AACN'S VISION FOR NURSING EDUCATION POSITION STATEMENT
September 2018

As the voice of academic nursing, the American Association of Colleges of Nursing (AACN) serves as a catalyst for excellence and innovation in nursing education, research, and practice. Since its inception in 1969, the organization has worked to improve the quality of nursing care by re-envisioning traditional nursing roles, strengthening nursing education programs, and striving to create a more highly educated nursing workforce. At a time when new models of health care are being introduced and the roles for registered nurses (RNs) are expanding, the need to reconsider how best to educate the nursing workforce of the future is critical.

As an indispensable member of the healthcare team, nurses today are at the forefront of advancing evidence-based solutions and leading innovation in an atmosphere of accelerating change. This imperative to change is being driven by the needs of students, employers, and consumers of care. Nurse educators today must be nimble enough to embrace new technology and explore fresh approaches to teaching designed to satisfy the diverse learning needs of contemporary nursing students. Employers are increasingly expecting registered nurses to be prepared at the baccalaureate level given the growing body of evidence linking education to quality outcomes. As care moves out of hospitals and into the community, we can no longer prepare nurses for roles confined to acute care settings. The scope of registered nurse practice is changing as well with RNs expected to play a greater role in meeting the nation's need for high quality and accessible care. To underscore this point, the Josiah Macy Jr. Foundation (2017) has emphasized that "we simply can't meet the primary care needs of the nation unless registered nurses are part of the solution, and we must prepare them appropriately and then use them for this role" (p. 25). From mounting concerns over patient safety to the growing need for primary care providers, nurses must be prepared to thrive while working on the front lines to implement solutions needed to repair a fragmented care delivery system.

With the goal of meeting the needs of a dynamic and global society, AACN's vision for nursing education is derived in part from a review of current trends and relevant assumptions about registered nurse preparation and practice. Recommendations address education pathways, overarching curricular changes, resource needs, and learning methodologies to move nursing towards a preferred vision. These recommendations are aspirational and provide a pathway for nursing education to move forward over time to advance the nursing profession within a changing environment. As a vision statement, this document is not a mandate for the profession or schools of nursing, and it does not address implementation strategies and actions that will be necessary to realize this vision.

Environmental Scan: Current State and Future Needs

To develop a vision for nursing education, AACN conducted an environmental scan to consider trends and projected changes in health care, higher education, population demographics, learners and learning styles, nursing workforce, and patient/populations needs.

Changing Higher Education

Higher education has been subject to shrinking federal and state funding, rising tuition, aging infrastructure, variation in funding sources, fluctuations in available resources, and changing demographics of enrollees (Chronicle of Higher Education, 2014). Traditional higher education models, including faculty structures, governance models, and curricula can limit flexibility and create barriers to innovation. Recent trends, such as open access online courses, short courses that award micro-credentials or badges, tuition models based on the number of enrollees in the course, and the growing availability of distance learning opportunities, are broadly challenging traditional approaches to higher education.

The development and awarding of micro-credentials or badges by academic institutions is an evolving trend. One study found that more than 90 percent of educational institutions are offering credentials and digital badges, in part, to serve millennial students who favor badging and certificates to traditional degrees (Bratcher, 2016). A badge is a visual representation of an accomplishment, achievement, or skill acquisition but not a formal degree. Digital badges have emerged as a documentation of community engagement, professional development, and accomplishments. Badges recognize incremental learning in visible ways and can support career development (Educause, 2018). Stackable credentials are another emerging practice whereby credentials such as badges can be accumulated over time and facilitate one's development along a career trajectory (Department of Labor, 2015).

Competency-based education has emerged in the health professions to address criticisms of contemporary approaches to training (Frank, et. al, 2010). Medicine has identified Entrustable Professional Acts (EPAs) and is developing competencies for post-graduate residencies (Englander, et al., 2013; Hicks, et al, 2010). The discipline of physical therapy has identified common competencies that graduates are expected to demonstrate prior to graduation. In addition, the Physical Therapist Clinical Performance Instrument provides a validated, standardized, assessment tool that is available for programs to use to document attainment of the expected competencies (Roach, et.al., 2012).

Charged with educating the nursing workforce of the future, it is critical that those in academic nursing formulate a proactive response to the changing landscape of higher education and the demands of employers, prospective students, and the public. To ensure that graduates are ready for contemporary practice requires faculty who have an awareness of evolving changes and a commitment to adapting curricula, teaching strategies, and student learning assessment. Further, inculcating graduates with the knowledge, skills, and values for embracing change through career-long learning is paramount.

Changing Learners

Across the educational spectrum, students are calling for changes in how they are taught given the changes in how they learn. Today's learners are composed of Millennials (1977-1995), Centennials (born after 1996), and Generation Z (1998-present). Baby Boomers (1946-1964) returning to school to re-tool or pursue new career options also are a component of today's learners. Each cohort/group learns differently and has preferences and characteristics that necessitate modification of curricular offerings and learning opportunities. Millennials are "digital natives" and have the perceived ability to multi-task. Centennials are the iGeneration (iGen) who have been referred to as "digital natives on steroids." Centennials have not known a world without social media or the immediacy of web searches and information at their fingertips. They prefer using a check list approach and do not embrace our societal conventions which views seat time as a benchmark for higher education. Generation Z values entrepreneurship and innovation, self-reliance, social and racial equality, and project-based learning around real-world problems (Seemiller & Grace, 2016).

In addition to traditional first-time college students seeking an education and degree, second degree learners are returning to school in greater numbers to retool their skills to better meet workforce demands. Learners are seeking second degrees to be competitive in the workplace and obtain marketable degrees and skills that afford them a preferred lifestyle. As such, faculty must retool their teaching strategies to accommodate the styles of this diverse population of learners, both first degree students (pedagogy) as well as adults returning to school (andragogy). These shifts in generations will require a metamorphosis of the education enterprise as we now know it.

