

Defining Scholarship for Academic Nursing Task Force Consensus Position Statement March 26, 2018

Since the American Association of Colleges of Nursing's (AACN's) *Position Statement on Defining Scholarship for the Discipline of Nursing* was published in 1999, academic nursing leaders have been continually evaluating nursing education programs to ensure that they are preparing the next generation of nurses to meet the healthcare needs of the public. Along with the need to determine what constitutes high quality education, the time is right to reconsider the role of the faculty in an increasingly complex learning environment where research, teaching, practice, and service are all of crucial importance. In today's academic setting, scholarship should be inclusive and applicable to scientists, as well as practice, education, and policy scholars.

A number of landmark reports issued since 1999 have propelled us to this new day. Building a safer, high-quality, high-value healthcare system has become the focus of all health professions following numerous reports from the Institute of Medicine (IOM, 2000, 2001, 2003, 2012). In 2004, the Doctor of Nursing Practice (DNP) was advanced in a position statement adopted by the AACN membership, which forever changed how the profession prepares nurses for the highest level of practice. Doctoral programs in nursing are now available for nurses seeking a terminal research or practice doctorate.

In 2010, the Institute of Medicine published a landmark study, *The Future of Nursing: Leading Change, Advancing Health.* The interdisciplinary committee recommended that nurses: 1) should practice to the full extent of their education and training; 2) should achieve higher levels of education and training through an improved education system that promotes seamless academic progression; 3) be full partners, with physicians and other healthcare professionals, in redesigning health care in the United States, and 4) engage in effective workforce planning and policymaking that requires better data collection and an improved information infrastructure. As the recommendations were transitioned to action and policy, the need to expand access to baccalaureate through doctoral education for nurses accelerated.

In 2016, AACN released *Advancing Healthcare Transformation: A New Era for Academic Nursing*, a report that provides recommendations for enhancing nursing's contributions to improving healthcare delivery and the health of the nation. The report advanced a new definition for "academic nursing":

Encompassing the integration of practice, education, and research within baccalaureate and graduate schools of nursing. Faculty engaged in academic nursing demonstrate a commitment to inquiry, generate new knowledge for the discipline, connect practice with education, and lead scholarly pursuits that improve health and health care (AACN, 2016a).

As the need for academic and clinical partnerships has intensified, so has the demand for doctoral education for advancing practice and nursing scholarship. The paradigm shift to a broader definition ensures that academic nursing scholarship is at the highest level of scholarly endeavor.

Purpose

As a practice discipline, nursing scholarship informs science, enhances clinical practice, influences policy, and impacts best practices for educating nurses as clinicians, scholars, and leaders. Addressing the complexities of contemporary practice, education, and research is typically interprofessional, involving scholars from many disciplines with a variety of terminal degrees (e.g., MD, PharmD, and DPT). The complexity of health services requires that nurse scholars engage in a high level of teamwork that is multidisciplinary (knowledge stays within disciplinary boundaries), interdisciplinary (harmonization and synthesis between disciplines in a coordinated and coherent whole), and transdisciplinary (integrating sciences that transcend disciplinary boundaries; Choi & Pak, 2006).

The preferred state is to create a system of recognition for nursing faculty who are scholars in research, practice, policy, and/or education. The system should value all scholarly contributions. To that end, the purpose of this position statement is to:

- 1) create a definition of scholarship that is inclusive and supports multiple ways of knowing;
- 2) address the scholarship of discovery or scientific inquiry, the scholarship of practice, and the scholarship of teaching; and
- 3) describe the integration of scholarship across institutional missions and how scholarship is promoted

Defining Scholarship

Nursing scholarship is the generation, synthesis, translation, application, and dissemination of knowledge that aims to improve health and transform health care.

Scholarship is the communication of knowledge generated through multiple forms of inquiry that inform clinical practice, nursing education, policy, and healthcare delivery. Scholarship is inclusive of discovery, integration, application, and teaching (Boyer, 1999). The hallmark attribute of scholarship is the cumulative impact of the scholar's work on the field of nursing and health care.

The scholarship of discovery or scientific inquiry takes the form of primary empirical research, analysis of large data sets, theory development and testing, methodological studies including implementation science, health services research, and philosophical inquiry and analysis. Furthermore, the scholarship of discovery results in new knowledge, refines or expands existing knowledge, and is translatable into practice. Inquiry in nursing is conducted within laboratories; communities; and with individuals using qualitative, quantitative and community-based approaches. In addition, scientific inquiry engages and benefits diverse populations and age groups, providing the evidence to support culturally sensitive interventions to improve quality of life, optimize health promotion, enable self-management, enhance end-of-life care, and contribute to healthcare policy (AACN, 2016a; Grady, 2016; Kerr, 2016). Incorporating the social determinants of health in research and practice is central to understanding the effect of health care and interventions on patient-centered outcomes (RWJF, 2016; IOM, 2014). Research scholars regardless of settings use similar designs and methods in understanding phenomena, examining relationships, or testing interventions with their different populations of interest.

The scholarship of practice is a critical component in shortening the theory to practice gap (Boyer, 1990). The scholarship practice interprets, draws together, and brings new insight to original research. Nursing's broad understanding of theory based in multiple disciplines as well as its long history of collaboration allows for the interconnection of ideas to change practice and solve problems. The practice scholar applies evidence to practice, incorporating implementation and translation science. Scholarship is guided by a multitude of innovative methods of inquiry that are informed through clinical practice with an aim of improving and transforming healthcare delivery and patient outcomes. Practice scholars apply and integrate evidence to and from clinical practice and conduct quality improvement using methodologies to improve care processes.

