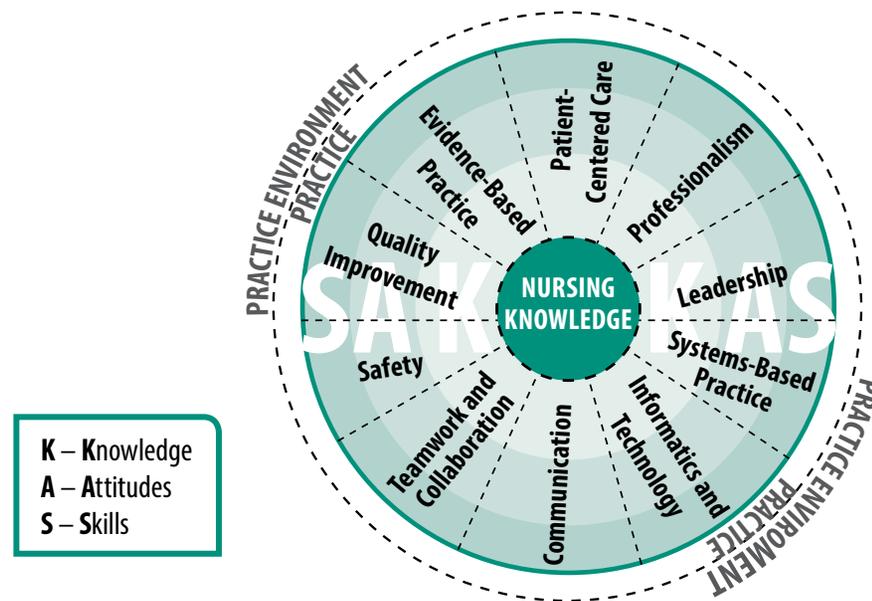


Massachusetts Nurse of the Future Nursing Core Competencies[©] REGISTERED NURSE



Massachusetts Department of Higher Education Nursing Initiative
Revised March 2016

Table of Contents

Background	2
Defining NOF Nursing Core Competencies: Assumptions, Nursing Core Competencies, and the Nursing Core Competency Model	3
Nursing Knowledge	8
The Nurse of the Future Nursing Core Competencies	
>> Patient-Centered Care	10
>> Professionalism	14
>> Leadership	18
>> Systems-Based Practice	22
>> Informatics and Technology	26
>> Communication	32
>> Teamwork and Collaboration	37
>> Safety	42
>> Quality Improvement	45
>> Evidence-Based Practice	47
Glossary	51
Professional Standards	55
General Bibliography	56

Background

This third edition of the Nurse of the Future Core Nursing Competencies is a result of review and updating process since the original publication. The purpose of the review was to ensure that the competencies reflect the many changes that have occurred in the health care environment and nursing practice over the past five years. The competencies still represent the minimum expectations for all nurses as they complete their pre-licensure education. As nursing education and practice continue to evolve in response to the needs of patients and the health care environment, these competencies will require ongoing review and evaluation to ensure that they continue to define the expectations for entry into nursing practice.

In March 2006, the Massachusetts Department of Higher Education (DHE) and the Massachusetts Organization of Nurse Executives (MONE) convened a facilitated working session entitled *Creativity and Connections: Building the Framework for the Future of Nursing Education and Practice*. This invitational session brought together 32 experienced professionals from the major statewide stakeholders in nursing education and practice. The group included nurse leaders from a variety of practice settings, educators from both public and private higher education representing all degree levels, and representatives from the Department of Higher Education, the Board of Registration in Nursing, the Massachusetts Center for Nursing (MCN), the Massachusetts Association of Colleges of Nursing (MACN), the Massachusetts/Rhode Island League for Nursing (MARILN), and other national accrediting agencies, including the National League for Nursing Accrediting Commission (NLNAC) and the Commission on Collegiate Nursing Education (CCNE).

An important outcome of the conference was the development of the following mission statement to guide future work: *Establish a formal coalition to create a seamless progression through all levels of nursing that is based on consensus competencies which include transitioning nurses into their practice settings*. An additional key outcome involved the establishment of the following top priorities:

- Creation of a seamless progression through all levels of nursing education
- Development of sufficient consensus on competencies to serve as a framework for educational curriculum
- Development of a statewide nurse internship/preceptor program

At the end of the conference a working group was formed composed of deans and faculty representing all segments of nursing education, and nursing practice leaders and clinical nursing staff representing the continuum of care. From 2006 through 2009, the working group researched and reviewed standards, initiatives, and best practices in nursing education and formed a foundation for moving the priorities forward. To expedite the process, the group formed two working committees: the Massachusetts Nurse of the Future (NOF) Competency Committee (see membership list, back cover), which was charged with furthering the development of a seamless continuum of nursing education by identifying a core set of nursing competencies; and the MONE Academic Practice Integration Committee, which was charged with using the identified competencies as a framework for developing a statewide transition into practice model.

This report summarizes the work of the NOF Competency Committee. In the report, the committee describes the process it used to identify NOF Nursing Core Competencies, presents the NOF Nursing Core Competency Model[®], and defines the ten NOF Nursing Core Competencies and the knowledge, attitudes and skills associated with each. Key terms used in the document are highlighted in bold and are defined in the Glossary.

Defining the Nurse of the Future Nursing Core Competencies and Core Competency Model

The NOF Competency Committee used a multi-step process to define a core set of nursing competencies for the nurse of the future. As a first step, the group identified and synthesized competencies obtained from other states, current practice standards, education accreditation standards, national initiatives, and projected patient demographic and health care profiles for Massachusetts. The committee also reviewed the Institute of Medicine's core competencies for all health care professionals (Institute of Medicine [IOM], 2003) and the Quality and Safety Education for Nurses model (Quality and Safety Education for Nurses [QSEN], 2007). Information and data obtained through this process of research, analysis, and dialogue formed the basis for the development of a preliminary set of NOF Nursing Core Competencies.

The committee then used a formalized process to obtain feedback on the preliminary set of core competencies from the nursing education and practice community throughout the state. The feedback process included online opportunities, two statewide summits, on-campus meetings with faculty from public and private associate and baccalaureate nursing education programs, and meetings with nursing leadership groups and nursing practice councils from a variety of health care organizations across the state. Feedback was also obtained through a gap analysis process developed in consultation with a nurse expert involved with the development of the QSEN competencies. Through this process, nursing programs and their clinical practice partners evaluated their curriculum and identified gaps between what is currently being taught and what they determined should be taught for students to master the NOF Nursing Core Competencies by graduation. Eight nursing programs in collaboration with their clinical practice partners participated in this funded activity.

After synthesizing the feedback, the committee conducted another review of the literature, comparing the preliminary set of core competencies against nationally accepted models, guidelines, and standards. The preliminary set of competencies was also compared to the CCNE Essentials of Baccalaureate of Education (American Association of Colleges of Nursing [AACN], 2008), the Bologna Accords (Zabalegui, Loreto, & Josefa et al., 2006; Davies, 2008), the Competency Outcomes and Performance Assessment (COPA) model (Lenburg, 1999), the National League for Nursing's educational competencies for graduates of associate degree nursing programs (National League for Nursing [NLN], 2000), and the Accreditation Council for Graduate Medical Education competencies (Accreditation Council for Graduate Medical Education [ACGME], n.d.). Information and data obtained by the review and feedback process was then incorporated into an updated version of the NOF Nursing Core Competencies.

The updated version of the core competencies is presented in this report and is also available online at www.mass.edu/nursing. The NOF Competency Committee encourages nurses from practice, academe, and professional nursing organizations to review and disseminate the competencies. To help monitor how they are used, the committee asks users of the NOF Nursing Core Competencies to complete the Tracking and Permission Form, also available on the website.

ASSUMPTIONS

In developing the NOF Nursing Core Competencies, the Competency Committee identified a set of assumptions to serve as a framework for its work and as guiding principles for the design of a competency-based education and practice partnership model. With the 2015 updating of the competencies, the Nurse of the Future Working Group added some additional assumptions to reflect the changes in the health care and nursing education environment that have emerged over the past 5 years. The assumptions include the following:

- Education and practice partnerships are key to developing an effective model.
 - Nursing education and practice settings should facilitate individuals in moving more effectively through the educational system
 - An integrated practice/education competency model will positively impact patient safety and improve patient care
 - Nursing practice should be differentiated according to the registered nurse's educational preparation and level of practice and further defined by the role of the nurse and the work setting
 - Practice environments that support and enhance professional competence across the continuum of care are essential
- It is imperative that leaders in nursing education and practice develop collaborative curriculum models to facilitate the achievement of a minimum of a baccalaureate degree in nursing by all nurses.
 - Advancing the education of all nurses is increasingly recognized as essential to the future of nursing practice
 - Evidence has demonstrated that nurses with higher education levels have a positive impact on patient care
- A more effective educational system must be developed, one capable of incorporating shifting demographics and preparing the nursing workforce to respond to current and future health care needs and population health issues.
 - The NOF Nursing Core Competencies are designed to be applicable across all care settings and to encompass all patient populations across the lifespan
 - Evidence-based knowledge and sensitivity to variables such as age, gender, culture, health disparities, socioeconomic status, race and spirituality are essential for caring for diverse populations in this global society
- The nurse of the future will be proficient in a core set of competencies.
 - There is a differentiation in competencies among practicing nurses at various levels
 - Competence is developed over a continuum and can be measured
- Nurse educators in education and in practice settings will need to use a different set of knowledge and teaching strategies to effectively integrate the Nurse of the Future Nursing Core Competencies[®] into curriculum.
- The nurses' role is integral in recognizing the social and cultural determinants of health that are essential to disease prevention and health promotion efforts needed to improve health and health care and to build a culture of health across the Commonwealth and the nation.
- With societal shifts, information-related innovations and a focus on teamwork and collaboration, health professions education will be inter-professional and focused on **collaborative practice**.
- To create competencies for the future, there must be an ongoing process of evaluation and updating of the competencies to insure that they are reflective of contemporary health care practice.

THE NURSE OF THE FUTURE NURSING CORE COMPETENCIES

The NOF Nursing Core Competencies emanate from the foundation of nursing knowledge. The competencies, which will inform future nursing practice and curricula, consist of the following:

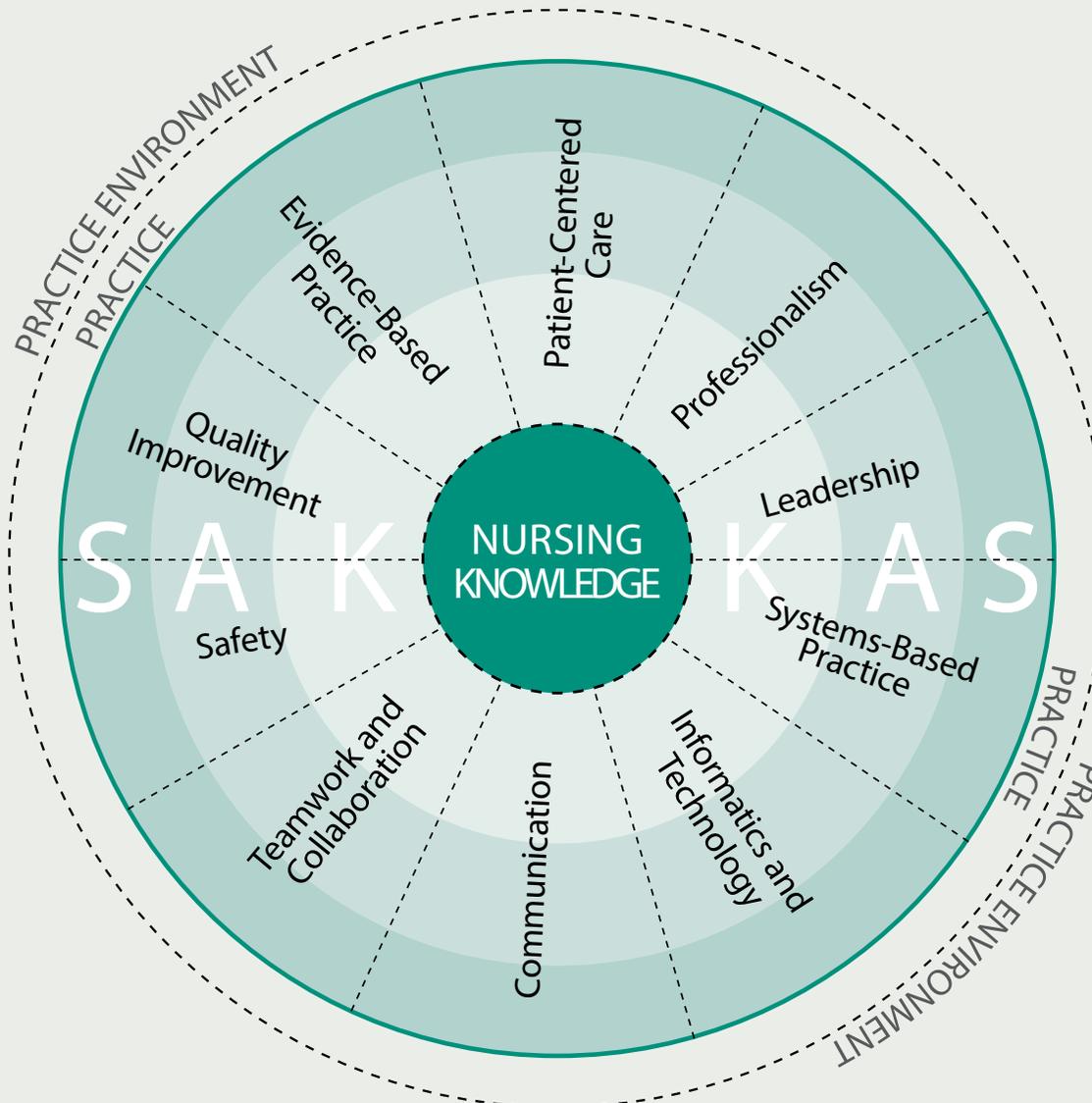
- Patient-Centered Care
- Professionalism
- Informatics and Technology
- Evidenced-Based Practice (EBP)
- Leadership
- Systems-Based Practice
- Safety
- Communication
- Teamwork and Collaboration
- Quality Improvement

THE NURSE OF THE FUTURE CORE COMPETENCY MODEL

The Nurse of the Future Nursing Core Competency® model is a graphic representation of the NOF Nursing Core Competencies and their relationship to nursing knowledge. In the model, nursing knowledge has been placed at the core to represent how nursing knowledge in its totality reflects the overarching art and science of the nursing profession and discipline. The ten essential competencies, which guide nursing curricula and practice, emanate from this central core and include patient-centered care, professionalism, leadership, systems-based practice, informatics and technology, communication, teamwork and collaboration, safety, quality improvement, and **evidence-based practice**. The order of the competencies does not indicate any hierarchy, as all the competencies are of equal importance. The competencies are connected by broken lines because distinction between individual competencies may be blurred; the competencies overlap and are not mutually exclusive. The competencies are similarly connected to the core by a broken line to indicate the reciprocal and continuous relationship between each of the competencies and nursing knowledge.