Changing Learning and Practice Technologies

Recent advances in educational neuroscience – a term used to describe the interrelationship between neuroscience, teaching strategies, and psychology – has resulted in new understandings associated with how the brain learns. This area of science provides evidence for best practices in teaching to include strategies that engage the learner in challenging and purposeful learning, and where reflection on that learning is incorporated. Advances in technologies provide growing opportunities to engage the learner in these types of learning experiences.

The use of learning technologies is transforming higher education by blurring the boundaries between formal and informal learning systems and offering greater opportunity for connectivity and active engagement. The technology explosion requires faculty to have a clear understanding of the push-pull of technology; the utility of technologies in transforming the teaching-learning experiences; and the availability, acceptability, affordability, and accessibility of technology to enhance learning. As technologies evolve, the availability and affordability of these new learning opportunities for all institutions and all learners must be considered. A balance is needed between competition and collaboration among institutions and the increased availability of technology-driven teaching methods, the rising cost of tuition, and the proven effectiveness of learning technologies.

A growing emphasis within the domain of learning science involves promoting active learning, e.g., the flipped classroom movement and personalized-paced learning. Priming for classroom

learning, both actual and virtual, by creating self-study, guided exposure to concepts and content (knowledge), followed by teacher coaching of knowledge application in the classroom holds much promise to accelerate learning. An example of technology as an adaptive learning tool that is already commonly accepted is the online use of problem-based learning. Learners are guided through multiple steps where previous knowledge must be recalled and applied to make decisions to progress through a problem-based unfolding case study.

Access to online education and new technologies is growing. Increasingly, a design-build approach is being used with pairing of faculty with an instructional designer to promote innovation and effective teaching methods in the classroom. Such approaches help address limited resources, rising education costs, and demands to expand enrollments as well as diverse student learning styles. New models of instruction, inclusive of large class sizes, incorporate strategies such as team teaching, utilization of preceptors and/or teaching assistants, small group work, etc. These options offer opportunities for multi-pronged approaches that facilitate student-centered learning.

Preparing graduates for the rapid advancement of technologies in practice also is a challenge. Today's nursing graduates are called upon to deliver quality care in increasingly technologically enhanced settings, which include electronic health record systems used to order interventions, document treatments patient reaction to treatments, and communicate across the care team. Technologies, including artificial intelligence, are emerging rapidly to support diagnostics, patient monitoring, care delivery, and evaluation/trending of care outcomes.

Changing Faculty Availability and Mix

The aging of the nursing faculty workforce is creating pressure to adapt new strategies to address growing faculty shortages fueled by both increased retirements and demand. Although faculty are delaying retirement much longer than in the past, in 2015 thirty-one percent of full-time faculty were over 60 years of age (Fang & Kesten, 2017). Projections indicated that retirements between 2016-2025 would equal one third of the 2015 employed faculty workforce. On a more positive note, the proportion of faculty age 44 or younger increased from 19% in 2006 to 24% in 2015. While the delayed retirements might prevent hiring of less experienced faculty, potentially at lower cost, hiring sufficient faculty to meet program needs is the current challenge. In 2016, 48% of all nursing programs (baccalaureate, master's and doctoral) reported insufficient number of faculty as one of the primary reasons for not admitting all qualified applicants (AACN, 2017).

In the face of evolving educational models and to meet financial challenges and faculty shortages, the number of adjunct faculty has been steadily increasing. Widespread national dialogues have raised questions related to the issues of the cost, purpose and value of the academic enterprise, and current models of tenure and promotion. To better suit the institutional mission, many schools have instituted both clinical or practice and research faculty tracks for recruitment, promotion, and tenure of faculty. Due to the differential in academic and practice salaries, concerns have been raised about fewer nurse clinicians choosing to enter academia (Fang & Bednash, 2015). This fuels a call for new models of faculty mix and utilization and the need to develop robust partnerships with the practice community (AACN, 2016). Growing options for practice and research within industry and the clinical services enterprise have

provided alternatives to academic careers for nurse scholars. With the growth of the practice doctorate and the need to maintain advanced practice licensure, new academic workload models incorporating faculty clinical practice and enhanced academic-practice relationships are emerging.

Active engagement in practice ensures that what is taught in schools, colleges, and programs of nursing appropriately reflects current practice, increases faculty credibility with practice, and enhances the relevance, applicability, and implementation of research. Stronger formal and informal collaboration between academia and practice is to position nursing in a leadership role in healthcare delivery (AACN, 2016).

Changing Healthcare Systems

To spur broader access to an enhanced patient experience, better quality care and provider work life and all at a reduced cost, the U.S. healthcare delivery system is undergoing constant change. Needed are adaptable, creative individuals able to work with diverse populations while being agile to respond to the fluctuating business needs and reimbursement realities. Reimbursement has moved from service-based payment to value-based purchasing. Integrated-care systems are emerging that require coordination, not only across settings, but across the care and lifespan continuum. With scientific discoveries growing exponentially, including new technologies, knowledge of genetics, treatments, and pharmacologic agents, health care is growing increasingly complex.

In addition, the rise of personalized health care has the potential to transform the traditional patient care experience. Precision health, which is frequently called precision medicine, refers to the use of biologic markers to make accurate predictions regarding an individual's risk for health conditions, and/or best treatment options for existing conditions. The technologies for precision health already exist and may lead to a significant shift in care delivery from standardized to individualized treatments and from treating conditions to preventing conditions. This shift will occur in conjunction with a growing emphasis on population health and the social determinants of health. However, regulatory policy, reimbursement, and clinical adoption of available options have been slow to change. The implementation of precision health approaches in clinical practice requires an increased awareness and understanding of these advances by the current and future healthcare workforce. This new approach to care requires that we rethink what we teach – what knowledge, skills, and attitudes will be necessary to provide this individualized approach to care.