The scholarship of teaching focuses on the transmission, transformation, and extension of knowledge (Boyer, 1999). Teaching scholars develop, evaluate, and improve nursing curricula, student learning, and teaching methodologies. The scholarship of education focuses on the understanding, describing, and teaching of learning endeavors as well as controlling, predicting, and disseminating outcomes of teaching-learning processes.

Threaded through the three domains of nursing scholarship is an emphasis on healthcare policy, which is critical to generating support for healthcare innovation and improvement in the public domain. The scholarship of healthcare policy includes: problem identification, problem analysis, stakeholder engagement, policy development, policy enactment (designing programs, influencing rules and regulations), policy implementation, policy/program evaluation, and the dissemination of evidence-based best practices.

Advancing the Scholarship of Discovery

Within academic nursing, the scholarship of discovery is advanced in a variety of ways, which include, but is not limited to:

Primary empirical research is the systematic collection of data to answer an empirical question or test a hypothesis. A variety of designs are used, including experimental, quasi-experimental, descriptive, qualitative, exploratory, and case studies. Methods include ethnography, historical, critical inquiry research, critical research designs, and community-based participatory research. Data may include, but are not limited to, primary empirical measurements, observations and specimens, genetic materials, personal oral accounts regarding the phenomenon of interest, historical documents and art work, and data from community focus groups. The choice of design in the scholarship of discovery is dependent on the research question and a number of factors such as importance of internal and external validity, data availability, or urgency of the decisions.

Analyzing large data, a field of inquiry often referred to as "Big Data," is a component of scientific inquiry that analyzes combined existing data from previous studies to form a large data set to provide meaningful results to improve health interventions and outcomes (Raghupathi & Raghupathi, 2014).

Theory development is the process of drawing together scientific and experiential knowledge, assumptions, and principles into a systematic set of statements that have explanatory and

predictive power with respect to an area of experience. Scientific theories suggest explanations for phenomena that may be subjected to empirical tests

Methodological studies, including implementation and translational science, involve the development and testing of new or revised methods of inquiry that generate knowledge. Implementation science seeks to identify barriers (personal, economic, and management) to effective evidence translation and examines the causal relationships of the interventions and the outcomes. The aim of translational science is to promote the rapid translation of research outcomes to clinical care to provide evidenced-based treatments (National Institutes of Health, 2017).

Health services research "examines how people get access to health care, how much care costs, and what happens to patients as a result of this care. The main goals of health services research are to identify the most effective ways to organize, manage, finance, and deliver high-quality care; reduce medical errors; improve patient safety; and impact policy formation and revision (Agency for Healthcare Research and Quality, 2002).

Philosophical inquiry in nursing is metaphysical, epistemological, and ethical and involves critical reasoning and argument that is systematic, rational, and critical. It seeks to answer questions related to the meaning of health and illness in the context of human life, how we acquire and evaluate knowledge, and the standards of conduct of life. Whether arguments are inductive or deductive in nature, assumptions are thoroughly examined and principles of logical thought and proof are followed.

Examples Applicable to the Scholarship of Discovery

- Generates new knowledge based on systematic evaluation using all methods of scientific inquiry to inform nursing practice, education, and/or policy through translation of research findings.
- Secures competitive extramural funding to investigate phenomena that expand the core of nursing knowledge.
- Leads successful research initiatives to include research teams or centers at the local, regional, national, or international arenas that focus on scientific inquiry to augment nursing knowledge related to health promotion and/or testing of interventions to improve health and disease outcomes.
- Develops innovative scientific approaches that inform practice and advance healthcare delivery methods.
- Disseminates in peer-reviewed journals with published impact factors or through media outlets
- Presents research findings at regional, national, and international conferences and healthcare meetings.
- Communicates to lay groups to promote translation and implementation of research findings.
- Develops and investigates unique programs of scientific inquiry at the basic, clinical, or population level to include testing interventions for efficacy, effectiveness, or implementation processes.

- Contributes to the development of scientific standards, health-related guidelines, or policies on a regional, national, or international level.
- Consults as an academic research partner in clinical settings.
- Publish best practices or evaluation outcomes of doctoral-level nursing programs.
- Is nationally recognized by peers for expertise, excellence, and innovation within an area of research specialty.
- Provides expert reviews for scientific projects and journals, periodicals, or textbooks.
- Receives regional, national, or international awards or recognition of contributions by a peer professional group.
- Guides interprofessional and leadership teams based on area of expertise to improve health and transform health care.
- Serves as a regional, national, or international research expert in leadership positions, on review committees, and on healthcare boards.
- Creates new theoretical frameworks/theory to guide, test, and disseminate the work of new phenomena

Advancing the Scholarship of Practice

The Scholarship of Practice is directly related to the need to address and resolve specific issues within practice – related to individual patients, organizations, and social problems (Boyer, 1990). Thoun (2009) suggested that this level of inquiry is imaginative, artistic, and resourceful. *Development of clinical knowledge* is created by practice scholars who question why certain methods are used and look for improvements in practice (Peterson & Stevens, 2013). Internal evidence is generated through outcomes management, quality improvement, and evidence-based practice projects that translate evidence into practice and policy to improve care and outcomes (Melnyk, 2013). The implementation of evidence-based practices generates local knowledge related to how best to improve healthcare processes and patient outcomes that may be transferable as best practices.