Nursing knowledge and each of the ten competencies are described in more detail in the following sections of this report. For each competency, a definition is provided that identifies expectations for all professional nurses of the future. Essential knowledge, attitudes, and skills (KAS), reflecting the cognitive, affective, and psycho-motor domains of learning, are also specified for each competency. The KAS identify expectations for initial nursing practice following completion of a pre-licensure professional nursing educational program.

MASSACHUSETTS DEPARTMENT OF HIGHER EDUCATION
Nurse of the Future Nursing Core Competencies[®]
The Art and Science of Nursing



K–Knowledge
A – Attitudes
S – Skills

- Accreditation Council for Graduate Medical Education. (n.d.). ACGME Outcome Project. Retrieved from http://cores33webs.mede.uic.edu/GMEmilestone/ui/portal/external/gc_about.aspx
- American Association of Colleges of Nursing. (2008). *The essentials of baccalaureate education for professional nursing practice* (Rev. ed.). Washington, DC: Author. Retrieved from <http://www.aacn.nche.edu/education-resources/bacessentials08.pdf>
- Davies, R. (2008). The Bologna process: The quiet revolution in nursing higher education. *Nurse Education Today*, 28(8), 935-942.
- Institute of Medicine. (2003). *Health professions education: A bridge to quality*. Washington, DC: National Academies Press.
- Lenburg, C. (1999). The framework, concepts, and methods of the Competency Outcomes and Performance (COPA) Model. *Online Journal of Issues in Nursing*, 4(2). Retrieved from <http://www.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/TableofContents/Volume41999/No2Sep1999/COPAModel.html>
- National League for Nursing Council of Associate Degree Nursing Competencies Task Force. (2000). *Educational competencies for graduates of associate degree nursing programs*. New York, NY: Author.
- Quality and Safety Education for Nursing. (2007). Quality and safety competencies. Retrieved from <http://qsen.org/competencies/pre-licensure-ksas/>
- Zabalegui, A., Loreto, M., Josefa, M., Ricoma, R., Nuin, C., Mariscal, I., . . . Moncho, J. (2006). Changes in nursing education in the European Union. *Journal of Nursing Scholarship*, 38(2), 114-118.

Nursing Knowledge

Nursing is a scholarly profession and practice-based discipline and is built on a foundation of knowledge that reflects nursing's dual components of science and art. Nursing knowledge in conjunction with a liberal education prepares learners to enter practice with identified core competencies.

A solid base in liberal education provides the distinguishing cornerstone for the study and practice of professional nursing (American Association of Colleges of Nursing [AACN], 2008, p. 11). A strong foundation in liberal arts includes a general education curriculum that provides broad exposure to multiple disciplines and ways of knowing. As defined by the Association of American Colleges and Universities (AAC&U), a liberal education is one that intentionally fosters, across multiple fields of study, wide ranging knowledge of science, cultures, and society; high level intellectual and practical skills; an active commitment to personal and social responsibility; and the demonstrated ability to apply learning to complex problems and challenges (AAC&U, 2007, p. 4). A liberal education includes both the sciences and the arts (AACN, 2008, p.10).

As a scientific discipline, nursing draws on a discrete body of knowledge that incorporates an understanding of the relationships among nurses, patients, and environments within the context of health, nursing concepts and theories, and concepts and theories derived from the basic sciences, humanities, and other disciplines. The science of nursing is applied in practice through a **critical thinking** framework known as the nursing process that is composed of assessment, diagnosis, planning, implementation, and evaluation. The steps of the nursing process serve as a foundation for clinical decision-making and evidence-based practice. Nurses use **critical thinking** to integrate objective data with knowledge gained from an assessment of the subjective experiences of patients and groups, and to apply the best available evidence and research data to the processes of diagnosis and treatment. Nurses use **clinical reasoning** to respond to the needs of the populations they serve and to develop strategies to support optimal outcomes that are most appropriate to the patient or situation while being mindful of resource utilization. Nurses continually evaluate the quality and effectiveness of nursing practice and seek to optimize outcomes (American Nurses Association [ANA], 2004).

The art of nursing is based on a framework of caring and respect for human dignity. The art and science of nursing are inextricably linked, as a compassionate approach to patient care carries a mandate to provide that care competently. Competent care is provided and accomplished through **delegated, independent and interdependent practice** (Koloroutis, 2004, pp. 123-25), and through **collaborative practice** (Tomey, 2009, p. 397) involving other colleagues and/or the individuals seeking support or assistance with their health care needs (ANA, 2004, p. 12).

With the globalization of health care and the development of collaborative teams to address and sustain effective quality care, nursing knowledge can serve as the foundation to engage other professionals in **interprofessionalism** and link to interprofessional competencies, knowledge and practice (Meleis, 2015).

The distinctive focus of the discipline of nursing is on nursing actions and processes, which are directed toward human beings and take into account the environment in which individuals reside and in which nursing practice occurs (Fawcett & Garity, 2009). This distinctive focus is reflected in the metaparadigm of nursing, which identifies human beings (patients), the environment, health, and nursing as the subjective matter of interest to nurses (ANA, 2004). In the context of nursing knowledge, these constructs are defined as follows:

Human beings/patients – the recipient of nursing care or services. This term was selected for consistency and recognition and support of the historically established tradition of the nurse-patient relationship and recipients of nursing care. Patients may be individuals, families, groups, communities, or populations. Further, patients may function in **independent, interdependent, or dependent roles**, and may seek or receive nursing interventions related to disease prevention, health promotion, or health maintenance, as well as illness and end-of-life care. Depending on the context or setting, patients may at times more appropriately be termed clients, consumers, or customers of nursing services (AACN, 1998, p. 2).

Environment – the atmosphere, milieu, or conditions in which an individual lives, works, or plays (ANA, 2004, p. 47).

Health – an experience that is often expressed in terms of wellness and illness, and may occur in the presence or absence of disease or injury (ANA, 2004, p. 48).

Nursing – is the protection, promotion, and optimization of health and abilities, prevention of illness and injury, alleviation of suffering through the diagnosis and treatment of human response, and advocacy in the care of individuals, families, groups, communities, and populations (ANA, 2001, p. 5).

NURSING KNOWLEDGE REFERENCES

American Association of Colleges of Nursing. (1998). *The essentials of baccalaureate education for professional nursing practice*. Washington, DC: Author.

American Association of Colleges of Nursing. (2008). *The essentials of baccalaureate education for professional nursing practice* (Rev. ed.). Washington, DC: Author. Retrieved from <http://www.aacn.nche.edu/education-resources/baccessentials08.pdf>

American Nurses Association. (2001). *Code of ethics for nurses with interpretive statements*. Silver Springs, MD: Author.

American Nurses Association. (2004). *Nursing scope and standards of practice*. Silver Springs, MD: Author.

Association of American Colleges and Universities. (2007). *College learning for the new global century*. Washington, DC: Author.

Fawcett, J., & Garity, J. (2009). *Evaluating research for evidence-based nursing practice*. Philadelphia, PA: F.A. Davis.

Koloroutis, M. (Ed.). (2004). *Relationship-based care: A model for transforming practice*. New York, NY: Springer.

Meleis A. (2015). *Interprofessional Education: A summary of reports and barriers to recommendations*. *Journal of Nursing Scholarship* 48(1), 106-11.

Tomey, A. M. (2009). *Guide to nursing management and leadership* (8th ed.). St. Louis, MO: Mosby Elsevier.

Patient-Centered Care

The Nurse of the Future will provide holistic care that recognizes an individual’s preferences, values, and needs and respects the patient or designee as a full partner in providing compassionate, coordinated, age and culturally appropriate, safe and effective care.

KNOWLEDGE	ATTITUDES/BEHAVIORS	SKILLS
<p>K1 Identifies components of nursing process appropriate to individual, family, group, community, and population health care needs across the life span</p>	<p>A1a Values use of scientific inquiry, as demonstrated in the nursing process, as an essential tool for provision of nursing care</p> <p>A1b Appreciates the differences between data collection and assessment</p>	<p>S1a Provides priority-based nursing care to individuals, families, and groups through independent and collaborative application of the nursing process</p> <p>S1b Demonstrates cognitive, affective, and psychomotor nursing skills when delivering patient care</p>
<p>K2 Understands that care and services are delivered in a variety of settings along a continuum of care that can be accessed at any point</p>	<p>A2a Values and respects assessing health care situation from the patient’s perspective and belief systems</p> <p>A2b Respects and encourages the patient’s participation in decisions about health care and services</p>	<p>S2 Assesses patient values, preferences, decisional capacity, and expressed needs as part of ongoing assessment, clinical interview, implementation of care plan, and evaluation of care</p>
<p>K3 Understands multiple dimensions of patient-centered care including:</p> <ul style="list-style-type: none"> a. Patient/family/community preferences, values b. Coordination and integration of care c. Information, communication, and education d. Physical comfort and emotional support e. Involvement of family and significant other f. Care transition and continuity 	<p>A3a Respects the patient’s perspective regarding own health and concerns</p>	<p>S3a Communicates patient values, preferences, and expressed needs to other members of health care team</p> <p>S3b Seeks information from appropriate sources on behalf of patient</p>

<p>K4a Demonstrates understanding of the diversity of the human condition</p> <p>K4b Describes how cultural diversity, ethnic, spiritual and socioeconomic backgrounds function as sources of patient, family, and community values</p> <p>K4c Understands how human behavior is affected by socioeconomics, culture, race, spiritual beliefs, gender identity, sexual orientation, lifestyle, and age</p> <p>K4d Understands the effects of health and social policies on persons from diverse backgrounds and cultures</p>	<p>A4a Values opportunities to learn about all aspects of human diversity and the inherent worth and uniqueness of individuals and populations</p> <p>A4b Recognizes impact of personal attitudes, values and beliefs regarding delivery of care to diverse clients</p> <p>A4c Supports patient-centered care for individuals and groups whose values differ from their own</p>	<p>S4a Provides patient-centered care with sensitivity and respect for the diversity of human experience</p> <p>S4b Implements nursing care to meet the holistic needs of patient on socioeconomic, cultural, ethnic, and spiritual values and beliefs influencing health care and nursing practice</p> <p>S4c Works collaboratively with health care providers from diverse backgrounds and cultures</p> <p>S4d Demonstrates caring practices toward patient, significant others, and groups of people receiving care</p>
<p>K5a Demonstrates comprehensive understanding of health across the continuum, including the concepts of pain, palliative care, and quality of life</p> <p>K5b Demonstrates understanding of promoting health and wellness</p>	<p>A5a Appreciates the role of the nurse in relieving all types and sources of pain and suffering</p> <p>A5b Recognizes the impact of personal values and beliefs about the management of pain and suffering and end-of-life care</p> <p>A5c Fosters strategies to promote health maintenance/motivation</p>	<p>S5a Assesses presence and extent of physical and emotional comfort</p> <p>S5b Elicits expectations of patient and family for relief of pain, discomfort, or suffering and end-of-life care</p> <p>S5c Initiates treatments to relieve pain and suffering in light of patient values, preferences, and expressed needs</p>

- Accreditation Council for Graduate Medical Education. (n.d.) ACGME Outcome Project. Retrieved from http://cores33webs.mede.uic.edu/GMEmilestone/ui/portal/external/gc_about.aspx
- Alexander, M., & Runciman, P. (2003). *ICN framework of competencies for the generalist nurse: Report of the development, process, and consultation*. Geneva, Switzerland: International Council of Nurses.
- American Association of Colleges of Nursing. (2008). *The essentials of baccalaureate education for professional nursing practice*. Washington, DC: Author.
- American Association of Colleges of Nursing. (2006). *Hallmarks of quality and safety: Baccalaureate competencies and curricular guidelines to assure high quality and safe patient care*. Washington, DC: Author.
- American Association of Colleges of Nursing. (2007). *White paper on the education and role of the clinical nurse leader*. Washington, DC: Author.
- Colorado Council on Nursing Education. (2007). The Colorado Nursing Articulation Model 2002-2005. Publication of the Colorado Trust. Retrieved from http://www.centralcoahec.org/documents/The_Colorado_Nursing_Articulation_Model_2007_update.pdf
- Cronewett, L., Sherwood, G., Barnsteiner, J., Disch, J., Johnson, J., Mitchell, . . . Warren, J. (2007). Quality and safety education for nurses. *Nursing Outlook*, 55(3), 122-131.
- Day, L., & Smith, E. (2007). Integrating quality and safety into clinical teaching in the acute care setting. *Nursing Outlook*, 55(3), 138-143
- Dreher, M., Everett, L., & Hartwig, S. (2001). The University of Iowa Nursing Collaboratory: A partnership for creative education and practice. *Journal of Professional Nursing*, 17(3), 114-120.
- Fleming, V. (2006). Developing global standards for initial nursing and midwifery education. In *Background paper on nurse and midwifery education standards in Interim Report of Proceedings*. Geneva, Switzerland: World Health Organization.
- Hobbs, J. L. (2009). A dimensional analysis of patient-centered care. *Nursing Research*, 58(1), 52-62.
- Institute of Medicine. (2003). *Health professions education: A bridge to quality*. Washington, DC: National Academies Press.
- Kennedy, H. P., Fisher, L., Fontaine, D., & Martin-Holland, J. (2008). Evaluating diversity in nursing education: A mixed method study. *Journal of Transcultural Nursing*, 19, 363-370.
- Koloroutis, M. (2004). *Relationship based care: A model for transforming practice*. Minneapolis, MN: Creative Health Management.
- National Council of State Boards of Nursing. (2009). Description of NCSBN's Transition to Practice Model. Retrieved from https://www.ncsbn.org/2013_TransitiontoPractice_modules.pdf
- National League for Nursing. (2005). Board of Governors position statement on transforming nursing education. Retrieved from <http://www.nln.org/docs/default-source/about/archived-position-statements/transforming052005.pdf?sfvrsn=6>
- National League for Nursing Accrediting Commission, Inc. (2008). *NLNAC accreditation manual*. New York, NY: Author.
- National League for Nursing Council of Associate Degree Nursing Competencies Task Force. (2000). *Educational competencies for graduates of associate degree nursing programs*. New York, NY: Author.