Nurse employment settings are shifting from the most expensive venues – inpatient facilities and emergency departments - to more ambulatory and primary care settings. Care is becoming increasingly convenient with more mobile and technology enabled e-visits or e-encounters available any place and any time. Shifting care delivery to retail, community or home settings has the potential to produce cost savings, a shift in workforce distribution, and requisite skills. Healthcare systems are revising strategic goals and reorganizing services to move more care outside of the inpatient institutions. The American Hospital Association reported that from 2008 to 2012 outpatient visits rose from 624 million to 675 million while inpatient visits decreased from 35.7 million to 34.4 million (Vesely, 2014). Urgent care clinics are employing growing numbers of advanced practice registered nurses (APRNs) to deliver services at a 72% savings

over emergency departments and project growth to 12,000 urgent care clinics by 2019 (Rechtoris, 2016). The increasing use of telehealth as well as the growth of non-hospital settings will affect the RN and APRN nursing workforces.

Changing Nursing Workforce

Today's nurses work in complex, integrated healthcare delivery systems. With patients and families experiencing multiple transitions across care settings, nurses need to have higher level skills to support safe transitions and minimize fragmentation of care. Growing demands for an increasing number of baccalaureate and higher-degree prepared nurses, require new education models, particularly new clinical education models. Strong academic-practice partnerships are needed to co-design clinical education that is relevant and reciprocal ensuring graduates are prepared to practice in the continually changing healthcare system and solidifying nursing's influence on efficient and effective care delivery models. To improve healthcare outcomes and the overall health of the population nursing faculty will need to prepare nurses with a solid skill set to practice across settings, provide care to diverse populations, address the social determinants of health, and minimize health disparities.

In 2016, the Josiah Macy Jr. Foundation brought together leaders in nursing education and primary care to examine current education along with best practice. This led to proposed actionable recommendations for re-balancing nursing education and specifically a call to encourage registered nurses to become leaders in primary care teams, practicing to their full scope of practice to improve the health of the American people (Bodenheimer, T. & Mason, D., 2017). The lack of primary care content in the curricula of most nursing schools, including both didactic content and clinical experiences, was noted; especially that nursing education continues to emphasize in-patient hospital nursing. As most faculty are likely not prepared to teach primary care nursing, this was addressed as a need. The nursing profession must partner with others to transform our healthcare system into one that promotes the health of individuals, families, and communities, including preventing and better managing chronic illnesses.

The Macy report must be considered in light of the 2017 report *Supply and Demand Projections of the Nursing Workforce 2014-2030,* from the DHHS, HRSA, Bureau of Health Workforce, and the National Center for Health Workforce Analysis (U.S. DHHS, 2017). This report highlighted the inequitable distribution of the nursing workforce across the United States. Although there is concern about a shortage of registered nurses, the greater problem resides with the distribution across states particularly in rural areas. Rural communities are greatly affected by the maldistribution of healthcare professionals, which significantly impacts primary and acute care access. Areas with higher proportions of low-income and minority residents, such as rural areas, tend to suffer most from a lower supply of healthcare providers. The number of working RNs per capita has remained substantively lower in rural areas than in urban areas, and the salaries of RNs who live in rural areas remain lower than urban-residing. The variables that impact the maldistribution of the nursing workforce include lower reimbursement levels, reduced ability to recruit and retain health professionals, higher rates of uninsured or Medicaid/Medicare patients, and fewer rural training sites. Most future health professionals come from urban areas, as rural students often experience educational disadvantages in terms of preparation in math and science

and development of successful academic/learning skills (National Rural Health Association, 2012; Rural Health Information Hub, 2018).

Nursing workforce demographics have changed slowly. The United States is steadily becoming more diverse. According to the U.S. Census Bureau in 2016, minority groups comprised 38.7% of the population. If these population trends continue, the minority population will be the majority by 2043. However, the nursing workforce remains predominately white with minorities comprising 24.5% of the workforce (U.S. Census Bureau, 2016). Diversity within the nursing workforce—in terms of race/ethnicity and sex—is desirable because it can contribute to the improvement of access and care quality for minorities and medically underserved populations (LaVeist & Pierre, 2014). Holistic admissions review is one strategy being used by health professional education to increase the diversity of the professions. Holistic admissions review is defined as a flexible, individualized way of assessing how an applicant will fare as a student and as a future professional and member of society (AAMC, 2014.) Other health professions, particularly medicine (91%), dentistry (98%), pharmacy (78%) and public health (78%) have adopted holistic admission processes (Urban Universities for Health, 2014). Research findings demonstrate that holistic admissions review practices increase diversity without decreasing the workforce preparedness and academic success of students (Glazer, et al, 2016).

Changing Regulation of Nursing Practice

The National Council of State Boards of Nursing (NCSBN), a not-for-profit organization whose members include the state and territorial boards of nursing, administers the national licensing exam, NCLEX-RN. The NCLEX-RN is the national exam used by all 50 states and territories as well as the Canadian provinces to license all entry-level registered nurses. The licensing exam is based on a job analysis of newly licensed nurses conducted every 3 years (NCSBN, 2018). Due to the increasing complexity of decisions being made by newly licensed nurses, NCSBN has announced that it is piloting new testing formats and assessment items known as the next generation of NCLEX (NCSBN, 2018c).