Velasquez, McArthur, and Johnson (2011) describe application and integration in terms of engagement and optimization. Engagement refers to the meshing and integration of knowledge into practice: whereas, optimization is the phase in which knowledge and theory generation is viewed as dynamic and ongoing, continuously inspiring new questions and innovations. The Scholarship of Practice may be advanced in numerous ways:

Application of competencies that promote the evaluation of clinical knowledge, new practice strategies, and systems of care that facilitate utilization of evidence-based processes. Strategies such as information technology and research are often used to evaluate and improve care. The development of quality indicators and innovative healthcare delivery models are critical to the scholarship of practice. In order to support the use of these competencies, new practice-based roles within health systems must be developed and implemented.

Establishment of academic-practice partnerships that leverage the expertise of nursing faculty and clinicians to integrate systems of health care, improve health outcomes, and foster development of financially viable new models of care leveraging the talents and

expertise of nursing faculty with clinical staff through academic-practice partnerships, new questions may emerge requiring research that generates evidence to inform new best practices as a result of such partnerships (Bleich, Hewlett, Miller, & Bender 2004; Peterson & Stevens, 2013; AACN, 2016a).

Measuring patient, organizational, and administrative outcomes that includes metrics relevant to patients, organizations, systems, and policymakers (e.g., cost, care outcomes, patient and provider satisfaction) facilitates data-driven decisions, and allows for impact analysis of outcomes in all arenas.

Evaluating interprofessional team outcomes is imperative for the delivery of team-based care. The development of the interprofessional healthcare team effectiveness and team science is evolving to produce optimal safety and quality outcomes. Components of team evaluation may include organizational context, task design, team process, team psychosocial traits, and team effectiveness, which are defined by patient/provider outcomes (Van Dijk-de Vries et al., 2016). Potential outcomes may incorporate use of guidelines orstandards, patient and provider satisfaction, clinical process improvement, collaborative behavior, and error rates (Reeves, Perrier, Goldman, Freeth, & Zwarenstein, 2013).

Examples Applicable to the Scholarship of Practice

- Develops best practices for translating evidence to practice based on results of translational and implementation science.
- Secures competitive funding to support innovations in practice.
- Publishes to influence practice via peer-reviewed venues.
- Disseminates policy papers through peer-reviewed media.
- Provides expert review for quality improvement projects, journals, periodical, or textbooks.
- Disseminates practice-based findings at regional, national, or international meetings.
- Analyzes system-wide data to evaluate practice patterns and/or uncover new issues related to practice from such data.
- Serves as a clinical practice specialist in partnerships that advance research, clinical improvements, policy development and/or implementation.
- Analyzes big data or conducts policy analysis at the community, state, national, or international level.
- Engages with stakeholders including patients, coalitions, corporations, and industries to educate the workforce, develop clinical innovations, and/or conduct research and practice transformation.
- Influences policy through leadership activities at the local, national, and international levels and participates in policy think tanks.
- Translates research and utilizes evidence to improve health and generate practice-based knowledge.
- Develops unique clinical nursing programs or interventions with documented effectiveness.
- Disseminates clinical programs or quality improvement initiatives in regional, national, or international arenas.
- Establishes and evaluates quality improvement initiatives.

- Leads in the development, review, and evaluation of clinical practice models to transform healthcare delivery.
- Translates research and utilizes evidence to improve health, impact practice, and effect change in health systems.
- Develops clinical guidelines, innovations, and new program initiatives.
- Assists with or conducts systematic reviews that synthesize summarize research findings to recommend solutions to current clinical problems.
- Evaluates and reports population health, satisfaction, and cost outcomes.
- Communicates best practices to lay groups to promote translation and implementation of research findings.
- Consults, reviews, or evaluates clinical nursing programs in other academic institutions.
- Consults with healthcare organizations to build capacity for improving care and implementing evidence-based practice.
- Recognized nationally by peers for expertise, excellence, and innovation within an area of practice specialty.
- Receives regional, national, or international awards or recognition of contributions by a peer professional group.
- Leads interprofessional teams to improve health and transform health care based on expertise.
- Serves as an expert in leadership positions, committee membership, healthcare boards, and other involvement related to practice expertise in regional, national, or international arenas.
- Uses secondary data from the electronic health record (EHR) to evaluate healthcare
 processes and patient outcomes, disseminating results to the external community to
 improve quality of care.

Advancing the Scholarship of Teaching

The scholarship of teaching focuses on understanding, describing, explaining teaching-learning strategies, assessing their impact on learner outcomes, and disseminating results. The evidence of learning is driven by scholarly inquiry and/or content mastery and must contribute new knowledge. The scholarship must be open for critique, review, and dissemination by the discipline (Allen & Field, 2005; Glassick, 2000; Oermann, 2014). Within academic nursing, the scholarship of teaching is advanced in many ways:

Evaluation research, which involves the study of teaching-learning processes, teaching methodologies, and curriculum processes. This form of research is designed to evaluate the impact and efficiency of teaching strategies and its impact on student and program outcomes.

Application of theoretical concepts used to guide teaching practices, curriculum development, and foster student success. These theoretical approaches can inform the science of nursing education to prepare quality nursing graduates at all levels that will provide safe, quality patient care.

Innovation necessary to improve nursing education as well as meet the needs of students, the healthcare community, and discipline. Innovation can focus on development, evaluation, and dissemination of new teaching strategies.

Examples Applicable to the Scholarship of Teaching

- Redesigns or develops educational systems to effectively prepare students as practitioners, researchers, and educators of the future.
- Develops and implements evidence-based educational strategies that promote critical thinking and clinical decision-making.
- Evaluates impact, cost effectiveness, and efficiency of teaching strategies in attainment of student learning outcomes.
- Disseminates research findings from programmatic and systematic evaluations to foster curricular changes in all levels of nursing education.
- Develops new teaching methods and strategies to prepare graduates for a transformed healthcare system.
- Incorporates and evaluates the use of instructional technology in nursing education.
- Leads the design of interprofessional education that enhances collaborative practice and/or policy development to improve health outcomes.