Nichols, B. (2007). *Building global alliances III: The impact of global nurse migration on health service delivery*. Philadelphia, PA: Commission on Graduates of Foreign Nursing Schools.

Oregon Consortium for Nursing Education Competencies. (2007). Retrieved from <http://www.ocne.org/students/Curriculum.html>

Ohio League for Nursing. (n.d.). Ohio Nursing Articulation Model: September, 2003-2005. Retrieved from <http://www.ohioleaguefornursing.org/associations/4237/files/HFFinalDocument.pdf>

Ponte, P. R., Glazer, G., Dann, E., McCollum, K., Gross, A., Tyrrell, R., . . . Washington, T. (2007). The power of professional nursing practice - An essential element of patient and family centered care. *The Online Journal of Issues in Nursing*, 12(1), Manuscript 3. Retrieved from http://www.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/TableofContents/Volume122007/No1Jan07/tpc32_316092.aspx

Potempa, K. (2002). Finding the courage to lead: The Oregon experience. *Nursing Administration Quarterly*, 26(4), 9-15.

Quality and Safety Education for Nursing. (2007). Quality and Safety Competencies. Retrieved from <http://qsen.org/competencies/>

Smith, J., & Crawford, L. (2003). *Report on findings from the practice and professional issues survey*. Chicago, IL: National Council of State Boards of Nursing, Inc.

Professionalism

The Nurse of the Future will demonstrate accountability for the delivery of standard-based nursing care that is consistent with moral, altruistic, legal, ethical, regulatory, and humanistic principles.

KNOWLEDGE	ATTITUDES/BEHAVIORS	SKILLS
<p>K1a Understands the concept of accountability for own nursing practice</p> <p>K1b Justifies clinical decisions</p>	<p>A1a Accepts responsibility for own behavior</p> <p>A1b Shows commitment to provision of high quality, safe, and effective patient care</p>	<p>S1a Demonstrates accountability for own nursing practice.</p> <p>S1b Exercises critical thinking and clinical reasoning within standards of practice</p>
<p>K2 Describes legal and regulatory factors that apply to nursing practice</p>	<p>A2a Values professional standards of practice</p> <p>A2b Values and upholds legal and regulatory principles</p>	<p>S2a Uses recognized professional standards of practice</p> <p>S2b Implements plan of care within legal, ethical, and regulatory framework of nursing practice</p>
<p>K3 Understands the professional standards of practice, the evaluation of that practice, and the responsibility and accountability for the outcome of practice</p>	<p>A3a Recognizes personal capabilities, knowledge base, and areas for development</p> <p>A3b Values collegiality, openness to critique, and peer review</p>	<p>S3a Demonstrates professional comportment</p> <p>S3b Provides and receives constructive feedback to/from peers</p>
<p>K4a Describes factors essential to the promotion of professional development</p> <p>K4b Describes the role of a professional organization shaping the culturally congruent practice of nursing</p> <p>K4c Understands the importance of reflection to advancing practice and improving outcomes of care</p>	<p>A4a Committed to life-long learning</p> <p>A4b Values the mentoring relationship for professional development</p> <p>A4c Values and is committed to being a reflective practitioner</p>	<p>S4a Participates in life-long learning</p> <p>S4b Demonstrates ability for reflection in action, reflection for action, and reflection on action</p>

<p>K5a Understands the concept of autonomy and self-regulation in nursing practice</p> <p>K5b Understands the culture of nursing, cultural congruence and the health care system</p>	<p>A5 Recognizes the responsibility to function within acceptable behavioral norms appropriate to the discipline of nursing and the health care organization</p>	<p>S5a Seeks ways to advocate for nursing's role, professional autonomy, accountability, and self-regulation</p> <p>S5b Promotes and maintains a positive image of nursing</p> <p>S5c Recognizes and acts upon breaches of law relating to nursing practice and professional codes of conduct</p>
<p>K6 Understands role and responsibilities as patient advocate</p>	<p>A6 Values role and responsibilities as patient advocate</p>	<p>S6 Serves as a patient advocate</p>
<p>K7 Understands ethical principles, values, concepts, and decision making that apply to professional nursing practice, interprofessional collaboration and patient care</p>	<p>A7a Values the application of ethical principles in daily practice</p> <p>A7b Values acting in accordance with code of ethics and accepted standards of practice</p> <p>A7c Clarifies personal and professional values and recognizes their impact on decision making and professional behavior</p> <p>A7d Values acting with honesty and integrity in relationships with patients, families, and other team members across the continuum of care</p>	<p>S7a Incorporates American Nurses Association's Code of Ethics into daily practice</p> <p>S7b Utilizes an ethical decision-making framework in clinical situations</p> <p>S7c Identifies and responds to ethical concerns, issues, and dilemmas that affect nursing practice</p> <p>S7d Enlists system resources and participates in efforts to resolve ethical issues in daily practice</p> <p>S7e Recognizes moral distress and seeks resources for resolution</p>

K8a Understands responsibilities inherent in being a member of the nursing profession

K8b Recognizes the relationship between personal health, self care, resilience and the ability to deliver sustained quality care

K8c Recognizes the relationship between civic and social responsibility and volunteerism with the advancement of one's own practice and the profession of nursing

K8d Contributes to building and fostering a nurturing & healthy work environment, promoting health safety in the workplace

A8a Recognizes need for personal and professional behaviors that promote the profession of nursing

A8b Values and upholds altruistic and humanistic principles

S8a Understands the history and philosophy of the nursing profession

S8b Incorporates professional nursing standards and accountability into practice

S8c Advocates for professional standards of practice using organizational and political processes

S8d Understands limits to one's scope of practice and adheres to licensure law and regulations

S8e Articulates to the public the values of the profession as they relate to patient welfare

S8f Advocates for the role of the professional nurse as a member of the interdisciplinary health care team

S8g Develops goals for health, self-renewal, and professional development

S8h Assumes social and civic responsibility through participation in community volunteer activities

S8i Assumes professional responsibility through participation in professional nursing organizations

- Alexander, M., & Runciman, P. (2003). *ICN framework of competencies for the generalist nurse: Report of the development, process, and consultation*. Geneva, Switzerland: International Council of Nurses.
- American Association of Colleges of Nursing. (2008). *The essentials of baccalaureate education for professional nursing practice*. Washington, DC: Author.
- American Association of Colleges of Nursing. (2006). *Hallmarks of quality and safety: Baccalaureate competencies and curricular guidelines to assure high quality and safe patient care*. Washington, DC: Author.
- American Association of Colleges of Nursing. (2007). *White paper on the education and role of the clinical nurse leader*. Washington, DC: Author.
- American Nurses Association. (2001). *Code of ethics for nurses with interpretive statements*. Silver Springs, MD: Author.
- Colorado Council on Nursing Education. (2007). *The Colorado Nursing Articulation Model 2002-2005*. Publication of the Colorado Trust. Retrieved from http://www.centralcoahec.org/documents/The_Colorado_Nursing_Articulation_Model_2007_update.pdf
- Cronewett, L., Sherwood, G., Barnsteiner, J., Disch, J., Johnson, J., Mitchell, P., . . . Warren, J. (2007). Quality and safety education for nurses. *Nursing Outlook*, 55(3), 122-131.
- Dreher, M., Everett, L., & Hartwig, S., (2001). The University of Iowa Nursing Collaboratory: A partnership for creative education and practice. *Journal of Professional Nursing*, 17(3), 114-120.
- Institute of Medicine. (2003). *Health professions education: A bridge to quality*. Washington, DC: National Academies Press.
- Jeffreys, M. R. (2010). *Teaching Cultural Competence in Nursing and Health Care: Inquiry, Action, and Innovation*. (2nd ed.) New York, NY: Springer.
- National Council of State Boards of Nursing. *Description of NCSBN's Transition to Practice Model*. (2009). Retrieved from https://www.ncsbn.org/2013_TransitiontoPractice_modules.pdf
- National League for Nursing. (2005). *Board of Governors position statement on transforming nursing education*. Retrieved from <http://www.nln.org/docs/default-source/about/archived-position-statements/transforming052005.pdf?sfvrsn=6>
- National League for Nursing Accrediting Commission, Inc. (2008). *NLNAC accreditation manual*. New York, NY: Author.
- National League for Nursing Council of Associate Degree Nursing Competencies Task Force. (2000). *Educational competencies for graduates of associate degree nursing programs*. New York, NY: Author.
- Ohio League for Nursing. (n.d.). *Ohio Nursing Articulation Model: September, 2003-2005*. Retrieved from <http://www.ohioleaguefornursing.org/associations/4237/files/HFFinalDocument.pdf>
- Oregon Consortium for Nursing Education Competencies. (2007). Retrieved from <http://www.ocne.org/students/Curriculum.html>
- Potempa, K. (2002). Finding the courage to lead: The Oregon experience. *Nursing Administration Quarterly*, 26(4), 9-15.
- Quality and Safety Education for Nursing. *Quality and safety competencies*. (2007). Retrieved from <http://qsen.org/competencies/>

Leadership

The Nurse of the Future will influence the behavior of individuals or groups of individuals within their environment in a way that will facilitate the establishment and acquisition/achievement of shared goals.

KNOWLEDGE	ATTITUDES/BEHAVIORS	SKILLS
K1 Identifies leadership skills essential to the practice of nursing	A1 Recognizes the role of the nurse as leader	S1 Integrates leadership skills of systems thinking, communication, and facilitating change in meeting patient care needs
K2 Understands critical thinking and problem-solving processes	A2 Values critical thinking processes in the management of client care situations	S2a Uses systematic approaches in problem solving S2b Demonstrates purposeful, informed, outcome-oriented thinking
K3a Understands human behavior, individual and group performance K3b Identifies the roles and skills of the health care team	A3a Recognizes the centrality of a interprofessional team approach to patient care A3b Values the diversity and inclusion of perspectives and expertise of each member of the health care team	S3a Demonstrates ability to effectively participate within health care teams S3b Promotes a productive culture by valuing individuals and their contributions S3c Models effective communication and promotes cooperative behaviors S3d Demonstrates tolerance for different viewpoints
K4 Understands the need to monitor one's own feelings and emotions, to discriminate among them and use this information to guide thinking and actions	A4a Recognizes that personal attitudes, beliefs and experiences influence one's leadership style A4b Recognizes the limits of one's own role and competence and, where necessary, consults with other health professionals with the appropriate competencies A4c Values fairness and open mindedness A4d Values an environment encouraging creative thinking and innovations A4e Values courage as a leadership skill	S4a Clarifies biases, inclinations, strengths, and self-limitations S4b Adapts to stressful situations S4c Seeks appropriate mentors S4d Acts as an effective role model and resource for students and support staff S4e Demonstrates ability to stand up for beliefs and does not avoid challenges

<p>K5 Explains the importance, necessity, and process of change</p>	<p>A5a Recognizes one’s own reaction to change and strives to remain open to new ideas and approaches</p> <p>A5b Values new ideas and interventions to improve patient care</p>	<p>S5a Implements change to improve patient care</p> <p>S5b Anticipates consequences, plans ahead, and changes approaches to improve outcomes</p> <p>S5c Participates in the change process to improve patient care, the work environment, and patient and staff satisfaction</p>
<p>K6 Understands the principles of accountability and delegation</p>	<p>A6a Accepts accountability and responsibility for one’s own professional judgment and actions</p> <p>A6b Accepts accountability for nursing care delegated to others</p> <p>A6c Recognizes the value of delegation</p>	<p>S6 Delegates selected nursing activities to unlicensed personnel to maintain or improve the patient’s health and well-being, or promote comfort</p>
<p>K7 Understands the complexity of the health care delivery system including how patient care services are organized and financed, and how reimbursement is structured</p>	<p>A7a Recognizes the impact of sociocultural, economic, legal, and political factors Influencing health care delivery and practice</p> <p>A7b Values the roles of provider groups across the continuum of care</p>	<p>S7a Acts as a champion for health care consumers and quality outcomes</p> <p>S7b Understands and articulates individual organization’s financial drivers</p> <p>S7c Demonstrates an understanding the complexity involved in decision making in Health care relating to population management across the continuum of care</p>
<p>K8 Understand how health care issues are identified, how health care policy is both developed and changed</p>	<p>A8 Recognizes how the health care process can be influenced through the efforts of nurses and other health care professionals, as well as lay and special advocacy groups</p>	<p>S8 Participates as a nursing professional in political processes and grassroots legislative efforts to influence health care policy</p>

<p>K9 Understands the need to withstand, recover or grow in the face of stressors and changing demands</p>	<p>A9 Recognizes the need to think about the future instead of the past</p>	<p>S9a Seeks opportunities for improvement and ongoing learning</p> <p>S9b Demonstrates ability to work with ambiguity and tension</p> <p>S9c Focuses energy to achieve goals and outcomes</p>
<p>K10 Articulates the impact of one's own leadership style in committing individuals to action</p>	<p>A10 Recognizes the value of leadership to empower others and enhance collaboration and shared decision making</p>	<p>S10 Uses group discussion, agreement and consensus building to enhance collaboration and shared decision making</p>

- Alexander, M., & Runciman, P. (2003). *ICN framework of competencies for the generalist nurse: Report of the development, process, and consultation*. Geneva, Switzerland: International Council of Nurses.
- Alfaro-LeFevre, R. (2009). *Critical thinking and clinical judgment*. St. Louis, MO: Saunders Elsevier.
- American Association of Colleges of Nursing. (2008). *The essentials of baccalaureate education for professional nursing practice* (Rev. ed.). Washington, DC: Author. Retrieved from <http://www.aacn.nche.edu/education-resources/baccessentials08.pdf>
- American Organization of Nurse Executives. (2015). *AONE nurse executive competencies*. Retrieved from www.aone.org/resources/nec.pdf
- American Organization of Nurse Executives. (2015). *AONE Post-Acute Care Competencies for the Nurse Leader*, AONE Post-Acute Care Task Force. Retrieved from http://www.aone.org/search?q=Post+Acute+Competencies&site=AONE&client=AONE_FRONTEND_1&proxystylesheet=AONE_FRONTEND_1&output=xml&filter=0&oe=UTF-8
- Bellack, J., Morjikian, R., Barger, S., Strachota, E., Fitzmaurice, J., Lee, A. . . O'Neil, E. (2001). Developing BSN leaders for the future: Fuld Leadership Initiative for Nursing Education (LINE). *Journal of Professional Nursing*, 17(1), 23-32.
- Carlson, K. (2015) Promoting Nurse Resilience. *MultiBriefs*. Retrieved from <http://exclusive.multibriefs.com/content/promoting-nurse-resilience/medical-allied-healthcare>
- Institute of Medicine. (2010). *The future of nursing: Leading change, advancing Health*. Washington, DC: National Academies Press.
- Jennings, B., Scalzi, C. C., Rodgers, J. D., & Keane, A. (2007). Differentiating nursing leadership and management competencies. *Nursing Outlook*, 55(4), 169-175.
- National League for Nursing Accrediting Commission, Inc. (2008). *NLNAC accreditation manual*. New York, NY: Author.
- Polard, C., Wild, C. (2014) Nursing leadership competencies - Low fidelity simulation as a teaching strategy. *Nurse Education in Practice*, 14(6), 620-626.
- Rousel, L. (2013) *Management and Leadership for Nurse Administrators*. Burlington, MA: Jones & Learning.
- Sherman, R. O. (2003). Nursing Leadership Institute Leadership Competency Model. Retrieved from http://nursing.fau.edu/uploads/docs/358/nursing_leadership_model2.pdf
- Shirey, M. R. (2007). Leadership Perspectives: Competencies and tips for effective leadership: From novice to expert. *Journal of Nursing Administration*, 37(4), 167-170.
- Wilmoth, M. C., & Shapiro, S. (2014). The Intentional Development of Nurses as Leaders. *Journal of Nursing Administration*, 44(6), 333-338.