In 2002 the AACN Task Force on Education and Regulation I report stated that it was not feasible at that time to engage in efforts to differentiate the license for baccalaureate and associate degree nursing graduates (AACN, 2002). However, evidence continues to emerge that demonstrates that a higher mix of education in the RN workforce improves outcomes of care (Aiken, Clarke, Cheung, Sloane & Silber, 2003; Friese, Lake, Aiken, Silber & Sochalski, 2008; Blegen, Goode, Park, Vaughn & Spetz, 2013; Yakusheva, Lindrooth & Weiss, 2014). In 2003, a second task force (TFER II) was charged with identifying the knowledge and skills that would be needed by future nurses to address the many gaps in healthcare and improve outcomes. The TFER II report, *White Paper on the Role of the Clinical Nurse Leader,* delineated the education outcomes and expectations for a new master's prepared nurse. The AACN Board in addition to approving the white paper passed a motion to assume leadership in the development of a new legal scope of practice and credential for the new master's prepared nursing professional, the Clinical Nurse Leader (CNL). The CNL Certification exam was launched in 2007; over 6,000 master's prepared nurses have been credentialed through this examination. As reports increase showing improved quality of care, including lowered costs, increased patient satisfaction, and improved care outcomes healthcare systems integrate CNLs into the nursing workforce (Ott, et

al.,2010; Bender, Connelly, Glaser & Brown, 2012; Sheets, Bonnah, Kareivis, Abraham, Sweeney & Strauss, 2012; Bender, 2014; Murphy, 2014).

Since the time of inception, regulation of advanced practice registered nurses (APRN) has varied by state and by APRN role. In the early 1990's NCSBN began its involvement with APRN regulation by developing model legislation for APRN licensure and core competencies. In 1995, NCSBN began working with national APRN certifiers to ensure that examinations were suitable for regulatory purposes (NCSBN, 2018). In 2004 in response to growing variability among state boards of nursing requirements for advanced practice registered nurse (APRN) licensure/certification, AACN and the National Organization of Nurse Practitioner Faculties (NONPF) initiated the APRN Consensus Group and then the APRN Joint Dialogue Group that conjoined the work of the Consensus Group together with that of NCSBN. In 2008, the final report of the Joint Dialogue Group, *Consensus Model for APRN Regulation: Licensure, Accreditation, Certification & Education*, was released and endorsed by 40 national nursing organizations (Consensus Work Group and NCSBN APRN Advisory Committee, 2008). Implementation of the new regulatory model by all organizations engaged in any aspect of the model has been ongoing since 2008. To date 16 states have fully implemented all aspects of the model and another 10 have implemented most of the model's requirements. When fully implemented across all states, the model will provide standardization in APRN regulation for the over 267,000 APRNs in the U.S. thereby improving mobility across states as well as increased access to APRN care (NCSBN, 2018 b).

Vision for Nursing Education

The Vision for Nursing Education Task Force has extensively reviewed and thoughtfully considered the many issues delineated above. Built on these trends and validated assumptions, a vision for nursing education was developed that serves to meet the needs of a dynamic and global society and a diverse patient population. Recommendations address education pathways, overarching curricular changes, faculty preparation, and learning methodologies which move nursing towards this preferred vision.

General Recommendations for All Levels of Nursing Education

Nursing Workforce Recommendation
AACN members have affirmed the need to address pervasive inequities in health care by ensuring the preparation of nurses able to meet the needs of all individuals in an increasingly diverse American society, including both ethnic and geographic diversity. AACN and its member schools are committed to accelerating diversity, inclusion, and equity initiatives to prepare the current and future nursing workforce to be reflective of the society it serves while simultaneously fulfilling society expectations and needs (AACN, 2017b). Therefore, the recommendations to advance this goal are:

1. Schools of nursing will use holistic admission review practices which include attention to a student's life experiences and personal qualities in addition to traditional measures of academic achievement such as grades and test scores (AAMC, 2014; Glazer & Bankston, 2016; Glazer,

Clark, Bankston, Danek, Fair & Michaels, 2016) and support students to ensure success in the programs.
2. Schools of nursing foster strategies to increase recruitment and retention of the nursing workforce in all geographic environments in consideration of the maldistribution of care providers, i.e. rural areas.

Competency-based Education and Assessment Recommendations
The current model for nursing educational experiences, both didactic and clinical, often fails to ensure attainment of competencies. There is an inability to control available learning experiences and clinical time may lack intentionality. Hours can be logged, but there is no assurance that all students have equitable experiences or that competencies are achieved. Moving to a competency-based model will foster intentionality: defined competencies and associated attributes, methods for achieving, and outcome measurement.

At the national level, consensus is growing in terms of preparing health professionals via competency-based, time variable education (Englander, et al. 2013; Ring, et al., 2014; Wagner, Dolansky, & Englander, 2017; Kavanagh & Szweda, 2017; Macy, 2017; Litwack, 2018). Academic leaders across all disciplines are calling for transition to programs that are more strongly competency-based with mastery of competencies variably paced for individual success.

In nursing, the transition from primarily time- or credit-based education to competency-based education will occur over time and will be dependent upon the development of nationally recognized, measurable competencies as well as valid and reliable standardized assessment methods. Implementation issues such as regional accreditation requirements, impact on faculty resources, and fiscal impact on the institution will need to be addressed. However, the move to competency-based education and assessment of standardized competencies meets the needs of clinical preceptors and employers who are currently frustrated by the diverse expectations of students entering clinical experiences as well as new graduates. Recommendations are that:

3. All nursing education, both at the entry-level for professional nursing practice as well as advanced nursing practice, transition away from time- or credit-based education to competency-based, time variable education as consistent with other health professions.
4. Schools or programs of nursing are required to document that the required national, consensus-based competencies are achieved prior to graduation using national validated methods; however, the curricular process and design related to how these competencies are achieved would be determined by the program/school.
5. AACN will facilitate the development of nationally recognized competencies using a consensus-based process that engages diverse stakeholders from academia, practice, and regulation. This would be similar to the Association of American Medical Colleges' (AAMC) Entrustable Professional Acts (EPAs) (Englander, et al., 2013)
6. Subsequent to adoption of the nursing competencies for entry and advanced clinical practice, AACN will facilitate the development of standardized competency assessment tools or methods to facilitate the valid assessment of students prior to completion of the nursing program.