Integration of Scholarship Across Institutional Missions

Integration of scholarship across the institutional missions of research, practice, health policy, and/or education is essential to advance the professional practice of nursing and improve health outcomes.

In 1990, Boyer's seminal argument for reframing higher education's scholarship in terms of discovery, application, and teaching was a call for engagement of educational institutions and faculty with the communities served, as well as integration of scholarship. Health-focused commissions (Kellogg Commission, 2000 & 2001; Institute of Medicine, 2010) and professional societies (AACN-AONE, 2012; AACN, 2016a) have since developed agendas and recommendations for symbiotic partnerships between academia and practice settings. These partnerships foster creative solutions to common issues and a healthy recognition of the synergistic expertise and knowledge held by scholars across settings.

Advancing Healthcare Transformation: A New Era for Academic Nursing (AACN, 2016a) cites the need for alignment and integration of academic nursing with the practice setting to advance health, health care, and healthcare transformation. By working together, academic and practice leaders can accelerate the dissemination of shared knowledge, scientific inquiry, translational research, and policy advocacy that affect health and health outcomes (AACN, 2004; AACN, 2006). There are many approaches to advance mutual institutional missions (research, practice, and education) that focus on better care, quality, access, and value. These approaches apply the full extent of the knowledge and skills held by nurses.

Examples of the advancement of scholarship across institutional missions include:

• Using data and implementation science to inform population health strategies and the strategic direction of accountable care organizations (ACOs).

- Conducting demonstration projects and evaluating health system innovations and population health capabilities, including new care model designs.
- Implementing quality and safety interventions across care settings and into the community.
- Nurturing transdisciplinary research teams with a focus on improving science and population health interventions.
- Promoting formation of research programs in partnership with academic medicine, health systems, and other professional schools.

Advancing scholarship across the institutional missions will require strategic thinking regarding the nature of the relationships and the structures needed to facilitate partnerships. There are many models that can be applied, and the choice of the model is dependent on a number of factors, such as the needs of the patients served, the educational preparation or certification of the faculty and staff, geographic setting, and/or the academic programs offered at the partner university or college.

Examples of structural arrangements that support scholarship across institutional missions include:

- Foster research and practice doctoral prepared faculty and staff or student teams to participate in clinical studies, project development, and implementation of evidence to practice or evaluation.
- Provide joint appointments of research-focused and practice-focused doctorally prepared scholars to inform research and practice through the translation of research findings, evaluation of practice innovation, and identification of improved outcomes.
- Use consultative roles for faculty nurse scholars for research studies and clinical projects in practice institutions.
- Develop consultative roles for nurse scholars from clinical practice to participate in curriculum development and evaluation of academic nursing programs and to precept nursing students.
- Develop partnerships between academic and practice experts to disseminate research findings through evidence-based practice projects and quality improvement initiatives.
- Develop teams of nurse scholars from practice and academic settings to collaborate with clinicians and administrators to develop, implement, and evaluate projects and studies.

Scholarship across institutional missions will require innovative methods to address the healthcare needs of individuals, populations, and the community served. Community partnerships are fundamental to advance research, practice, and teaching scholarship. These methods will require new areas of expertise for doctoral scholars. Arrangements for mentorship or consultation will need to be considered.

Examples of innovative methods needed in doctoral scholarship across institutional missions include the expertise to:

- Test methods for rapid translation to practice.
- Engage patients to inform the design and methods of research studies, such as community members in participatory action research.

- Conduct analysis to answer questions about a clinical problem using large data sets generated from clinical practice.
- Partner on evidence-based practice projects or specific phases of the process (<u>A</u>sk a question, <u>A</u>cquire the evidence, <u>A</u>ppraise the evidence, <u>A</u>pply evidence to practice, <u>A</u>ssess if a change occurred, and <u>A</u>djust if needed – www.ebbp.org).
- Conduct clinical pilots and efficacy trials of new interventions, and test the effectiveness of interventions in multiple settings with diverse populations.
- Sponsor or co-sponsor policy efforts that support transformational change in healthcare organizations and systems.

Scholarship across institutional missions will focus on diverse topics, but the result is a holistic approach to the generation and application of knowledge in practice and academia. Innovative and emerging methods should be used to assess, plan, implement, and evaluate practice improvements and transformations. There are many structures and arrangements that can support these efforts. Structures will need to be assessed and chosen in consideration of the relevance and feasibility to the setting.

Summary

Colleges and universities across the nation are continually evolving to ensure that healthcare needs for the public are met by educating the next generation of nurses. This document accounts for many contemporary issues, such as the trends in new research methods, opportunities for improving health, increasing demands and complexity of health care, and multiple ways of knowing. Matters related to scholarship addressed in this position statement include: a definition of scholarship as related to education, research, and practice; a discussion of advancing the scholarship of discovery, practice and teaching; and the integration of scholarship across institutional missions.

A broader definition of scholarship supports recognition and value for scholarly contributions in the areas of research, practice and teaching. The definition of scholarship is expanded to ensure that academic nursing contributes at the highest level of scholarly endeavor toward improving health and transforming health care.

Glossary

Academic Nursing

Academic Nursing encompasses the integration of practice, education, and research within baccalaureate and graduate schools of nursing. Faculty engaged in academic nursing demonstrate a commitment to inquiry, generate new knowledge for the discipline, connect practice with education, and lead scholarly pursuits that improve health and health care (AACN, 2016a).