Systems-Based Practice

The Nurse of the Future will demonstrate an awareness of and responsiveness to the larger context of the health care system, and will demonstrate the ability to effectively call on **work unit** resources to provide care that is of optimal quality and value (Adapted from ACGME, n.d.).

KNOWLEDGE	ATTITUDES/BEHAVIORS	SKILLS
<p>K1 Understands and is responsive to the larger context and system of health care</p>	<p>A1a Appreciates the role of new staff nurses in the operations of an effective work unit</p> <p>A1b Appreciates how the elements of the work unit impact one's practice</p>	<p>S1 Plans, organizes, and delivers patient care in the context of the work unit</p>
<p>K2a Understands the impact of health care system changes on planning, organizing, and delivering patient care at the work unit level</p> <p>K2b Understands interrelationships among nursing, the nursing work unit, and organizational goals</p>	<p>A2a Appreciates the complexity of the work unit environment</p> <p>A2b Recognizes the complexity of individual and group practice on a work unit</p> <p>A2c Appreciates the impact of one's decisions on the work unit</p> <p>A2d Recognizes the importance of work unit systems in providing supplies, medications, equipment, and information in a timely and accurate fashion</p> <p>A2e Appreciates role in identifying work unit inefficiencies and operational failures</p>	<p>S2a Considers the influences of the health care system, work unit, and patient/family when making patient care decisions</p> <p>S2b Seeks to solve problems encountered at the point of care</p> <p>S2c Makes management aware of clinical and work unit problems encountered in daily practice</p> <p>S2d Identifies inefficiencies and failures on the work unit, such as those involving supplies, medications, equipment, and information</p> <p>S2e Participates in solving work unit inefficiencies and operational failures that impact patient care, such as those involving supplies, medications, equipment, and information</p>

<p>K3a Understands the concept of patient care delivery models</p> <p>K3b Understands role and responsibilities as a member of the health care team in planning and using work unit resources to achieve quality patient outcomes</p> <p>K3c Understands the relationship between the outcomes of one's own nursing care and work unit resources</p>	<p>A3a Acknowledges the tension that may exist between a goal-driven and a resource-driven patient care delivery model</p> <p>A3b Values the contributions of each member of the health care team to the work unit</p> <p>A3c Values the management of one's own time as a critical work unit resource in delivering patient care</p> <p>A3d Values the partnerships required to coordinate health care activities that can affect work unit performance</p>	<p>S3a Considers resources available on the work unit when contributing to the plan of care for a patient or group of patients</p> <p>S3b Practices cost effective care and resource allocation that does not compromise quality of care</p> <p>S3c Collaborates with members of the health care team to prioritize resources, including one's own work time and activities delegated to others, for the purposes of achieving quality patient outcomes</p> <p>S3d Evaluates outcomes of one's own nursing care</p> <p>S3e In collaboration with others, uses evidence to facilitate work unit change to achieve desired patient outcomes</p>
<p>K4 Understands role and responsibilities as patient advocate, assisting patient in navigating through the health care system</p>	<p>A4a Values role and responsibilities as patient advocate</p> <p>A4b Values partnerships in providing high quality patient care</p> <p>A4c Values effective communication and information sharing across disciplines and throughout transitions in care</p> <p>A4d Appreciates role and responsibilities in using education and referral to assist the patient and family through transitions across the continuum of care</p>	<p>S4a Serves as a patient advocate</p> <p>S4b Assists patients and families in dealing with work unit and health care system complexities</p> <p>S4c Uses education and referral to assist the patient and family through care transitions</p>

K5 Is aware of global aspects of health care

A5a Appreciates the potential of the global environment to influence patient health

A5b Appreciates the potential of the global environment to influence nursing practice

S5 Engages in self-reflection on one's role and responsibilities related to **global health** issues

- Accreditation Council for Graduate Medical Education. (n.d.). ACGME Outcome Project. Retrieved from http://cores33webs.mede.uic.edu/GMEMilestone/ui/portal/external/gc_about.aspx
- American Association of Colleges of Nursing. (2008). *The essentials of baccalaureate education for professional nursing practice* (Rev. ed.). Washington, DC: Author. Retrieved from <http://www.aacn.nche.edu/education-resources/bacessentials08.pdf>
- Barnum, B., & Kerfoot, K. (1995). The resource-driven model. In *The nurse as executive* (4th ed.) (pp. 10-14). Gaithersburg, MD: Aspen.
- Bleich, M. R. (2014) Developing leaders as system thinkers – part 1. *Journal of Continuing Education for Nurses*, 45(4), 158-259.
- Bleich, M. R. (2014) Developing leaders as system thinkers – part 2. *Journal of Continuing Education for Nurses*, 45(5), 201-202.
- Bleich, M. R. (2014) Developing leaders as system thinkers – part 3. *Journal of Continuing Education for Nurses*, 45(6), 246-248.
- Dolansky, M. A., & Moore, S. M. (2013) Quality and safety education for nurses (QSEN): The key is systems thinking. *The Online Journal of Issues in Nursing*, 18(3). Retrieved from <http://www.nursingworld.org/Quality-and-Safety-Education-for-Nurses.html>
- Graham, M., Naqvi, Z., Encandela, J., Byland, R., Calero-Breckhemer, A., & Schmidt, H. (2009). *Advances in Health Science Education*, 14, 187-203.
- Guralnick, S., Ludwig, S., & Englander, R. (2014). Domains of competence: Systems-based practice. *Academic Pediatrics*, 14(2S), S70-S79.
- Joint Commission Resources, Inc. (2007). *Front line of defense: The role of nurses in preventing sentinel events* (2nd ed.). Oakbrook Terrace, IL: Author.
- Koloroutis, M. (Ed.). (2004). *Relationship-based care: A model for transforming practice*. Minneapolis, MN: Creative Health Care Management.
- Nelson, E. C., Batalden, P. B., & Godfrey, M. M. (2007). *Quality by design: A clinical microsystems approach*. San Francisco, CA: Jossey-Bass.
- Porter-O'Grady, T., & Malloch, K. (2011). *Quantum leadership advancing innovation transforming healthcare* (3rd ed.). Sudbury, MA: Jones & Bartlett Learning.
- Tucker, A. L., & Spear, S. J. (2006). Operational failures and interruptions in hospital nursing. *HSR: Health Services Research*, 41(3 Pt 1), 643-662.

Informatics and Technology

The Nurse of the Future will be able to use advanced technology and to analyze as well as synthesize information and collaborate in order to make critical decisions that optimize patient outcomes. (National Academies of Sciences, Engineering, and Medicine. 2015)

KNOWLEDGE	ATTITUDES/BEHAVIORS	SKILLS
<p>K1a Understands basic computer science concepts</p> <p>K1b Identifies the basic components of the computer systems</p>	<p>A1 Recognizes the importance of basic computer competence to evolving nursing practice</p>	<p>S1a Demonstrates proficiency in:</p> <ul style="list-style-type: none"> • Concepts of information and communication technology • Foundations of basic computer systems (i.e., software, operating systems, hardware, networks, peripheral devices, computer systems, internet and web based applications, wireless technology) • Foundations of database management • Data Security <p>S1b Demonstrates proficiency in basic computer skills related to personnel management (i.e., admin), education, and desktop software</p>

<p>K2a Describes Information Management concepts (i.e., communication theories)</p> <p>K2b Describes standardized terminology in a care environment that reflects nursing's unique contribution to patient outcomes</p> <p>K2c Describes the foundation of Nursing Informatics:</p> <ul style="list-style-type: none"> • Distinguishes between healthcare and nursing informatics • Describes Informatics Knowledge and its relationship to Regulations, Human Factors, and Change Management <p>K2d Describes an understanding of electronic communication strategies among healthcare providers in the healthcare system</p>	<p>A2a Values the importance of nursing data to improve nursing practice</p> <p>A2b Appreciates the use of electronic communications strategies in the delivery of patient care</p>	<p>S2a Uses data, as presented through the Electronic Health Record (E.H.R.), to inform clinical decisions and deliver safe, quality patient care</p> <p>S2b Uses data from nursing and all relevant sources, including technology, to inform the delivery of care</p> <p>S2c Uses informatics, and knowledge of the larger healthcare delivery system, to support and enhance patient care</p> <p>S2d Utilizes Electronic communication strategies (E.H.R., mHealth, Personal health records)</p>
<p>K3 Explains why information and technology skills are essential for the professional nurse</p>	<p>A3 Appreciates the necessity for all health professionals to seek lifelong, continuous learning of information management</p>	<p>S3a Uses information and its sources, critically and incorporates selected information into his or her own professional knowledge database</p> <p>S3b Seeks education about how information is managed in the care setting</p> <p>S3c Performs basic troubleshooting when using applications</p>

K4 Understands Core Components of the E.H.R. and their application within the larger health care information system:

- Core components of the E.H.R. (Ancillary Systems, Clinical Data Repository, Physician Documentation, Bar-Coded Medications Administration (BCMA), Continuity of Care Document transactions and Decision Support)
- Nursing specific applications and relationship to entire E.H.R. (Clinical documentation, Computerized Provider Order Entry (CPOE), BCMA, Patient Monitoring, Decision Support, Clinical Guidelines)
- Consumer applications
- Social Media

A4 Values the importance of technology on patient care and quality and safety outcomes

S4a Demonstrates skills in using patient care technologies, information systems, and communication devices that support safe nursing practice

S4b Demonstrates proficiency in basic computer skills related to communication, and data access

S4c Utilizes telecommunication technologies to assist in effective communication in a variety of healthcare settings

S4d Applies safeguards and decision making support tools embedded in patient care technologies and information systems to support a safe practice environment for both patients and healthcare workers

S4e Utilizes E.H.R. systems to document interventions related to achieving nurse sensitive outcomes

S4f Applies patient care technologies as appropriate to address the needs of a diverse patient population

<p>K5a Describes the E.H.R. implementation process</p> <p>K5b Identifies the different roles involved in system design, analysis and management, including core nursing responsibilities associated with an E.H.R. implementation</p> <p>K5c Defines informatics skills required in system development (i.e., system evaluation, design, testing, and training)</p>	<p>A5 Values nurses' involvement in design, selection, implementation and evaluation of information technologies to support patient care</p>	<p>S5a Participates in E.H.R. System Implementation (i.e., system evaluation, design implementation, testing, training , optimization and project management)</p> <p>S5b Works in interdisciplinary teams to make decisions regarding the application of technologies and the acquisition of data</p> <p>S5c Recognizes that redesign of workflow and care processes should precede implementation of care technology to facilitate nursing practice</p> <p>S5d Participates in evaluation of information systems in practice settings through policy and procedure development</p>
<p>K6a Describes patient access, rights and engagement as pertain to E.H.R.</p> <p>K6b Understands the principles of data integrity, professional ethics and legal rights of the patient</p>	<p>A6 Recognizes that greater patient engagement contributes to better health outcomes</p>	<p>S6a Utilizes strategies to protect data and maintains data integrity</p> <p>S6b Upholds ethical standards related to data security, regulatory requirements, confidentiality, and clients' right to privacy</p> <p>S6c Teaches patients about healthcare technologies</p> <p>S6d Adapts the use of technologies to meet patient needs</p>
<p>K7a Describes how technology and information management are related to the quality and safety of patient care</p> <p>K7b Describes the role of information technology in improving patient care outcomes and creating a safe care environment</p>	<p>A7a Appreciates the limits of technology, recognizing there are nursing practices that cannot be performed by computers or technology</p> <p>A7b Appreciates the contributions of technology as a tool to improve patient safety and quality</p>	<p>S7a Uses data and statistical analysis to evaluate practice, perform quality improvement and enhance patient safety</p> <p>S7b Uses information Management tools to monitor outcomes of care process</p> <p>S7c Advocates for the use of new patient care technologies for safe, quality care</p>

<p>K8 Describes the integration of research and evidenced based practice into the E.H.R</p>	<p>A8 Values technology as a tool for generating knowledge and guiding clinical practice</p>	<p>S8a Conducts on-line literature searches</p> <p>S8b Provides for efficient data collection</p> <p>S8c Uses applications to manage aggregated data</p> <p>S8d Integrates evidenced based standards to support clinical practice</p>
<p>K9 Describe emerging areas of informatics that will influence the development of the E.H.R., patient care and professional practice</p>	<p>A9 Values informatics as an evolving discipline</p>	<p>S9 Discusses the value of emerging trends (i.e., Health care Information Exchange, Data Analytics, Population Health Management, Patient and Family Engagement) and how they will influence healthcare reform</p>

- American Association of Colleges of Nursing. (2008). *The essentials of baccalaureate education for professional nursing practice* (Rev. ed.). Washington, DC: Author. Retrieved from <http://www.aacn.nche.edu/education-resources/baccessentials08.pdf>
- American Nurses Association. (2015). *Nursing Informatics: Scope and Standards of Practice 2nd Edition*. Silver Springs, MD: Nursebooks.org.
- National Academies of Sciences, Engineering, and Medicine. (2016) *Assessing Progress on the Institute of Medicine Report The Future of Nursing*. Washington, DC: The National Academies Press, doi:10.17226/21838
- The Massachusetts Core Competencies: A Toolkit for Implementation in Education and Practice Settings. (2014). Retrieved from http://campaignforaction.org/sites/default/files/MAAC_CoreCompetenciesToolkit_052014.pdf
- Yoon, S., Yen, P.-Y., & Bakken, S. (2009). Psychometric Properties of the Self-Assessment of Nursing Informatics Competencies Scale (SANICS). *Studies in Health Technology and Informatics*, 146, 546–550.

