phase. Retrieved June 26, 2005, from http://www.nursezone.com/job/MedicalNewsAlerts.asp?article ID=13088&page=On+the+job&profile=Nursing+news&headline=Clinical+Nurse+Leader+Role+Moves+into+Pilot+Phase

Wilson, B. G. (1997). Thoughts on theory in educational technology. *Educational Technology*, 37, 22–27.