Community Based Participatory Research Community Based Participatory Research (CBPR) is a collaborative approach to research that equally involves all partners in the research process and recognizes the unique strengths that each brings. CBPR begins with a research topic of importance to the community and has the aim of combining knowledge with action and achieving social change to improve health outcomes and eliminate health disparities (Faridi, Grunbaum, Gray, Franks, & Simoes, 2007).

Critical Inquiry Research Critical inquiry research views both methods (ways of gathering data) and methodology (frameworks that guide research) as tied to power differentials. It is grounded in a "belief that there is no trans-historical, culture-free, disinterested way of knowing and foregrounds the politics of knowing and being known" (Lather, 2004).

Critical Research Design Critical research design works toward transformative action and egalitarian participation; connects meaning to broader structures of social power, control, and history; works toward open, flexible theory building grounded in both confrontation with and respect for the experiences of people in their daily lives and profound skepticism regarding appearances and 'common sense'; and minimizes the tensions involved in speaking with rather than to/for marginalized groups" (Lather, 2004).

Data Science

The examination of natural, human, and social phenomena through the unified application of statistics and data analysis rather than traditional theoretical and methodological approaches (Hayashi et al., 1998).

Epistemological

The study of knowledge and justified belief, specifically concerned with the conditions, sources, and structure of knowledge (Steup, 2009a).

Health Policy

Health policy (WHO, n.d.) refers to decisions, plans, and actions that are undertaken to achieve specific healthcare goals within a society. An explicit health policy can achieve several things: it defines a vision for the future which in turn helps to establish targets and points of reference for the short and medium term; it outlines priorities and the expected roles of different groups; and it builds consensus and informs people. (Note: Institutional level policy is not included for the purposes of this position statement.)

Impact

The force exerted by a new idea, concept, technology, or ideology. Having influence or effect, e.g., *The Essentials of Doctoral Education for Advanced Nursing Practice have had significant impact on the education of nurses*

(Dictonary.com, 2017a).

Interdisciplinary

Relating to more than one branch of knowledge. Combining or involving two or more professions, technologies, or departments, or the like, as in business or industry. The goal is to synthesize knowledge to achieve an integrated result that surpasses previous approaches, ways of thinking, and existing disciplines (Choi & Pak, 2006; George, 2005)

Implementation Science

The study of integrating research findings into healthcare practice and policy by understanding facilitators and barriers to the uptake of evidence (NIH, n.d.). The goal is to determine which factors promote the use of innovations in practice to the fullest extent and in the most effective way possible (National Implementation Research Network, 2015)

Improvement Science

A multidisciplinary applied science that seeks to improve healthcare processes and outcomes through quality improvement strategies such as innovation and rapid cycle testing in real-world environments (National Institutes of Children's Health Quality, 2017).

Interprofessional Education

Education occurs when two or more professions learn about, from, and with each other to enable effective collaboration and improve health outcomes (World Health Organization [WHO], 2010).

Interprofessional Practice Teams

Working across healthcare professions to cooperate, collaborate, communicate, and integrate care in teams to ensure that care is continuous and reliable. The team consists of the patient, the nurse, and other healthcare providers as appropriate (IOM, 2003).

Metaphysical

A branch of philosophy pertaining to abstract thought or subjects such as causality, truth, and existence (Steup, 2009b).

Multidisciplinary

Combining or involving several academic disciplines or professional specializations in an approach to a topic or problem. Members from each discipline consult with one another and contribute to the work independently by offering conceptual, theoretical, and empirical perspectives from their respective disciplines (Fawcett, 2013; Choi & Pak, 2006).

Participatory Action Research

A type of public health research that involves research participants through an iterative process of reflection, action, and data collection. The research actively involves participants such that the boundaries between researchers and participants become blurred (Baum, MacDougall, & Smith, 2006).

Person and Family-Centered Care Person and Family-Centered Care recognizes the individuals using health and social services as equal partners in planning, developing, and monitoring care to make sure it meets their needs. This means putting people and their families at the center of decisions and seeing them as experts working alongside professionals to get the best outcome (Health Innovation Network, 2016).

Practice

The provision of care to individuals, families, or communities regardless of setting. Refers to advanced or basic nursing care provided to individuals or families that is intended to achieve specific health goals or achieve selected health outcomes. Practice settings have a wide range of venues for point of care, including acute and critical care, long-term care, home health, community-based settings, case management, disease management, population health, occupational and employee health, primary care, and educational settings with an aim to maintain professional role currency. Practice serves to guide and inform research for nurse scholars (AACN, 2011)

Precision Medicine

Treatment and prevention of disease based on individual characteristics such as genes, environment, and lifestyle. Examples of precision medicine, such as blood typing prior to transfusion, have existed for some time but the term 'precision medicine' as a holistic approach to disease treatment and prevention is relatively new (National Library of Medicine, 2017).

Practice-focused Doctorate

The practice-focused doctorate (DNP) represents the highest level of education for a career in nursing practice and the scholarship of clinical practice application and integration. Nursing practice-focused doctoral programs prepare scholars for the critical component of shortening the theory to practice gap. Practice-focused doctorates prepare nurses to generate new knowledge through innovation of practice change, the translation of evidence, and the implementation of quality improvement processes in specific practice settings, systems, or with specific populations to improve health or health outcomes. This new knowledge is considered transferrable but is not considered generalizable. The practice-focused doctorate stewards the profession, educates the next generation of nurses, defines its uniqueness, and maintains its professional integrity. Collaboration for the dissemination of newly generated care delivery models and the translation of the scholarship of discovery are the responsibility of DNP prepared nurse scholars (AACN, 2006, 2015).