Communication

The Nurse of the Future will interact effectively with patients, families, and colleagues, fostering mutual respect and shared decision making, to enhance patient satisfaction and health outcomes.

Therapeutic Communication

KNOWLEDGE	ATTITUDES/BEHAVIORS	SKILLS
<p>K1a Understands the principles of effective communication through various means</p> <p>K1b Knows grammar, spelling, and health care terminology</p>	<p>A1a Accepts responsibility for communicating effectively</p> <p>A1b Recognizes one's individual responsibility to communicate effectively utilizing a collegial tone and voice</p>	<p>S1a Uses clear, concise, and effective written, electronic, and verbal communications</p> <p>S1b Documents interventions and outcomes of care according to professional standards and work unit policy</p>
<p>K2a Understands visual, auditory, and tactile communication</p> <p>K2b Understands the physiological, psychosocial, developmental, spiritual, and cultural influences on effective communication</p> <p>K2c Describes the impact of one's own communication style on others</p>	<p>A2a Values different means of communication (auditory, visual, and tactile)</p> <p>A2b Values mutually respectful communication</p> <p>A2c Values individual cultural and personal diversity</p> <p>A2d Respects persons' rights to make decisions in planning care</p>	<p>S2a Chooses the right setting and time to initiate conversation</p> <p>S2b Assesses the patient's readiness/willingness to communicate</p> <p>S2c Assesses the patient's ability to communicate</p> <p>S2d UtilizedUtilizes patient preferences for visual, auditory, or tactile communication</p> <p>S2e Assesses barriers to effective communication</p> <p>S2f Makes appropriate adaptations in own communication based on patient and family assessment</p> <p>S2g Assesses the impact of use of self in effective communication</p>

<p>K3a Understands the nurse's role and responsibility in applying the principles of verbal and nonverbal communication</p> <p>K3b Understands the nurse's role and responsibility in applying principles of active listening</p> <p>K3c Recognizes the value of validation in an effective therapeutic relationship</p>	<p>A3a Values the therapeutic use of self in patient care</p> <p>A3b Appreciates the dynamics of physical and emotional presence on communication</p> <p>A3c Appreciates the influences of physiological, psychosocial, developmental, spiritual, and cultural influences on one's own ability to communicate</p> <p>A3d Acknowledges that acceptance of another person's behaviors will enhance the therapeutic relationship and facilitate communication</p>	<p>S3a Establishes rapport</p> <p>S3b Actively listens to comments, concerns, and questions</p> <p>S3c Demonstrates effective interviewing techniques</p> <p>S3d Provides opportunity to ask and respond to questions</p> <p>S3e Assesses verbal and non-verbal responses</p> <p>S3f Adapts communication as needed based on patient's response</p> <p>S3g Distinguishes between effective and ineffective communication with patients and families</p> <p>S3h Utilizes selected forms and levels of validation to minimize conflict and enhance the therapeutic relationship</p>
<p>K4 Identifies techniques for reducing violent and/or disruptive behavior</p>	<p>A4 Recognizes situations where de-escalation techniques are required to prevent violence and aggression levels of validation to minimize conflict and enhance the therapeutic relationship</p>	<p>S4 Utilizes verbal and non-verbal communication skills to reduce and manage violent and/or disruptive behavior</p>

Collegial Communication & Conflict Resolution

KNOWLEDGE	ATTITUDES/BEHAVIORS	SKILLS
<p>K5a Understands what each health team member uniquely provides in terms of patient care</p> <p>K5b Interprets differences in communication styles among patients and families, nurses, and other members of the health team</p> <p>K5c Understands the various modes to communicate with members of the health care team</p> <p>K5d Discusses effective strategies for communicating and resolving conflict</p> <p>K5e Understands the principles of group process and negotiation</p> <p>K5f Acknowledges the presence of an authority gradient in the healthcare team</p>	<p>A5a Cares about people as individuals, valuing all members of the health care team and their roles as important to patient care</p> <p>A5b Appreciates the contributions of others in helping patient and families achieve health goals</p> <p>A5c Recognizes the limitations of electronic communication in real time processing</p> <p>A5d Recognizes that each individual involved in a conflict has accountability for it and should work to resolve it</p> <p>A5e Acknowledges negotiation as a strategy to identify mutually acceptable ways to meet patient care objectives</p> <p>A5f Accepts graded assertiveness as a technique to communicate</p>	<p>S5a Demonstrates empathy and concern while ensuring organizational goals are met</p> <p>S5b Asserts views in a straightforward unambiguous manner</p> <p>S5c Selects the appropriate communication mode (verbal v. electronic) for the situation</p> <p>S5d Uses standardized communication approaches in all communications and in care transitions</p> <p>S5e Uses a structured approach to communicate effectively with colleagues</p> <p>S5f Contributes to resolution of conflict through negotiation</p> <p>S5g Expresses concern through as stepped process, escalating as the safety of the patient and the situation requires</p>
<p>K6 Identifies cultural variations in approaches to interactions with others</p>	<p>A6 Identifies how one's own personality, preferences, and patterns of behavior impact communication with others</p>	<p>S6 Applies self-reflection to better understand one's own manner of communicating with others</p>
<p>K7 Examines the role of the nurse in assuring patient privacy, security, and confidentiality</p>	<p>A7 Accepts responsibility to maintain patient confidentiality</p>	<p>S7 Distinguishes which members of the healthcare team have a valid right to know selected patient information</p>

Teaching/Learning

KNOWLEDGE	ATTITUDES/BEHAVIORS	SKILLS
<p>K8a Understands the influences of different learning styles on the education of patients and families</p> <p>K8b Identifies differences in auditory, visual, and tactile learning styles</p> <p>K8c Understands the principles of teaching and learning</p> <p>K8d Is aware of the three domains of learning: cognitive, affective, and psychomotor</p> <p>K8e Understands the concept of health literacy</p> <p>K8f Understands the process of cooperative learning</p> <p>K8g Understands the purpose of health education</p>	<p>A8a Values different means of communication used by patients and families</p> <p>A8b Recognizes learning styles vary by individual</p> <p>A8c Values the patient's right to know the reason for chosen interventions</p> <p>A8d Values the need for teaching in all three domains of learning</p> <p>A8e Accepts responsibility to insure the patient receives health information that is understandable</p> <p>A8f Values cooperative learning strategies as a method to facilitate learning</p> <p>A8g Accepts the role and responsibility for providing health education to patients and families</p>	<p>S8a Assesses factors that influence the patient's and family's ability to learn, including readiness to learn, preferences for learning style, and levels of health literacy</p> <p>S8b Incorporates facts, values, and skills into teaching plan</p> <p>S8c Assists patients and families in accessing and interpreting health information and identifying healthy lifestyle behaviors</p> <p>S8d Provides relevant and sensitive health education information and advice to patients and families</p> <p>S8e Participates in cooperative learning</p> <p>S8f Discusses clinical decisions with patients and families</p> <p>S8g Evaluates patient and family learning</p>

COMMUNICATION BIBLIOGRAPHY

- American Association of Colleges of Nursing. (2008). *The essentials of baccalaureate education for professional nursing practice* (Rev. ed.). Washington, DC: Author. Retrieved from <http://www.aacn.nche.edu/education-resources/baccessentials08.pdf>
- Bednarz, H, Schim, S., & Doorenbos, A. (2010). Cultural diversity in nursing education: Perils, pitfalls, and pearls. *Journal of Nursing Education*, 49(5), 253-260.
- Bloom, B. S. (1956). Taxonomy of educational objectives, the classification of educational goals, Handbook I: Cognitive domain. New York, NY: David McKay.
- Colorado Council on Nursing Education. (2007). *The Colorado Nursing Articulation Model: 2002-2005*. Publication of the Colorado Trust. Retrieved from http://www.centralcoahec.org/documents/nursing_articulation.pdf
- Curtis, K., Tzannes, A., & Rudge, T. (2011). How to talk to doctors – A guide for effective communication. *International Nursing Review*, 58(1), 13-20.
- Harvey, P., & Ahmann, E. (2014). Validation: A Family-Centered Communication Skill. *Pediatric Nursing* 40(3), 143-147.
- Hughes, R. G. (Ed.). (2008). Patient safety and quality: *An evidence-based handbook for nurses*. AHRQ Publication No. 08-0043. Rockville, MD: Agency for Healthcare Research and Quality.
- IOM Committee on Health Literacy. (2004). *Health literacy: A prescription to end confusion*. Washington, DC: The National Academies Press.
- Jackson, D. (2008). Collegial trust: Crucial to safe and harmonious workplaces [Editorial]. *Journal of Clinical Nursing*, 17(12), 1541-1542.
- Johnson, D. W., Johnson, R., & Smith, K. (1998). *Active learning: Cooperation in the college classroom*. Edina, MN: Interaction Book.
- Lancaster, G., Kolakowsky-Hayner, S., & Greer-Williams, N. (2015). Interdisciplinary communication and collaboration among physicians, nurses, and unlicensed assistive personnel. *Journal of Nursing Scholarship*, 47(3), 275-284.
- Ohio League for Nursing. (n.d.). Ohio Nursing Articulation Model: September, 2003-2005. Retrieved from <http://www.ohioleaguefornursing.org/associations/4237/files/HFFinalDocument.pdf>
- Price, O., & Baker, J. (2012). Key components of de-escalation techniques: A thematic synthesis. *International Journal of Mental Health Nursing*, 21(4), 310-319.
- Potempa, K. (2002). Finding the courage to lead: The Oregon experience. *Nursing Administration Quarterly*, 26(4), 9-15.
- Robinson, F., Gorman, G., Slimmer, L., & Yudkowsky, R. (2010). Perceptions of effective and ineffective nurse-physician communication in hospitals. *Nursing Forum*, 45(3), 206-216

Teamwork and Collaboration

The Nurse of the Future will function effectively within nursing and interdisciplinary teams, fostering open communication, mutual respect, shared decision making, team learning, and development (Adapted from QSEN, 2007).

Self

KNOWLEDGE	ATTITUDES/BEHAVIORS	SKILLS
<p>K1 Identifies own strengths, limitations, and values in functioning as a member of a team</p>	<p>A1a Recognizes responsibility for contributing to effective team functioning</p> <p>A1b Appreciates the importance of collaboration</p> <p>A1c Recognizes the value of mutual respect and collegial trust among team members</p>	<p>S1a Acts with honesty and integrity when working with patients, families, and team members</p> <p>S1b Demonstrates self-awareness of strengths and limitations as a team member</p> <p>S1c Initiates plan for self-development as a team member</p> <p>S1d Acts collaboratively with integrity, consistency, and respect for diverse and differing views</p>

Team

KNOWLEDGE	ATTITUDES/BEHAVIORS	SKILLS
<p>K2 Describes scope of practice, team mission, objectives, norms and resources and roles of interdisciplinary and nursing health care team members</p>	<p>A2 Values the perspectives and expertise of all health team members</p>	<p>S2a Functions competently within own scope of practice as a member of the health care team</p> <p>S2b Uses knowledge of one's own role and those of other professions to appropriately assess and address the healthcare needs of the patients and populations served</p>

<p>K3 Identifies contributions of other individuals and groups in helping patients and families achieve health goals</p>	<p>A3 Respects the centrality of the patient and family as core members of any health care team</p>	<p>S3a Practices collaborative decision-making and practice through accommodation, negotiation, coordination and shared accountability</p> <p>S3b Assumes the role of team member or leader based on the situation</p>
<p>K4 Describes strategies for identifying and managing overlaps in team member roles and accountabilities</p>	<p>A4 Respects the unique professional and cultural attributes that members bring to a team</p>	<p>S4a Initiates requests for assistance when situation warrants it</p> <p>S4b Manages, within the scope of practice, areas of overlap in role and/or accountability in team member functioning</p> <p>S4c Integrates the contributions of others in assisting patient/family to achieve health goals</p>

Team Communication

KNOWLEDGE	ATTITUDES/BEHAVIORS	SKILLS
<p>K5 Understands the impact of the effective collegial communication on patient outcomes</p>	<p>A5 Values teamwork and the relationships upon which it is based</p>	<p>S5a Adapts own communication style to meet the needs of the patient, family, team and situation</p> <p>S5b Demonstrates commitment to team goals</p> <p>S5c Solicits input from other team members to improve individual and team performance</p> <p>S5d Shares instructive feedback on performance in respectful ways</p>

Effect of Team on Safety & Quality

KNOWLEDGE	ATTITUDES/BEHAVIORS	SKILLS
<p>K6a Understands the impact of effective team functioning on safety and quality of care</p> <p>K6b Discusses how authority and hierarchy influence teamwork and patient safety</p>	<p>A6a Recognizes the risks associated with transferring patient care responsibilities to another professional (“hand-off”) during care transitions</p> <p>A6b Appreciates patient-centered problem solving as the overarching framework for team’s care delivery process</p>	<p>S6a Follows communication practices to minimize risks associated with transfers between providers during care transitions</p> <p>S6b Asserts own position/perspective in discussions about patient care</p> <p>S6c Chooses communication styles that diminish the risks associated with authority gradients among team members</p>

Impact of Systems on Team Functioning

KNOWLEDGE	ATTITUDES/BEHAVIORS	SKILLS
<p>K7a Identifies systems factors that facilitate or interfere with effective team functioning</p> <p>K7b Identifies lateral violence as a barrier to teamwork and unit functioning</p> <p>K7c Identifies civility as a facilitator of effective teamwork and unit functioning</p> <p>K7d Explores strategies for improving work units to support team functioning</p>	<p>A7a Recognizes tensions between professional autonomy and systems factors</p> <p>A7b Recognizes behaviors that contribute to lateral violence</p> <p>A7c Recognizes behaviors that promote civility within the team and work setting</p> <p>A7d Values the creation of system solutions in achieving quality of care</p>	<p>S7a Contributes to effective team functioning</p> <p>S7b Practices strategies including cognitive rehearsal to minimize lateral violence</p> <p>S7c Practices strategies including patience, prudence, kindness, respect and tact to encourage and support civility</p> <p>S7d Participates in designing work units that support effective teamwork</p>

- American Association of Colleges of Nursing. (2008). *The essentials of baccalaureate education for professional nursing practice* (Rev. ed.). Washington, DC: Author. Retrieved from <http://www.aacn.nche.edu/education-resources/bacessentials08.pdf>
- Center for American Nurses (2008). *Lateral violence and bullying in nursing*. Retrieved from https://www.mc.vanderbilt.edu/root/pdfs/nursing/center_lateral_violence_and_bullying_position_statement_from_center_for_american_nurses.pdf
- Cronenwett, L., Sherwood, G., Barnsteiner, J., Disch, J., Johnson, J., Mitchell, P., . . . Warren, J. (2007). Quality and safety education for nurses. *Nursing Outlook*, 55(3), 122-131.
- Edmonson, C., (2010). Moral Courage and the Nurse Leader. *OJIN: The Online Journal of Issues in Nursing*, 15 (3) Manuscript 5. DOI: 10.3912/OJIN.Vol15No03Man05
- Fritz, J., (2011). Civility in the workplace. *Spectra*, 11- 15.
- Griffin, M. (2004). Teaching cognitive rehearsal as a shield for lateral violence: An intervention for newly licensed nurses. *Journal of Continuing Education in Nursing*, 35(6), 257-6.
- Griffin, M., Clark, C. (2014). Revisiting cognitive rehearsal as an intervention against incivility and lateral violence in nursing: 10 years later. *Journal of Continuing Education in Nursing*, 45(12), 535-542.
- Interprofessional Education Collaborative. (2011). *Core competencies for interprofessional collaborative practice*. Report of an expert panel. Washington, DC: Author.
- Interprofessional Education Collaborative. (2011). *Team-based competencies building a shared foundation for education and practice. Conference Proceedings*. Washington, DC: Author.
- Jackson, D. (2008). Collegial trust: Crucial to safe and harmonious workplaces [Editorial]. *Journal of Clinical Nursing*, 17(12), 1541-1542.
- Quality and Safety Education for Nursing. (2014). *Quality and safety competencies*. Retrieved from <http://qsen.org/competencies/pre-licensure-ksas/>
- van Schaik, S., O'Brien, B., Almeida, S., & Adler, S. (2014). Perceptions of interprofessional teamwork in low-acuity settings: A qualitative analysis. *Medical Education*, 48(6), 583-592.