Transition to Practice Recommendations:

7. With the growing complexity of healthcare and diversity of practice settings, schools of nursing and practice entities should jointly offer optional, accredited (by a Department of Education recognized entity), post-graduate transition to practice programs for both entry-level and advanced nursing graduates (Harper, McGuinness & Johnson, 2017; Rugen, et al., 2018). Schools of nursing should consider awarding academic credit to graduates who complete accredited transition to practice programs.

8. To address the variable needs of employers and nurses particularly in more specialized areas of practice (i.e. women's health, care of older adults, trauma care), schools of nursing and practice entities should jointly offer short courses or modules (separately or within post-graduate transition to practice programs) focused on specific areas of practice. These learning experiences are preferably designed to award academic credits, promote competency enhancement, enhance potential for career advancement, and positively influence nurses' impact on healthcare delivery.

Faculty Shortage and Scarce Resources Recommendations:
Increasing costs and scarcity of resources in higher education and health professional education, including the faculty shortage, are projected to grow. A shortage of qualified and/or experienced faculty at each nursing school puts educational quality at risk and jeopardizes consistent student exposure to critical competency-based knowledge and skills and guidance by expert faculty. To address these changes and scarcity of resources, recommendations include:

9. With the advancements in technology and the development of virtual learning and assessment, including in the affective and cognitive domains, schools of nursing should balance simulated with real-life field learning to give access to high risk, low volume clinical experiences according to evidence of quality.

10. To assure high quality learning through relevant content standardization, schools should address the faculty shortage, better utilize scarce resources and expertise, and consider accessing regional consortia of nursing schools to share in providing core and optional/elective courses or areas of content for entry-level and advanced nursing. The consortia could be similar to the Nursing Education Xchange (NEXus) housed at the University of Utah or done centrally through an AACN-coordinated repository/service.

11. Regional accredited learning (simulation) centers provide access to current and new technologies for students and practicing clinicians and may distribute costs across schools offering more affordable options to increase access to resources.

Academic – Practice Interface Recommendations
In light of the recognized need for educational transformation that will improve the health of the public and create a workforce matched to healthcare delivery, there is a clear need to develop expanded and new academic-practice partnership models that go beyond what is utilized today. Envisioned are models that include multi-school and multi-practice partnerships as well as regional coalitions. Given the challenge and complexity of multiple and diverse academic and practice partnerships within health systems, nursing must foster strategies that promote opportunity for relationship-based partnerships that allow intentional cross-engagement, co-design, and commitment across practice and education. True partnerships provide benefits to all engaged entities and reflect the breadth of practice institutions including community-based, public health, and integrated care institutions. Nursing must have an influential voice in designing and implementing healthcare policy, systems, and delivery. Academic nursing must be

a strong and active participant in dialogues with practice partners and policy makers. Stronger academic-practice partnerships are needed such that nursing faculty are engaged in the clinical practice of the health system and clinical services are more closely connected to the academic mission of the school of nursing (AACN, 2016). Recommendations are:

12. AACN-AONE principles for academic-practice partnerships are adopted by all schools of nursing (AACN-AONE, 2012).

13. Schools of nursing, of all types, geographic regions, and missions, in partnership with practice institutions are able and implement the recommendations delineated in *A New Era for Academic Nursing* (AACN, 2016).

14. In addition to the broad, high-level goals and purposes described above, academic-practice partnerships include engagement around such areas as:
- Curricular design and implementation
- Joint faculty appointments and identification and preparation of preceptors and mentors for students and new graduates
- Development of optional transition to practice programs
- Joint participation in interdisciplinary health professional, research teams

Faculty Preparation and Career Advancement Recommendations

The faculty mix based on expertise in practice, education, and research in both nursing and other disciplines normally is determined by the mission and needs of the institution. Dialogues regarding how best to prepare individuals for the faculty role transcend all health professions and other higher education disciplines. It is aspired that faculty preparing the next generation of graduates are required to hold a terminal degree in the area in which they are teaching and have current expertise in that area. As in other disciplines (e.g. engineering, business, law), the major focus of the degree is on the area of practice specialization within the discipline, not the process of teaching. "The individual faculty from nursing or other disciplines, will demonstrate current and sustained competency in knowledge of the AACN Essentials appropriate for the baccalaureate and graduate-level teaching pedagogy, interpersonal skills, and leadership as well as competency in their area of practice/specialization (AACN 2017b, p.1)" Therefore, to become a master teacher in either the practice environment or academy, additional preparation in the science of pedagogy is needed to augment one's ability to transmit the science of the profession they practice and teach. AACN recommends:

15. Additional preparation for those pursuing a graduate nursing degree and interested in an academic career seek additional preparation, potentially as follows:
- Optional, formal course work during one's graduate academic program.
- Schools of nursing or the university/college provide an orientation or onboarding as well as mentorship for faculty new to the role.
- Optional/elective coursework is offered as a post-graduate badge/credential for those interested in an academic career and holding a practice or research-focused doctorate in nursing or other field of study.

16. Faculty development is accessed across one's career and reflects changes in healthcare and higher education, i.e. new discoveries in learning science, interprofessional team care and education, and healthcare and learning technologies.