Research-focused Doctorate

The research-focused doctorate represents the highest level of education for a career in research and the scholarship of discovery, generation, translation, and dissemination of new knowledge. Nursing research-focused degrees include the doctor of philosophy (PhD) and the doctor of nursing science (DNS and DNSc) degree programs. It prepares scholars for the generation of new knowledge. The PhD graduate develops and generates nursing science, stewards the profession, educates the next generation of nurses, defines its uniqueness, and maintains its professional integrity. In the scientific arena within and beyond academe, the PhD is the beginning preparation for the development of independence in scientific pursuit. Collaboration for the dissemination of newly generated care delivery models and the translation of the scholarship of discovery are the responsibility of PhD prepared individuals (AACN, 2010).

Service

Within the context of academe, service is freely given to the division, department, college, university or greater institution, to the profession, to society through consultation, and by using teaching to enhance service (Sampson, Driscoll, & Carroll, 2010).

Social Determinants of Health (SDOH)

Social determinants of health address the underlying issues of social justice, cultural diversity, and ethical awareness as major drivers of healthcare outcomes. Recent decades have brought a new understanding of just how much our health outcomes are determined by social factors, ranging from parenting and family structure to economic disparities, racial injustice, and degradation of the environment. These "social determinants of health" likely will have a greater influence on our well-being than factors typically associated with the healthcare system. Yet healthcare professionals remain uncertain how to integrate this knowledge into education and practice (Health Plus Social, 2016).

Team-based care

The provision of health services to individuals, families, and/or their communities by at least two health providers who work collaboratively with patients and their caregivers—to the extent preferred by each patient—to accomplish shared goals within and across settings to achieve coordinated, high-quality care (Mitchell et al., 2012; Okum et al, 2014; Schottenfeld et al, 2016)

Team Science

An approach involving multiple investigators with diverse skills and backgrounds to address complex, multi-factorial research problems. This multidisciplinary approach is viewed as a strategy to accelerate scientific discovery and implementation into practice and policy (National Cancer Institute, n.d.).

Transdisciplinary

Individuals work together across disciplines to create a single conceptual, theoretical, or empirical structure. Members continue their collaboration by conducting research using the newly created structure (Choi & Pak, 2006; Fawcett, 2013).

Translational Research/ Science The synergy created when practice-focused and doctorally prepared scholars partner to implement newly generated knowledge grounded in evidence-based findings aimed at resulting in evidence-based practice. Moreover, translational research includes two areas of translation. One is the process of applying discoveries generated during research in the laboratory, and in preclinical studies, to the development of trials and studies in humans. The second area of translation concerns research aimed at enhancing the adoption of best practices in the community. Cost-effectiveness of prevention and treatment strategies is also an important part of translational science (NIH, 2009; Rubio et al, 2010).

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References

- American Association of Colleges of Nursing. (2016a). *Advancing healthcare transformation: A new era for academic nursing*. Retrieved from www.aacnnursing.org/Portals/42/Publications/AACN-New-Era-Report.pdf
- American Association of Colleges of Nursing. (2016b). *Special survey on vacant faculty positions for academic year 2016-2017*. Retrieved from www.aacnnursing.org/Portals/42/News/Surveys-Data/vacancy16.pdf
- American Association of Colleges of Nursing. (2015). The doctor of nursing practice: Current Issues and clarifying recommendations. Report from the task force on the implementation of the DNP. Washington, DC. Retrieved from www.aacnnursing.org/Portals/42/DNP/DNP-Implementation.pdf
- American Association of Colleges of Nursing. (2017). *Data on doctoral programs*. Retrieved from www.aacnnursing.org/News-Information/Fact-Sheets/DNP-Fact-Sheet
- American Association of Colleges of Nursing. (2011). *The essentials of master's education in nursing*. Washington, DC: Author
- American Association of Colleges of Nursing. (2010). *The research-focused doctoral program in nursing*. Washington, DC: Author
- American Association of Colleges of Nursing. (2006). *The essentials of doctoral education for advanced nursing practice*. Washington, DC: Author
- American Association of Colleges of Nursing. (2004). *AACN position statement on the practice doctorate in nursing*. Washington, DC: Author
- American Association of Colleges of Nursing. (1999). *Defining scholarship for the discipline of nursing*. Retrieved from www.aacnnursing.org/News-Information/Position-Statements-White-Papers/Defining-Scholarship
- American Association of Colleges of Nursing and-American Organization of Nurse Executives. (2012). *AACN-AONE task force on academic practice partnerships*. Retrieved from http://www.aone.org/resources/academic-practice-partnerships.pdf
- Agency for Healthcare Research & Quality. (2002). *Agency for healthcare research and quality*. Retrieved from: https://archive.ahrq.gov/about/whatis.htm
- Baum, F., MacDougall, C., & Smith, D. (2006). Participatory action research. *Australian Journal of Primary Health*. Retrieved from http://doi.org/10.1136/jech.2004.028662