Safety

The Nurse of the Future will minimize risk of harm to patients and providers through both system effectiveness and individual performance (QSEN, 2007).

KNOWLEDGE	ATTITUDES/BEHAVIORS	SKILLS
K1 Identifies human factors and basic safety design principles that affect safety	A1 Recognizes the cognitive and physical limitations of human performance	S1 Demonstrates effective use of technology and standardized practices that support safe practice
K2 Describes the benefits and limitations of commonly used safety technology	A2 Recognizes the tension between professional autonomy and standardization	S2 Demonstrates effective use of strategies at the individual and systems levels to reduce risk of harm to self and others
K3 Discusses effective strategies to enhance memory and recall and minimize interruptions	A3 Recognizes that both individuals and systems are accountable for a safe culture	S3 Uses appropriate strategies to reduce reliance on memory and interruptions
<p>K4a Delineates general categories of errors and hazards in care</p> <p>K4b Describes factors that create a culture of safety</p> <p>K4c Describes optimal processes for communicating with patients/families experiencing adverse events</p>	<p>A4a Recognizes the importance of transparency in communication with the patient, family, and health care team around safety and adverse events</p> <p>A4b Recognizes the complexity and sensitivity of the clinical management of medical errors and adverse events</p>	<p>S4a Participates in collecting and aggregating safety data</p> <p>S4b Uses organizational error reporting system for “near miss” and error reporting</p> <p>S4c Communicates observations or concerns related to hazards and errors involving patients, families, and/or health care team</p> <p>S4d Utilizes timely data collection to facilitate effective transfer of patient care responsibilities to another professional during transitions in care (“hand-offs”)</p> <p>S4e Discusses clinical scenarios in which sensitive and skillful management of corrective actions to reduce emotional trauma to patients/families is employed</p> <p>S4f Participates in safety surveys</p>

<p>K5 Describes how patients, families, individual clinicians, health care teams, and systems can contribute to promoting safety and reducing errors</p>	<p>A5 Recognizes the value of analyzing systems and individual accountability when errors or near misses occur</p>	<p>S5 Participates in analyzing errors and designing systems improvements</p>
<p>K6a Describes processes used in understanding causes of error and in allocation of responsibility and accountability</p> <p>K6b Discusses potential and actual impact of established patient safety resources, initiatives and regulations</p> <p>K6c Describes the elements for sustaining a High Reliable Organization (HRO)</p>	<p>A6a Values the systems' benchmarks that arise from established safety initiatives</p> <p>A6b Values the importance for using a model for applying the principles of reliability to healthcare systems: prevent failure, identify and mitigate failure and redesign processes on identified failure</p> <p>A6c Values the paradigm that works to promote patient safety and efficient healthcare delivery</p>	<p>S6a Uses established safety resources for professional development and to focus attention on assuring safe practice</p> <p>S6b Participates within methods for evaluating and improving the overall reliability of a complex system</p> <p>S6c Uses elements identified by AHRQ when delivering care: awareness of operations, reluctance to accept excuses, preoccupation with failure, deferring to expertise, continuous resiliency</p>

- Agency for Healthcare Research and Quality [AHRQ] (2015). *Patient safety indicators*. Retrieved from http://qualityindicators.ahrq.gov/Modules/psi_overview.aspx
- Agency for Healthcare Research and Quality [AHRQ] (2015). *Patient safety network: Glossary*. Retrieved from <http://www.psnet.ahrq.gov/glossary.aspx>
- American Association of Colleges of Nursing. (2008). *The essentials of baccalaureate education for professional nursing practice* (Rev. ed.). Washington, DC: Author. Retrieved from <http://www.aacn.nche.edu/education-resources/baccessentials08.pdf>
- Crigger, N., & Godfrey, N. (2014). Professional wrongdoing: Reconciliation and recovery. *Journal of Nursing Regulation*, 4(4), 40-45.
- Cronenwett, L., Sherwood, G., Barnsteiner, J., Disch, J., Johnson, J., Mitchell, P., . . . Warren, J. (2007). Quality and safety education for nurses. *Nursing Outlook*, 55(3), 122-131.
- Healthcare Performance Improvement. (2009). *SEC and SSER patient safety measure system for healthcare* (Rev. 1). Virginia Beach, VA: Author. Retrieved from <http://hpiresults.com/docs/PatientSafetyMeasurementSystem.pdf>
- Institute for Health Care Improvement (IHI). Develop a culture of safety. Retrieved from <http://www.ihl.org/IHI/Topics/PatientSafety/SafetyGeneral/Changes/Develop+a+Culture+of+Safety.htm>
- Institute of Medicine. (1999). *To err is human: Building a safer health care system*. Washington, DC: The National Academies Press.
- Institute of Medicine. (2001). *Crossing the quality chasm: A new health system for the 21st century*. Washington, DC: The National Academies Press.
- Institute of Medicine. (2003). *Health professions education: A bridge to quality*. Washington, DC: The National Academies Press.
- Leape, L. (2000). Reporting of medical errors: Time for reality check. *Quality in Healthcare*, 9(3), 144-145.
- Leape, L., & Berwick, D. (2000). Safe health care: Are we up to it? *British Medical Journal*, 320, 725-26.
- Leape, L., Lawthers, A. G., Brennan, T. A., & Johnson, W. G. (1993). Preventing medical injury. *Quality Review Bulletin*, 19(5), 144-149.
- Massachusetts Coalition for Prevention of Medical Errors. (2006). When things go wrong: Responding to adverse events. A consensus statement of the Harvard hospitals. Retrieved from <http://www.macoalition.org/documents/respondingToAdverseEvents.pdf>
- Mattox, E. A. (2012). Strategies for improving patient safety: Linking task to error type. *Critical Care Nurse*, 32(1), 52-78.
- Mengis, J. & Nicolon, D. (2010). Root cause analysis in clinical event. *Nursing Management*, 16(9), 16-20.
- Nolan, T., Resar, R., Haradenm C., & Griffin, F. A. (2004). Improving the reliability of healthcare. IHI Innovation Series Whitepaper. Cambridge, MA. Institute of Healthcare Improvement.
- Reason, J. (2000). Human error: Models and management. *British Journal of Medicine*, 320, 768-770.
- The Joint Commission. (2009). *2009 National Patient Safety Goals Hospital Program*.
- The Joint Commission (2015). National Patient Safety Goals. Retrieved at http://www.jointcommission.org/hap_2015_npsgs/

Quality Improvement

The Nurse of the Future uses data to monitor the outcomes of care processes, and uses improvement methods to design and test changes to continuously improve the quality and safety of health care systems. (QSEN, 2007)

KNOWLEDGE	ATTITUDES/BEHAVIORS	SKILLS
K1 Describes the nursing context for improving care	A1 Recognizes that quality improvement is an essential part of nursing	<p>S1a Actively seeks information about quality initiatives in their own care settings and organization</p> <p>S1b Actively seeks information about quality improvement in the care setting from relevant institutional, regulatory and local/national sources</p>
K2 Comprehends that nursing contributes to systems of care and processes that affect outcomes	A2 Recognizes how team collaboration is important to quality improvement and values the input from the interprofessional team	S2 Participates in the use of a quality improvement model and tools to make processes of care interdependent and explicit
K3 Explains the importance of variation and measurement in providing quality nursing care with awareness, of diverse populations and/or issues	<p>A3a Appreciates how standardization supports quality patient care</p> <p>A3b Recognizes how unwanted variation compromises care</p>	S3 Participates in the use of quality improvement tools to assess performance and identify gaps between local and best practices
K4 Describes approaches for improving processes and outcomes of care	A4 Recognizes the value of what individuals and teams can do to improve care processes and outcomes of care	<p>S4a Participates in the use of quality improvement practices and implements changes in the delivery of care with consideration for population based health care</p> <p>S4b Implements best practices for preventing harm</p>

QUALITY IMPROVEMENT BIBLIOGRAPHY

- American Association of Colleges of Nursing. (2008). *The essentials of baccalaureate education for professional nursing practice* (Rev. ed.). Washington, DC: Author. Retrieved from <http://www.aacn.nche.edu/education-resources/baccessentials08.pdf>
- Cronenwett, L., Sherwood, G., Barnsteiner, J., Disch, J., Johnson, J., Mitchell, P., . . . Warren, J. (2007). Quality and safety education for nurses. *Nursing Outlook*, 55(3), 122-131.
- Dolansky, M., & Moore, S. (2013). Quality and Safety Education in Nursing (QSEN): The key is systems thinking. *Online Journal of Issues in Nursing*, 18(3). Manuscript 1. Retrieved from <http://www.nursingworld.org/Quality-and-Safety-Education-for-Nurses.html>
- Institute of Healthcare Improvement (2015). How to improve. Retrieved at <http://www.ihi.org/resources/Pages/HowtoImprove/default.aspx>
- Massachusetts Coalition for Prevention of Medical Errors. (2006). When things go wrong: Responding to adverse events. A consensus statement of the Harvard hospitals. Retrieved from <http://www.macoalition.org/documents/respondingToAdverseEvents.pdf>
- Miller R., Winterton T., & Hoffman, W. (2014). Building a Whole New Mind: An Interprofessional Experience in Patient Safety and Quality Improvement Education Using the IHI Open School. *South Dakota Medicine*, 17-22.
- The Joint Commission. (2009). *2009 National Patient Safety Goals Hospital Program*.
- The Joint Commission. (2015). Hospital: 2016 National Patient Safety Goals. Retrieved from http://www.jointcommission.org/standards_information/npsgs.aspx

Evidence-Based Practice

The Nurse of the Future will identify, evaluate, and use the best current evidence coupled with clinical expertise and consideration of patients' preferences, experience and values to make practice decisions (Adapted from QSEN, 2007).

KNOWLEDGE	ATTITUDES/BEHAVIORS	SKILLS
<p>K1 Demonstrates knowledge of basic scientific methods and processes</p>	<p>A1a Appreciates strengths and weaknesses of scientific bases for practice</p> <p>A1b Values the need for ethical conduct in practice and research</p>	<p>S1a Participates in the development of clinical questions for potential research</p> <p>S1b Critiques/appraises research for application to practice</p> <p>S1c Participates in data collection and other research activities</p> <p>S1d Follows the guidelines and requirements pertaining to Human Subject Protection for conducting research</p>
<p>K2 Describes the concept of evidence-based practice (EBP), including the components of research evidence, clinical expertise, and patient/family values</p>	<p>A2 Values the concept of EBP as integral to determining best clinical practice</p>	<p>S2 Bases individualized care on best current evidence, patient values, and clinical expertise</p>
<p>K3 Describes reliable sources for locating evidence reports and clinical practice guidelines</p>	<p>A3 Appreciates the importance of accessing relevant clinical evidence</p>	<p>S3 Locates evidence reports related to clinical practice topics and guidelines within appropriate databases</p>
<p>K4 Differentiates clinical opinion from research and evidence summaries</p>	<p>A4 Appreciates that the strength and relevance of evidence should be determinants when choosing clinical interventions</p>	<p>S4a Applies research and evidence reports related to area of practice</p> <p>S4b Understands the use of best practice and evidence at the patient level, clinical level, population level and across the system</p>

<p>K5 Explains the role of evidence in determining best clinical practice</p>	<p>A5a Questions the rationale of supporting routine approaches to care processes and decisions</p> <p>A5b Values the need for continuous improvement in clinical practice based on new knowledge</p>	<p>S5 Facilitates integration of new evidence into standards of practice, policies, and nursing practice guidelines</p>
<p>K6a Identifies evidence-based rationale when developing and/or modifying clinical practices</p> <p>K6b Understands data collection methodologies appropriate to individuals, families, and groups in meeting health care needs across the life span</p>	<p>A6 Acknowledges own limitations in knowledge and clinical expertise before seeking evidence and modifying clinical practice</p>	<p>S6 Uses current evidence and clinical experience to decide when to modify clinical practice</p>