17. Faculty providing direct or indirect applied practice learning experiences integrate direct or indirect practice with their role as educator.

18. Faculty mix of expertise in practice, education, and research is valued; faculty with degrees and programs of research in education and other disciplines are included as determined by the mission and needs of the institution.

19. Teaching teams are formed to include individuals with expertise in instructional technology and other advances in learning.

20. Leadership development opportunities are provided to faculty to provide for career progression as well as growth and sustainability of the profession.

21. A multidisciplinary Center for Teaching and Learning Excellence is developed by AACN to showcase and support the development of innovative learning, experiential, and curricular models, for both didactic, simulated and real-life clinical learning.

Entry-Level Professional Nursing Recommendations

Based on the current state and assumptions delineated above, AACN recommends:

22. The baccalaureate degree in nursing (BSN) is adopted as the minimum preparation for registered nurse licensure and entry into the nursing profession.

23. Achieving this goal means degree programs are offered in universities/four-year colleges or in partnership with community colleges or other four-year colleges/universities. Models of partnerships are identified in the Academic Progression in Nursing (APIN) final report, a Tri-Council for Nursing initiative (Farmer, Gerardi, Thompson & Hoffman, 2018)

24. The BSN minimum degree for entry into registered nurse practice is facilitated by AACN in partnership with the Tri-Council and other professional nursing organizations.

Entry-level Education and Curriculum Recommendations
Currently, entry-level nursing education prepares graduates primarily for acute care. With the growing complexity of healthcare systems and the increasing move of care to the community, entry professional nurses need competencies in team-based care across a variety of venues. AACN recommends:

25. To meet these needs, entry-level professional nursing education prepare a generalist for practice across the lifespan and continuum of care in four areas or spheres of practice. (Lipstein, et al., 2016)

- Disease prevention/promotion of health and well-being, which includes the promotion of physical and mental health in all patients as well as management of minor acute and intermittent care needs of generally healthy patients;
- Chronic disease care, which includes management of chronic diseases and prevention of negative sequela;
- Regenerative or restorative care, which includes critical/trauma care, complex acute care, acute exacerbations of chronic conditions, and treatment of physiologically unstable patients that generally requires care in a mega-acute care institution; and,
- Hospice/palliative/supportive care.

26. Programs encompass didactic, simulation, and clinical field learning opportunities in diverse settings, including community primary care, long-term care, acute care, hospice, and virtual care settings (telehealth).

27. Beginning competencies for person care, care transitions and coordination, and population health are mastered within the four spheres of care, which are not setting specific. For example, a long-term care (LTC) facility may encompass all spheres of practice except the regenerative (critical/trauma) sphere.

28. Substantial clinical experiences are provided within appropriate areas/sites that reflect the four spheres of care and include combinations of experiences in acute care, ambulatory, primary care, LTC, palliative care, or other relevant settings.

29. Strong academic-practice partnerships are forged to design and implement innovative, contemporary clinical or field experiences.

30. Substantial (time and type of experiences) immersion experiences are available to all entry-level learners encompassing one or more of the four spheres of care near the end of the degree program. The experiences are designed to integrate learning into one's clinical practice, increase care competencies, provide continuity, and increase confidence in performing as a generalist nurse.

31. Expected competencies for generalist, entry-level nursing practice include observable and measurable competencies across the four spheres of care. Competencies in other areas, including professionalism, ethics, legal aspects of practice, critical thinking, evidence-based practice, population health, global health, social determinants of health, assessment, communication, mental health, care coordination, and interprofessional team practice are threaded and assessed across the four spheres of care.

32. As described in the general recommendations, optional transition to practice programs for baccalaureate or master's entry nurses are offered in any of the four spheres: prevention/promotion of health and wellbeing, chronic disease care, regenerative (critical/trauma) care, and hospice/palliative care.

33. Courses in specialty areas are offered as stackable credentials or badges within an academic program or as part of a life-long program of learning/career development. These are designed and offered by schools or in conjunction with practice partners, augment the generalist degree preparation, and address identified needs of employers and changes within the healthcare system.

Entry to the Profession Master's Degree Recommendations
As the complexity of healthcare delivery and patient/population health needs continue to grow, education preparation for the entry to professional nursing practice is expected to evolve to a generalist master's degree at some point in the future. While transitioning to this future vision for nursing education, post-baccalaureate master's degree programs with an emphasis on systems, quality improvement and safety, evidence-based practice, care coordination, interprofessional communication, and team leadership should continue to prepare graduates for practice at the point of care. These master's degree programs address the needs and gaps in the current healthcare system as well as provide opportunities for nurses to advance their careers through graduate education, assume greater accountability for care outcomes, and continue to practice at the point of care. Similar to individuals applying to other health professional programs, generalist master's degree nursing programs require students to enter with a minimum of a bachelor's degree in another field. Recommendations are:

34. In addition to the entry-level professional nursing competencies and areas of preparation previously mentioned, master's entry programs will provide education for strengthened competencies in organizational and system's thinking, quality improvement and safety, care coordination, interprofessional communication, and team-based care and leadership.35.As pre-registered nurse licensure students, graduates from generalist master's entry-level degree programs, in addition to sitting for the NCLEX-RN®, sit for a certification exam that provides assurance of the additional competencies. This is in alignment with the recommendation of the AACN Task Force on Education and Regulation II (AACN, 2004). 36. Eventually, it is envisioned that as entry-degree credentialing moves from a bachelor's degree to the masters' level, the RN licensure examination will completely evolve to encompass testing of the master's entry competencies. Also, all advanced nursing practice evolves to require a practice doctorate, This includes the masters' degrees in indirect practice domains offered by schools of nursing, e.g., leadership, health informatics, public health, quality improvement, or others, are envisioned to evolve to the doctoral level.