- Bleich, M. R., Hewlett, P. O., Miller, K. L., & Bender, K. (2004). Beyond tradition: Synergizing intellectual and material capitol to forge the new academic-service partnership. *Journal of Professional Nursing*, 20, 285-294.
- Boyer, E. (1990). *Scholarship reconsidered: Priorities for the professoriate*. Princeton, NJ: The Carnegie Foundation for the Advancement of Teaching.
- Brown, M., & Crabtree, K. (2013). The development of practice scholarship in DNP programs: A paradigm shift. *Journal of Professional Nursing*, 29, 330-337.
- Burson, R. (2017). *Scholarship in Practice*. In K. Moran, R. Burson, & D. Conrad (Eds). *The doctor of nursing practice scholarly project: A Framework for Success* (2nd *Ed.*). Burlington, MA: Jones & Bartlett.
- Choi, B. P. K., & Pak, A. W. P. (2006). Multidisciplinarity, interdisciplinarity, and transdisciplinarity in health research, services, education and policy 1. Definitions, bejectives and evidence of effectiveness. *Clinical and Investigative Medicine*, 29, 351-364.
- Dictionary.com. (2017a). Impact. Retrieved from http://www.dictonary.com/browse/impact?s=t
- Dictionary.com. (2017b). *Metaphysical*. Retrieved from http://www.dictonary.com/browse/metaphysical
- Faridi, Z., Grunbaum, J. A., Gray, B. S., Franks, A., & Simoes, E. (2007). *Community-based participatory research: Necessary next steps*. Retrieved from http://www.cdc.gov/pcd/issues/2007/jul/06_0182.htm
- Fawcett, J. (2013). Thoughts about multidisciplinary, interdisciplinary, and transdisciplinary research. *Nursing Science Quarterly*, 26, 376-379.
- George, J. (2005). *Nursing theories, the base for professional nursing practice* (5th Ed.). Upper Saddle River, NJ: Prentice Hall.
- Glassick, C. (2000). Boyer's expanded definitions of scholarship, the standards for assessing scholarship, and the elusiveness of the scholarship of teaching. *Academic Medicine*, 75(9), 877-880.
- Grace, P. J., Willis, D. G., Roy, C., & Jones, D. A. (2016). Profession at the crossroads: A dialog concerning the preparation of nursing scholars and leaders. *Nursing Outlook*. *64*(1), 61-70. doi:10.1016/j.outlook.2015.10.002
- Grady, P. A. (2016). *The NINR strategic plan: Advancing science, improving lives*. Bethesda, MD: National Institute of Nursing Research.

- Health Innovation Network. (2016). What is patient-centered care and why is it important? Retrieved from http://www.hin-southlondon.org/system/ckeditor_assets/attachments/41/what_is_person-centred_care_and_why_is_it_important.pdf
- Hayashi, C., Yajima, K., Bock, H. H., Ohsumi, N., Tanaka, Y., & Baba, Y. (1998). What is data science? Fundamental concepts and a heuristic example. In C. Y. Hayashi (Ed.), *Data science, classification, and related methods. Studies in classification, data analysis, and knowledge organization* (pp. 40-51). Tokyo: Springer.
- Health policy, (n.d.). Retrieved September 5, 2017, from http://www.who.int/topics/health_policy/en/
- Health Plus Social. (2016). *An inquiry into the social determinants of health*. USC School of Social Work. GreenHouse Center of Social Innovation. Los Angeles, CA.
- Institute of Medicine. (2000). *To err is human: Building a safer health system.* Washington, DC: National Academies Press.
- Institute of Medicine. (2001). Crossing the quality chasm. Washington, DC: National Academies Press.
- Institute of Medicine. (2003). *Health professions education: A bridge to quality*. Washington, DC: National Academies Press.
- Institute of Medicine. (2010). *The future of nursing: Leading change, advancing health.* Washington, DC: The National Academies Press.
- Institute of Medicine. (2012). *Best care at lower cost*. Washington, DC: National Academies Press.
- Institute of Medicine. (2014). Capturing social and behavioral domains and measures in electronic health records: Phase 2. Washington, DC: National Academies Press.
- Kellogg Commission. (2000). Renewing the covenant: Learning, discovery, and engagement in a new age and different world. Washington, DC: National Association of State Universities and Land-Grant Colleges.
- Kellogg Commission. (2001). Returning to our roots: executive summaries of the reports of the Kellogg commission on the future of state and land grant universities. Washington, DC: National Association of State Universities and Land-Grant Colleges.
- Kerr, M. E. (2016). Support for nursing science. *Nursing Outlook*. 64, 262-270. doi:10.1016/j.outlook.2015.09.007

- Lather, P. (2004). Critical inquiry in qualitative research; Feminist and poststructural perspectives: Science "after truth." *Foundations for Research Methods of Inquiry in Education and the Social Sciences*. p. 203-215. Mahwah, NJ: Lawrence Erlbaum Associates.
- Melnyk, B. M. (2013). Distinguishing the preparation and roles of doctor of philosophy and doctor of nursing practice graduates: National implications for academic curricula and health care systems. *Journal of Nursing Education*, *52*, 442-443.
- Mitchell, P., Wynia, R., Golden, B., McNellis, B., Okun, S., Webb, C. E., Rohrbach, V., & Von Kohorn, I. (2012). *Core principles and values of effective team-based health care*. Retrieved from https://www.nationalahec.org/pdfs/VSRT-Team-Based-Care-Principles-Values.pdf
- National Academies of Science. (2015). *Assessing progress on the IOM report, the future of nursing*. Retrieved from http://www.nationalacademies.org/hmd/Reports/2015/Assessing-Progress-on-the-IOM-Report-The-Future-of-Nursing.aspx
- National Cancer Institute. (n.d.). *About team science*. Retrieved from https://www.teamsciencetollkit.cancer.gov/public/WhatIsTS.aspx
- National Implementation Research Network. (2015). *Implementation science defined*. Retrieved from http://doi.org/10.1001/jama.2015.17949
- National Institutes of Children's Health Quality. (2017). *Improvement science*. Retrieved from http://www.nichq.org/about/expertise/improvement-science
- National Institutes of Health. (2017, February 23). *Implementation science information and resources*. Retrieved from https://www.fic.nih.gov/researchtopics/pages/implementationscience.aspx
- National Institutes of Health. (2009). *Definitions under subsection 1 (research objectives)*, Section I (funding opportunity description), Part II (full text of announcement), of RFA-RM-07-007: Institutional clinical and translational science award (U54) Mar 2007. Retrieved from http://grants.nih.gov/grants/guide/rfa-files/RFA-RM-07-007.html
- National Library of Medicine. (2017). What is "precision medicine" -- and can it work? Retrieved from https://ghr.nlm.nih.gov/primer/precisionmedicine/definition
- Oermann, M. (2014). Defining and assessing the scholarship of teaching in nursing. *Journal of Professional Nursing*, 30(5), 370-375
- Okum, S., Schoenbaum, S., Andrews, D., Chidambaran, P., Chollette, V., Gruman, J., et al. (2014). *Patients and health care teams forging effective partnerships*. Retrieved from https://www.accp.com/docs/positions/misc/PatientsForgingEffectivePartnerships%20-%20IOM%20discussion%20paper%202014.pdf