- American Association of Colleges of Nursing. (2008). *The essentials of baccalaureate education for professional nursing practice* (Rev. ed.). Washington, DC: Author. Retrieved from <http://www.aacn.nche.edu/education-resources/baccessentials08.pdf>
- Cronenwett, L., Sherwood, G., Barnsteiner, J., Disch, J., Johnson, J., Mitchell, P., . . . Warren, J. (2007). Quality and safety education for nurses. *Nursing Outlook*, 55(3), 122-131.
- Dearholt, S., & Dang, D. (2012). *John Hopkins nursing evidence based practice model and guidelines* (2nd ed.) Indiana, IN: Sigma Theta Tau International.
- Fawcett, J., & Garity, J. (2009). *Evaluating research for evidence-based nursing practice*. Philadelphia, PA: F. A. Davis.
- Fineout-Overholt, E., Williamson, K. M., Gallagher-Ford, L., Melnyk, B. M., & Stillwell, S. B. (2011). Evidence based practice, Step by step: Following the evidence: Planning for sustainable change. *American Journal of Nursing*, 111(1), 54-60.
doi: 10.1097/01.NAJ.0000393062.83761.c0
- Gallagher-Ford, L., Fineout-Overholt, E., Melnyk, B. M., & Stillwell, S. B. (2011). Evidence based practice: Step by step: Implementing an evidence based practice change. *American Journal of Nursing*, 111(3):54-60.
doi: 10.1097/10.1097/01.NAJ.0000395243.14347.7e
- Gallagher-Ford, L., Fineout-Overholt, E., Melnyk, B. M., & Stillwell, S. B. (2011). Evidence-Based Practice, Step by Step: Rolling Out the Rapid Response Team. *American Journal of Nursing*, 111(5):42-47.
doi: 10.1097/01.NAJ.0000398050.30793.0f
- Grove, S. K., Burns, N., & Gray, J. R. (2013). *The practice of nursing research: Appraisal, synthesis, and generation of evidence* (7th ed.). St. Louis, MO: Saunders Elsevier.
- Melnyk, B. M., & Fineout-Overholt, E. F. (2005). *Evidence-based practice in nursing and healthcare*. Philadelphia, PA: Lippincott Williams & Wilkins.
- Melnyk, B. M., Fineout-Overholt, E., Gallagher-Ford, L., & Stillwell, S. B. (2011) Evidence based practice, Step by step: Sustaining evidence based practice policies and an innovative model. *American Journal of Nursing*, 111(9), 57-60
doi: 10.1097/01.NAJ.0000405063.97774.0e
- Melnyk, B. M., Fineout-Overholt, E., Stillwell, S. B., & Williamson, K. M. (2009). Evidence-based practice, Step by step: Igniting a spirit of Inquiry. *American Journal of Nursing*, 109(11), 49-52.
doi: 10.1097/01.NAJ.0000363354.53883.58
- Melnyk, B. M., Fineout-Overholt, E., Stillwell, S. B., & Williamson, K. M. (2010). Evidence-based practice, Step by step: The seven steps of evidence based practice. *American Journal of Nursing*, 110 (1), 51-53.
doi: 10.1097/01.NAJ.0000366056.06605.d2
- Melnyk, B. M., Fineout-Overholt, E., Stillwell, S. B., & Williamson, K. M. (2010). Evidence based practice, Step by step: Asking the clinical question: A key step in evidence based practice. *American Journal of Nursing*, 110 (3), 58-61.
doi: 10.1097/01.NAJ.0000368959.11129.79
- Melnyk, B. M., Fineout-Overholt, E., Stillwell, S. B., & Williamson, K. M. (2010). Evidence based practice, Step by step: Searching the evidence. *American Journal of Nursing*, 110(5), 41-47.
doi: 10.1097/01.NAJ.0000372071.24134.7e

- Melnik, B. M., Fineout-Overholt, E., Stillwell, S. B., & Williamson, K. M. (2010). Evidence Based Practice, Step by step: Critical Appraisal of the Evidence: Part I. *American Journal of Nursing*, 110 (7), 47-52.
doi: 10.1097/01.NAJ.0000383935.22721.9c
- Melnik, B. M., Fineout-Overholt, E., Stillwell, S. B., & Williamson, K. M. (2010). Evidence based practice, Step by step: Critical appraisal of the evidence: Part II: Digging deeper, examining the “keeper” studies. *American Journal of Nursing*, 110 (9), 41-48.
doi: 10.1097/01.NAJ.0000388264.49427.f9
- Melnik, B. M., Fineout-Overholt, E., Stillwell, S. B., & Williamson, K. M. (2010). Evidence based practice, Step by step: Critical appraisal of the evidence Part III. *American Journal of Nursing*, 110 (11), 43-51.
doi: 10.1097/01.NAJ.0000390523.99066.b5

Glossary

Adverse event	Any injury caused by medical care (Massachusetts Coalition for the Prevention of Medical Errors, 2006).
Authority Gradient	The command hierarchy of power, or the balance of power, measured in terms of steepness. The authority gradient can influence both patient care and organizational decisions by repressing those in subordinate positions, keeping them from influencing or making decisions they consider to be the most appropriate (Edmonson, 2010).
Care Transitions	Patient moves between healthcare providers and between settings within a facility and between facilities, inclusive of the home
Clinical reasoning	Reasoning across time about particular situations and through changes in the patient's condition or concerns and/or changes in the clinician's understanding of the patient's clinical condition or concerns (Benner, Sutphen, Leonard-Kahn & Day, 2008).
Cognitive rehearsal	Behavioral technique generally consisting of three parts: <ul style="list-style-type: none"> • Participating in didactic instruction about incivility and lateral violence • Identifying and rehearsing specific phrases to address incivility and lateral violence • Practicing the phrases to become adept at using them (Griffin, 2014).
Collaborative practice	This practice can include interdisciplinary teams, nurse-physician interaction in joint practice, or nurse-physician collaboration in care giving. Collaboration is cooperative and synergistic. The interaction between nurse and physicians or other health care team members in collaborative practice should enable the knowledge and skills of the professions to influence the quality of patient care (Tomey, 2009).
Collegial trust	A form of personal trust that relates to our colleagues and refers to the expectations that they will behave professionally, work with integrity and do the things they say they are going to do, or the things we can rightfully expect them to do (such as follow established protocols etc.) (Jackson, 2008)
Cooperative learning	Student interactions in purposefully structured groups that encourage individual flexibility and group learning through positive interdependence, individual accountability, face-to-face interaction, appropriate use of collaborative skills, and regular self-assessment of team functioning.
Critical thinking	The disciplined, intellectual process of applying skillful reasoning as a guide to belief or action (Paul, Ennis & Norris). In nursing, critical thinking for clinical decision-making is the ability to think in a systematic and logical manner with openness to question and reflect on the reasoning process used to ensure safe nursing practice and quality care (Heaslip, 2008).

Culturally congruent practice	Healthcare that is customized to fit within the patient's values, beliefs, traditions, practices and lifestyles (Jeffreys, 2010).
Data Integrity	Secured and protected transmission of information between patients and their providers or designated others, including clinicians and other staff following all legal, ethical, and organization policies to protect and maintain confidentiality (Technology Information Guiding Educational Reform, 2009).
Delegated practice	Assessments and interventions in this realm are determined by the medical plan of care and specific provider-directed interventions. The nurse carries out these delegated functions when his or her knowledge, experience, and judgment confirm that the specific medical order is appropriate and safe for the patient being served (Koloroutis, 2004).
Domains of learning	<p><i>Cognitive</i> domain of learning skills revolves around knowledge, comprehension, and thinking through a particular topic.</p> <p><i>Affective</i> domain of learning skills describes the way people react emotionally in terms of attitudes and feelings.</p> <p>Psychomotor domain of learning skills describes the ability to physically perform a task or behavior. (Bloom, 1956)</p>
Evidence-based practice	<p>Uses the current best evidence to make decisions about patient care. Integrates the search for and critical appraisal of current evidence relating to a clinical question, the nurse's expertise, and the patient's preferences and values (Melnyk and Fineout-Overholt, 2005).</p> <p>Research utilization tends to use knowledge typically from one study while evidence-based practice incorporates the expertise of the practitioner and patient preferences and values (Melnyk and Fineout-Overholt, 2005).</p>
Global health	The health of populations around the world in an environment that disregards national borders and transcends the perspectives and concerns of individual nations, instead reflecting factors including global political, economic, and workforce issues (American Association of Colleges of Nursing, 2008).
Goal-driven model	Nursing care delivery model in which the work flow originates in the nurse's assessment of patient needs and assumes that the resources required to deliver a comprehensive package of care based on patient needs will be forthcoming. The goals for the patient drive the care (Barnum & Kerfoot, 1995).
Hand-off	Transfer of verbal and/or written communication about patient condition between care providers (QSEN, 2007).
Health literacy	The degree to which individuals can obtain, process, and understand the basic health information and services they need to make appropriate health decisions (IOM, 2004).
Health care team(s)	Interprofessional and multidisciplinary members across the continuum of care

High reliable organization	There are 5 key concepts essential for any improvement initiative to succeed: 1) Sensitivity to operations, 2) Reluctance to simplify, 3) Preoccupation with failure, 4) Deference to expertise, and 5) Resilience.
Independent practice	The nurse conducts assessments and interventions for the purpose of promoting health and healing. The focus is on the patient's response to actual or potential health problems (Koloroutis, 2004).
Interdependent practice	The nurse initiates communication with other members of the health care team to assure that the patient and family receive the full scope of interdisciplinary expertise and services commensurate with a coordinated and integrated plan of care (Koloroutis, 2004).
Interprofessionalism	The process by which professionals reflect on and develop ways of practicing that provides an integrated and cohesive answer to the needs of the client/family/population. It involves continuous interaction and knowledge sharing between professionals, organized to solve or explore a variety of education and care issues all while seeking to optimize the patient's participation (Interprofessional Education Collaborative, 2011).
Lateral violence	Nurses covertly or overtly directing their dissatisfaction inward toward each other, toward themselves, and toward those less powerful than themselves (Griffin, 2004).
Learning styles	Particular methods (visual, auditory, and tactile) of interacting with, taking in, and processing information that allows the individual to learn.
Near miss	An event or situation that did not produce a patient injury, but only because of chance.
Operational failures	The inability of the work system to reliably provide information, services, and supplies, when, where, and to whom needed (Tucker, 2006).
Patient safety	Freedom from accidental or preventable injuries produced by medical care (Massachusetts Coalition for the Prevention of Medical Errors, 2006).
Professional comportment	Demonstrates professional behaviors, including attention to appearance, demeanor, respect for self and others, and attention to professional boundaries with patients and families as well as among caregivers (Benner, 2008).
Quality improvement practices	Planned or systematic actions that require the open exchange of information to guide improvement or system changes.
Quality improvement model and tools	Documents used to collect data for investigation and analysis of events.

Resource-driven model	Nursing care delivery models in which the nurse takes into account the environment and the resources it holds to determine what goals can reasonably be met for a patient or group of patients. This requires the nurse to make the best selection of goals and use scarce resources appropriately (Barnum & Kerfoot, 1995).
Safety culture	Commitment to safety that permeates all levels of health care delivery (Agency for Health care Research and Quality, n.d.).
Work unit	The practice environment in which the nurse/team delivers care to patients/families.

Professional Standards

Professional standards developed by the following organizations were used as a framework for the NOF Nursing Core Competencies:

- >> Accreditation Council for Graduate Medical Education (ACGME)
- >> Agency for Healthcare Research and Quality (AHRQ)
- >> American Association of Colleges of Nursing (AACN)
- >> American Nurses Association (ANA)
- >> American Organization of Nurse Executives (AONE)
- >> Bologna Accord
- >> Commission on Collegiate Nursing Education (CCNE)
- >> Competency Outcomes and Performance Assessment (COPA)
- >> Institute of Medicine (IOM)
- >> International Council of Nurses (ICN)
- >> Interprofessional Education and Collaboration (IPEC)
- >> National Council of State Boards of Nursing (NCSBN)
- >> National League for Nursing (NLN)
- >> National League for Nursing Accrediting Commission, Inc. (NLNAC)
- >> Quality and Safety Education for Nurses (QSEN)

General Bibliography

- Accreditation Council for Graduate Medical Education. (n.d.). ACGME Outcome Project. Retrieved from http://cores33webs.mede.uic.edu/GME/milestone/ui/portal/external/gc_about.aspx
- Agency for Healthcare Research and Quality (AHRQ). (n.d.). *Patient safety network*. Retrieved from <http://www.psnet.ahrq.gov/>
- Agency for Healthcare Research and Quality (AHRQ). (n.d.). *Patient safety network: Glossary*. Retrieved from <http://www.psnet.ahrq.gov/glossary.aspx>
- Alexander, M., & Runciman, P. (2003). *ICN framework of competencies for the generalist nurse: Report of the development, process, and consultation*. Geneva, Switzerland: International Council of Nurses.
- Alfaro-LeFevre, R. (2009). *Critical thinking and clinical judgment*. St. Louis, MO: Saunders Elsevier.
- American Association of Colleges of Nursing. (1998). *The essentials of baccalaureate education for professional nursing practice*. Washington, DC: Author.
- American Association of Colleges of Nursing. (2002). *Hallmarks of the professional nursing practice environment*. Washington, DC: Author.
- American Association of Colleges of Nursing. (2006). *Hallmarks of quality and safety: Baccalaureate competencies and curricular guidelines to assure high quality and safe patient care*. Washington, DC: Author.
- American Association of Colleges of Nursing. (2007). *White paper on the education and role of the clinical nurse leader*. Washington, DC: Author.
- American Association of Colleges of Nursing. (2008). *The essentials of baccalaureate education for professional nursing practice* (Rev. ed.). Washington, DC: Author. Retrieved from <http://www.aacn.nche.edu/education-resources/baccessentials08.pdf>
- American Nurses Association. (2001). *Code of ethics for nurses with interpretive statements*. Silver Springs, MD: Author.
- American Nurses Association. (2003). *Nursing's social policy statement* (2nd ed.). Silver Springs, MD: Author.
- American Nurses Association. (2004). *Nursing scope and standards of practice*. Silver Springs, MD: Author.
- American Organization of Nurse Executives. (2015). *AONE nurse executive competencies*. Retrieved from www.aone.org/resources/nec.pdf
- Association of American Colleges and Universities. (2007). *College learning for the new global century*. Washington, DC: Author.
- Barnum, B., & Kerfoot, K. (1995). The resource-driven model. In *The Nurse as Executive* (pp. 10-14), Gaithersburg, MD: Aspen.
- Barton, A. J. (2005). Cultivating informatics competencies in a community of practice. *Nursing Administration Quarterly*, 29(4), 323-328.
- Bellack, J., Morjikian, R., Barger, S., Strachota, E., Fitzmaurice, J. Lee, A., . . . O'Neil, E. (2001). Developing BSN leaders for the future: Fuld leadership initiative for nursing education (LINE). *Journal of Professional Nursing*, 17(1), 23-32.
- Benner, P. (1982). From novice to expert. *American Journal of Nursing*, 82(3), 402-407.

- Benner, P., Sutphen, M., Leonard-Kahn, V., & Day, L. (2008). Formation and everyday ethical comportment. *American Journal of Critical Care*, 17(5), 473-476.
- Berkow, S., Virkstis, K., Stewart, J., & Conway, L. (2008). Assessing new graduate nurse performance. *Journal of Nursing Administration*, 38(11), 468-472.
- Bloom, B. S. (1956). *Taxonomy of educational objectives, the classification of educational goals, Handbook I: Cognitive domain*. New York, NY: David McKay.
- Center for American Nurses. (n.d.). Lateral violence and bullying in nursing. Retrieved from https://www.mc.vanderbilt.edu/root/pdfs/nursing/center_lateral_violence_and_bullying_position_statement_from_centerfor_american_nurses.pdf
- Colorado Council on Nursing Education. (2007). *The Colorado Nursing Articulation Model: 2002-2005*. Publication of the Colorado Trust. Retrieved from http://www.centralcoahec.org/documents/nursing_articulation.pdf
- Commission on Collegiate Nursing Education (CCNE). (2009). *Standards for Accreditation of Baccalaureate and Graduate Degree Nursing Programs*. Washington, DC: Author. Retrieved from <http://www.aacn.nche.edu/Accreditation/pdf/standards09.pdf>
- Cronenwett, L., Sherwood, G., Barnsteiner, J., Disch, J., Johnson, J., Mitchell, P., . . . Warren, J. (2007). Quality and safety education for nurses. *Nursing Outlook*, 55(3), 122-131.
- Davies, R. (2008). The Bologna process: The quiet revolution in nursing higher education. *Nurse Education Today*, 28(8), 935-942.
- Day, L., & Smith, E. (2007). Integrating quality and safety into clinical teaching in the acute care setting. *Nursing Outlook*, 55(3), 138-143.
- Dreher, M., Everett, L., & Hartwig, S. (2001). The University of Iowa Nursing Collaboratory: A partnership for creative education and practice. *Journal of Professional Nursing*, 17(3), 114-120.
- Edmonson, C., (2010). Moral Courage and the Nurse Leader. *OJIN: The Online Journal of Issues in Nursing*, 15 (3) Manuscript 5. doi: 10.3912/OJIN.Vol15No03Man05.
- European Computer Driving License (ECDL) Foundation. (2006). EqualSkills syllabus version 1.6. Retrieved from http://www.ecdl.com/files/2009/programmes/docs/20090722114405_Equalskills_1.6.pdf
- Fawcett, J. & Garity, J. (2009). *Evaluating research for evidence-based nursing practice*. Philadelphia, PA: F.A. Davis.
- Fleming, V. (2006). Developing global standards for initial nursing and midwifery education. In *Interim report of proceedings*. Geneva, Switzerland: World Health Organization.
- Griffin, M. (2004). Teaching cognitive rehearsal as a shield for lateral violence: An intervention for newly licensed nurses. *Journal of Continuing Education in Nursing*, 35(6), 257-63.
- Heaslip, P. (1993, 2008 revised). Critical thinking and nursing. Retrieved from <http://www.criticalthinking.org/pages/critical-thinking-and-nursing/834>
- Hobbs, J. L. (2009). A dimensional analysis of patient-centered care. *Nursing Research*, 58(1), 52-62.
- Hughes, R. G. (Ed.). (2008). *Patient safety and quality: An evidence-based handbook for nurses*. AHRQ Publication No. 08-0043. Rockville, MD: Agency for Healthcare Research and Quality.
- Institute for Health Care Improvement. Develop a culture of safety. Retrieved from <http://www.ihi.org/IHI/Topics/PatientSafety/SafetyGeneral/Changes/Develop+a+Culture+of+Safety.htm>

- Institute of Medicine. (1999). *To err is human: Building a safer health system*. Washington, DC: National Academies Press.
- Institute of Medicine. (2001). *Crossing the quality chasm: A new health system for the 21st century*. Washington, DC: National Academies Press.
- Institute of Medicine. (2003). *Health professions education: A bridge to quality*. Washington, DC: National Academies Press.
- Institute of Medicine. (2004). *Health literacy: A prescription to end confusion*. Washington, DC: National Academies Press.
- Institute of Medicine. (2010). *The Future of Nursing: Leading Change, Advancing Health*. Washington, DC: National Academies Press.
- Jennings, B. A., Scalzi, C. C., Rodgers, J. D., & Keane, A. (2007). Differentiating nursing leadership and management competencies. *Nursing Outlook*, 55(4), 169-175.
- Johnson, D. W., Johnson, R., & Smith, K. (1998). *Active learning: Cooperation in the college classroom*. Edina, MN: Interaction Book.
- Joint Commission Resources, Inc. (2007). *Front line of defense: The role of nurses in preventing sentinel events* (2nd ed.). Oakbrook Terrace, IL: Author.
- Kennedy, H. P., Fisher, L., Fontaine, D., & Martin-Holland, J. (2008). Evaluating diversity in nursing education: A mixed method study. *Journal of Transcultural Nursing*, 19(4), 363-370.
- Koloroutis, M. (Ed.). (2004). *Relationship-based care: A model for transforming practice*. Minneapolis, MN: Creative Health Care Management.
- Leape, L. (2000). Reporting of medical errors: Time for reality check. *Quality in Health Care*, 9(3), 144-145.
- Leape, L. & Berwick, D. (2000). Safe health care: Are we up to it? *British Medical Journal*, 320(7237), 725-726.
- Leape, L., Lawthers, A., & Brennan, T., & Johnson, W. G. (1993). Preventing medical injury. *Quality Review Bulletin*, 19(5), 144-149.
- Lenburg, C. (1999). The framework, concepts, and methods of the Competency Outcomes and Performance (COPA) Model. *Online Journal of Issues in Nursing*, 4(2). Retrieved from <https://nursingworld.org/mods/archive/mod110/copafull.htm>
- Massachusetts Coalition for Prevention of Medical Errors. (2006). When things go wrong: Responding to adverse events. A consensus statement of the Harvard hospitals. Retrieved from <http://www.macoalition.org/documents/respondingToAdverseEvents.pdf>
- McBride, A. B. (2005). Nursing and the informatics revolution. *Nursing Outlook*, 53(4), 183-191.
- McCormick, K. A., Delaney, C.D., Flatley Brennan, P., Effken, J.A., Kendrick, K., Murphy, J., . . . Westra, B. (2007). White paper: Guideposts to the future—An agenda for nursing Informatics. *Journal of the American Medical Informatics Association*, 14(1), 19-24.
- Moon, J. (2002). *How to use level descriptors*. London: Southern England Consortium for Credit accumulation and Transfer (SEEC). Retrieved from <http://www.seec-office.org.uk/How%20to%20Use%20Level%20Descriptors.pdf>
- National Council of State Boards of Nursing. (2006). A national survey on elements of nursing education. Retrieved from https://www.ncsbn.org/Vol_24_web.pdf
- National Council of State Boards of Nursing. (2009). Description of NCSBN's Transition to Practice Model. Retrieved from https://www.ncsbn.org/2013_TransitiontoPractice_modules.pdf

- National League for Nursing Council of Associate Degree Nursing Competencies Task Force. (2000). *Educational competencies for graduates of associate degree nursing programs*. New York, NY: Author.
- National League for Nursing. (2005). Board of Governors position statement on transforming nursing education. Retrieved from <http://www.nln.org/docs/default-source/about/archived-position-statements/transforming052005.pdf?sfvrsn=6>
- National League for Nursing Accrediting Commission, Inc. (2008). *NLNAC accreditation manual*. New York, NY: Author.
- National League for Nursing. (2008). *Position statement: Preparing the next generation of nurses to practice in a technology-rich environment: An informatics agenda*. New York, NY: Author.
- Nelson, E. C., Batalden, P. B., & Godfrey, M. M. (2007). *Quality by design: A clinical microsystems approach*. San Francisco, CA: Jossey-Bass.
- Nichols, B. (2007). *Building global alliances III: The impact of global nurse migration on health service delivery*. Philadelphia, PA: Commission on Graduates of Foreign Nursing Schools.
- Ohio League for Nursing. (n.d.). Ohio Nursing Articulation Mode: September, 2003-2005. Retrieved from <http://www.ohioleaguefornursing.org/associations/4237/files/HFFinalDocument.pdf>
- Oregon Consortium for Nursing Education (OCNE). Curriculum Competencies (2012 updated). Retrieved from <http://www.ocne.org/students/Curriculum.html>
- Paulsen, M. F. (2003). Online education and learning management systems. *Global e-learning in a Scandinavian perspective*. Bekkestun, Norway: NKI Forlaget.
- Ponte, P. R., Glazer, G., Dann, E., McCollum, K., Gross, A., Tyrrell, R., . . . Washington, D. (2007). The power of professional nursing practice — An essential element of patient and family centered care. *The Online Journal of Issues in Nursing*, 12(1), Manuscript 3. Retrieved from http://www.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/TableofContents/Volume122007/No1Jan07/tpc32_316092.aspx
- Potempa, K. (2002). Finding the courage to lead: The Oregon experience. *Nursing Administration Quarterly*, 26(4), 9-15.
- Quality and Safety Education for Nursing. (2007). *Quality and safety competencies*. Retrieved from <http://www.qsen.org/competencies.php>
- Reason, J. (2000). Human error: Models and management. *British Journal of Medicine*, 320(7237), 768-770.
- Sherman, R. O. (2003). Nursing Leadership Institute Leadership Competency Model. Retrieved from http://nursing.fau.edu/uploads/docs/358/nursing_leadership_model2.pdf
- Shirey, M. R. (2007). Leadership perspectives: Competencies and tips for effective leadership: From novice to expert. *Journal of Nursing Administration*, 37(4), 167-170.
- Smith, J., & Crawford, L. (2003). *Report on findings from the practice and professional issues survey*. Chicago, IL: National Council of State Boards of Nursing.
- Staggers, N., Gassert, C. A., & Curran C. (2001). Informatics competencies for nurses at four levels of practice. *The Journal of Nursing Education*, 40, 303-316.

- Tanner, C. A., Gubrid-Howe, P., & Shores, L. (2008). The Oregon Consortium for Nursing Education: A response to the nursing shortage. *Policy, Politics, & Practice*, 9(3), 203-209.
- Technology Informatics Guiding Educational Reform (TIGER). (2007). Evidence and informatics transforming nursing: 3-Year action steps toward a 1-year vision. Retrieved from <http://www.aacn.nche.edu/education-resources/tiger.pdf>
- Technology Informatics Guiding Educational Reform (TIGER). (2009). Tiger Informatics Competencies Collaborative (TICC) final report. Retrieved from http://tigercompetencies.pbworks.com/f/TICC_Final.pdf
- The Joint Commission. (2009). 2009 National Patient Safety Goals for hospitals. Retrieved from <http://www.stvhs.com/student/east/12-%202009%20National%20Patient%20Safety%20Goals.pdf>
- Tomey, A. M. (2009). *Guide to nursing management and leadership* (8th ed.). St. Louis, MO: Mosby Elsevier.
- Tucker, A. L., & Spear, S. J. (2006). Operational failures and interruptions in hospital nursing. *HSR: Health Services Research*, 41(3 Pt 1), 643-662.
- Zabalegui, A., Loreto, M., Josefa, M., Ricoma, R., Nuin, C., Mariscal, I., . . . Moncho, J. (2006). Changes in nursing education in the European Union. *Journal of Nursing Scholarship*. 38(2), 114-118.

Nurse of the Future Competency Committee- 2016 Review

Margery Chisholm, RN, EdD, ABPP, Professor, School of Nursing, MGH Institute of Health Professions

Genevieve Conlin, DNP, MS/MBA, RN, NEA-BC, Associate Chief Nursing Officer, Ambulatory Services, Boston Medical Center

Eileen Costello, DNP, RN, CNE, Dean, Health Professions, Public Service Programs, and Social Sciences, Mount Wachusett Community College *

Judith Cullinane, MSN, RN, CCRN, Professional Development Director, Pediatrics, Tufts Medical Center and Associate Professor of Practice, Simmons College School of Nursing and Health Sciences

Anna Hagopian, MSN, RN, Nurse Educator, Metro West Medical Center

Diane Hanley, MS RN-BC EJD, Associate Chief Nursing Officer, Professional Practice, Nursing Quality and Education, Boston Medical Center, Co-Chair

Mary Kennedy, MS, RN-BC, CEO, Aegis Informatics LLC; Clinical Instructor, Northeastern University

Karen Devereaux Melillo, PhD, A-GNP-C, FAANP, FGSA, Professor & Interim Dean, School of Nursing, College of Health Sciences, UMass Lowell *

Judith M. Pelletier, MSN, RN, Director of the Practical Nursing Program, Upper Cape Cod Technical High School *

Marita Prater, MS, RN, Vice President for Patient Care Services, CNO; Sturdy Memorial Hospital

Lorraine Schoen, MS, BSN, RN, Director of Clinical Affairs, Massachusetts Hospital Association

Maureen Sroczynski, DNP, RN, President/CEO, Farley Associates, Inc. *

Mary Tarbell, MS, RN, Assistant Professor/Division of Nursing, American International College

Marie Tobin, DNP, MPH, RN, NEA-BC, Director, Centralized Clinical Placement Program, Department of Higher Education

Diane M. Welsh, DNP APRN CNE, Associate Dean, Nursing; Associate Professor, Regis College, Co-Chair *

Patricia M. Crombie, MSN, RN, Director, Healthcare-Nursing, Department of Higher Education & Project Director, Massachusetts Action Coalition

Dale Earl, Project Manager, Healthcare-Nursing, Department of Higher Education; Copy Editor

ADDITIONAL CONTRIBUTORS

Alice Chamberlain, RN, BSN, Clinical Informatics Nurse; Sturdy Memorial Hospital

Sarah Collins PhD, RN, Senior Clinical and Nurse Informatician; Clinical Informatics, Partners eCare, Partners Healthcare Systems Instructor in Medicine, Harvard Medical School & Brigham and Women's Hospital

Andrew B. Phillips, PhD, RN, Assistant Professor, School of Nursing, MGH Institute of Health Professions, Massachusetts General Hospital, Partners HealthCare System

Po-Yin Yen, PhD, RN, Research Assistant Professor; Department of Biomedical Informatics; The Ohio State University

Michelle Smith, MS, RN, Associate Professor of Nursing, Mount Wachusett Community College; Bibliography editor

Michelle Woodward, Web Content Specialist, Department of Higher Education; Design Editor

* Served on original Nurse of the Future Competency Committee