- Peterson, K., & Stevens, J. (2013). Integrating the scholarship of practice into the nurse academian portfolio. Retrieved from http://digitalcommons.brockport.edu/nursing_facpub/1
- Raghupathi, W., & Raghupathi, V. (2014, February 7). Big data analytics in healthcare: Promise and potential. *Health Information Science and Systems*, 2(1). doi:10.1186/2047-2501-2-3
- Reeves S., Perrier L., Goldman J., Freeth D., & Zwarenstein M. (2013). *Interprofessional education: Effects on professional practice and healthcare outcomes (Update)*. Cochrane Database of Systematic Reviews. 2013, Issue 3. No.: CD002213.DOI: 10.1002/14651858.CD002213.pub3. www.cochranelibrary.com
- Robert Wood Johnson Foundation. (2016). *Using social determinants of health data to improve health care and health: a learning report*. Retrieved from file://in-nurs-son2v/users/newhouse/Articles/rwjf428872_SocialDeterminentsofHEALTH_2016.pdf
- Robert Wood Johnson Foundation. (2015). *A culture of health: Measuring what matters*. Retrieved from http://www.rwjf.org/en/culture-of-health/2015/11/measuring_what_matte.html
- Rubio, D. M., Schoenbaum, E. E., Lee, L. S., Schteingart, D. E., Marantz, P. R., Anderson, K. E., & Esposito, K. (2010). Defining translational research: implications for training. *Academic Medicine*, 85, 470-475. Retrieved from http://doi.org/10.1097/ACM.0b013e3181ccd618
- Sampson, J. P., Jr., Driscoll, M. P., & Carroll, P. S. (2010). *Guidelines for writing promotion and tenure letters for faculty members*. Florida State University, Office of the Dean of the Faculties, Tallahassee, FL. Retrieved from https://education.fsu.edu/wp-content/uploads/2015/06/Guidelines-for-Writing-Promotion-and-Tenure-Letters.pdf
- Schottenfeld, L., Petersen, D., Peikes, D., Ricciardi, R., Burak, H., McNellis, R., & Genevro, J. (2016). Creating patient-centered team-based primary care. AHRQ Pub. No. 16-0002-EF. Rockville, MD: Agency for Healthcare Research and Quality.
- Smeltzer, S. C., Sharts-Hopko, N. C., Cantrell, M. A., Heverly, M. A., Nthenge, S., & Jenkinson, A. (2015). A profile of US nursing faculty in research- and practice-focused doctoral education. *Journal of Nursing Scholarship*, 47(2), 178-185.
- Staffileno, B. A., Murphy, M. P., & Carlson, E. (2016). Overcoming the tension: Building effective DNP-PhD faculty teams. *Journal of Professional Nursing*, *32*, 342-348.
- Steup, M. (2009a). *Stanford encyclopedia of philosophy. Epistemology*. Retrieved from https://plato.stanford.edu/archives/fall2016/entries/epistemology
- Steup, M. (2009b). *Stanford encyclopedia of philosophy. Metaphysics*. Retrieved from https://plato.stanford.edu/entries/metaphysics

- Terhaar, M. F., & Sylvia, M. (2015). Scholarly work product of doctor of nursing practice: One approach to evaluating scholarship, rigor, impact and quality. *Journal of Clinical Nursing*, 25, 163-174.
- Thoun, D. S. (2009). Toward an appreciation of nursing scholarship: Recognizing our traditions, contributions, and presence. *Journal of Nursing Education*, 48, 552-556.
- Van Dijk-de Vries, A. N., Duiel-Peeters, I. G. P., Muris, J. W., Weeseling, G. J., Beusmans, H. M. I., & Vriihoef, H. J. M. (2016). Effectiveness of teamwork in an integrated care setting for patients with COPD: Development and testing of a self-evaluation instrument for interprofessional teams. *International Journal of Integrated Care*, 16(1): 9, pp. 1–10. DOI: http://dx.doi.org/10.5334/ijic.2454
- Velasquez, D. M., McArthur, D. B., & Johnson, C. (2011). Doctoral nursing roles in knowledge generation. In P.G. Reed and N.B.C. Shearer (Eds.), *Nursing knowledge and theory innovation: Advancing the science of practice*. New York, NY: Springer.
- World Health Organization. (2010). Framework for action on inter-professional education & collaborative practice. Geneva, Switzerland.

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