Doctoral Education
Nurses seeking a doctoral degree in nursing obtain their doctorate in practice or research. All doctoral programs (practice and research-focused) in nursing include a standardized core set of courses. This core facilitates opportunities for nurses to obtain a practice doctorate and then a research-focused doctorate or the reverse. Doctoral education in nursing recommendations are:
37. Research-focused and practice-focused doctorates are terminal degrees in nursing.
38. All doctoral nursing programs (research and practice-focused) have an advanced nursing (doctoral) standardized core (advanced level courses) that incorporates advanced systems and design thinking (knowledge acquisition, assessment, development and application and analytics) among other topics such as leadership, ethics, data analysis, health informatics, global health, and health policy. An advanced nursing (doctoral) core allows students to easily transition from one track or degree to another as well as standardize the expected outcomes of advanced nursing education.
39. Individuals holding either practice doctorates or research-focused doctoral degrees are eligible for academic positions relevant to their degree, background, and experience.
40. The mix of faculty will form scholarly teams to reinforce how the unique skill set of each degree (practice or research-focused) is critical to the development of new knowledge and application of best evidence.
41. Those pursuing a doctoral degree in nursing (either research or practice-focused) and interested in an academic career seek additional preparation as delineated in recommendation #15.
42. Opportunities or streamlined pathways from the research-focused degree program to the practice doctorate program and from the practice doctorate to the research-focused degree program are offered.

Advanced Nursing Practice: Practice-Focused Doctoral Education Recommendations
43. Changes in higher education and the growing complexity of healthcare have significantly impacted the entire nursing workforce, including those prepared for advanced nursing practice. A shift to a practice doctorate from a specialty advanced practice master's degree is already in effect. Changes in healthcare delivery and demands for improved outcomes and reduced costs have created burgeoning opportunities for nursing. For the future, we envision the following:
The practice doctorate in nursing is the minimum academic degree for advanced practice

registered nurses and all other areas of advanced nursing practice which encompass direct clinical care/services and systems/indirect nursing care/services (AACN, 2004b).

44. After completing the advanced nursing (doctoral) core, students choose one of two broad pathways: 1) direct point of care clinical practice or 2) systems/indirect nursing practice. Within the pathway (whether it is a direct care or systems/indirect nursing practice focus) the student pursues a population (APRN Consensus Work Group & NCSBN APRN Advisory Committee, 2008) or specialty track and masters the national competencies delineated for that population or specialty.

45. The direct clinical care pathway, which includes the presently recognized four Advanced Practice Registered Nurse (APRN) roles (certified nurse-midwife, certified registered nurse anesthetist, clinical nurse specialist, and nurse practitioner), is assessed for change over time in accordance with contemporary healthcare delivery changes. The systems/indirect care pathway, which includes executive leadership/ nursing administration, health informatics, health policy, public health, and quality/safety, among others, will be similarly assessed.

46. In either the direct or indirect pathways, practice-focused doctoral education includes an immersion, practice experience in/with an appropriate setting/population reflecting the track or area of advanced nursing practice. Pathway/track competence at program completion is reflected in a relevant synthesis experience.

47. After completing the practice doctorate opportunities to complete nursing or health science research-focused doctorates are available in a streamlined path.

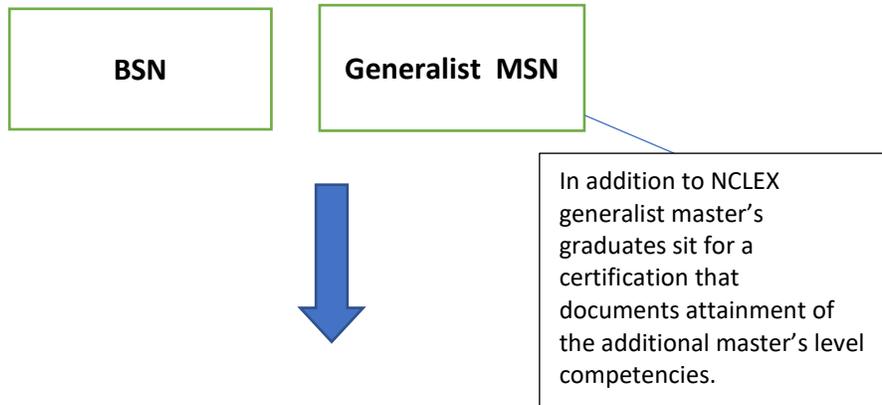Research-Focused Doctoral Education Recommendations

Within universities, the research-focused doctorate is generally a PhD degree. AACN envisions that this degree remains a degree whose structure and process are determined by the university/college in which it is embedded. Regardless of degree designation the research-focused doctorate in nursing/health science prepares for the conduct of health-related knowledge generation through research. The vision for research-focused doctoral education is:

48. The research-focused doctoral degree in nursing /health sciences is open to those holding a minimum of a baccalaureate or higher degree in nursing or in a related discipline. The course of studies prepares individuals for the conduct of individual and group research, as well as systems-focused research, interprofessional or nursing practice research, and translational science.
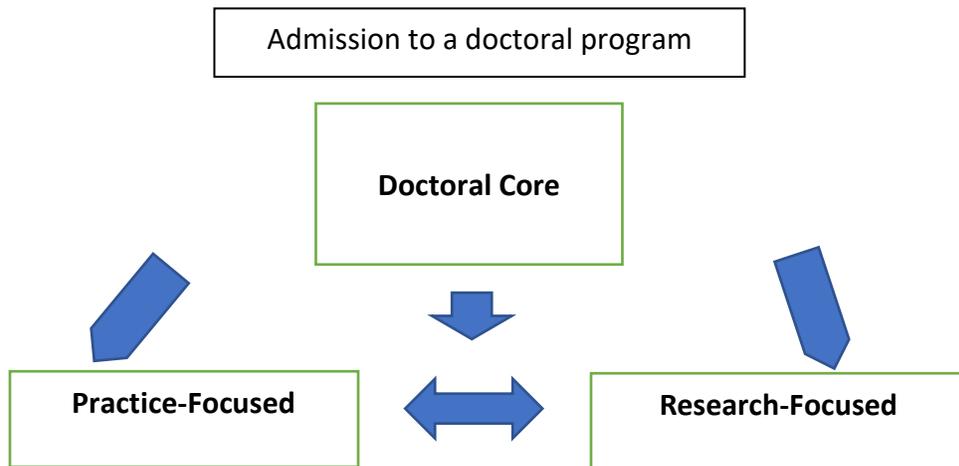
49. After completing the research-focused degree in nursing opportunities to complete practice-focused doctorates are available in a streamlined path.

VISION FOR NURSING EDUCATION
EDUCATION PATHWAYS

Entry to the Profession

| BSN | Generalist MSN |

In addition to NCLEX generalist master's graduates sit for a certification that documents attainment of the additional master's level competencies.

ADVANCED NURSING STUDY: Doctoral Education

Admission to a doctoral program

Doctoral Core

Practice-Focused ⟷ **Research-Focused**

Glossary

Competence - The array of abilities (knowledge, skills and attitudes) across multiple domains or aspects of performance in a certain context. Competence is multi-dimensional and dynamic. It changes with time, experience, and settings (Frank et al., 2010).

Competency - An observable ability of a health professional, integrating multiple components such as knowledge, skills, and attitudes. Since competencies are observable, they can be measured and assessed to ensure their acquisition (Frank et al., 2010).

Competency- based education (CBE) – An approach
to preparing [clinicians] for practice that is fundamentally oriented to a graduate's outcome abilities and organized around competencies derived from an analysis of societal and patient needs. It deemphasizes time-based training and promises greater accountability, flexibility, and learner centeredness (Frank et al, 2010).

Competency-based education - Learners progress by demonstrating the competencies they need to perform optimally as health professionals across the span of their careers through the various states of formal education, including transitions from one stage to the next (Macy, 2017).

Digital Badge – a visual representation of an accomplishment, achievement, or skill acquisition – more granular than a formal degree but helps to make incremental learning more visible. (Educause, 2018)

Generalist entry-level master's degree – Entry-level or 2nd degree master's program that admits students with baccalaureate degrees in other disciplines and no previous nursing education. The program prepares graduates for entry into the profession and awards a master's degree in nursing (AACN, 2017c).

Holistic admissions review – Flexible, individualized way of assessing how an applicant will fare as a student and as a future professional and member of society (AAMC, 2014).

Patient – Includes individuals, families, groups, communities, and populations (AACN, 2008, p.7)

Stackable credentials - A sequence of credentials that can be accumulated over time and move an individual along a career pathway or up a career ladder (Department of Labor, 2015).

References

Aiken, L. H., Clarke, S. P., Cheung, R. B., Sloane, D. M., & Silber, J.H. (2003). Educational levels of hospital nurses and surgical patient mortality. *Journal of the American Medical Association*, 290(12), 1617-1623.

American Association of Colleges of Nursing (2002). Task Force on Education and Regulation I.

American Association of Colleges of Nursing (2004a). Dialogue with the Board. http://www.aacnnursing.org/Portals/42/CNL/Spring04Dialogue.pdf?ver=2017-07-31-204147-573.

American Association of Colleges of Nursing. (2004b). AACN Position Statement on the Practice Doctorate in Nursing. Available at http://www.aacnnursing.org/Portals/42/News/Position-Statements/DNP.pdf.

American Association of Colleges of Nursing. (2008). *The Essentials of Baccalaureate Education for Professional Nursing Practice.* http://www.aacnnursing.org/Portals/42/Publications/BaccEssentials08.pdf

American Association of Colleges of Nursing. (2016). *Advancing healthcare transformation: A new era for academic nursing*. http://www.aacnnursing.org/Portals/42/AACN-New-Era-Report.pdf?ver=2017-07-06-120430-557.

American Association of Colleges of Nursing (2017a). Diversity, Inclusion, & Equity in Academic Nursing. http://www.aacnnursing.org/News-Information/Position-Statements-White-Papers/Diversity.

American Association of Colleges of Nursing (2017 b). The Preferred Vision of the Professoriate in Baccalaureate and Graduate Nursing Programs. http://www.aacnnursing.org/Portals/42/News/Position-Statements/Professoriate.pdf.

American Association of Colleges of Nursing. (2017c). *2016-2017 Enrollment and Graduations in Baccalaureate and Graduate Programs in Nursing*. Washington, DC: Author.

American Association of Colleges of Nursing and American Organization of Nurse Executives Task Force on Academic Practice Partnerships. (2012). Guiding Principles to Academic Practice Partnerships. http://www.aacnnursing.org/Academic-Practice-Partnerships/The-Guiding-Principles.

Association of American Medical Colleges (2014). About holistic admissions. Retrieved from https://http://www.aamc.org/initiatives/holisticreview/about/2014 .

APRN Consensus Work Group and NCSBN APRN Advisory Committee. (2008). Consensus Model for APRN Regulation: Licensure, Accreditation, Certification & Education. Accessed February 2018 at

http://www.aacnnursing.org/Portals/42/AcademicNursing/pdf/APRNReport.pdf?ver=2017-05-15-111341-617.

Association of American Medical Colleges (2014). About holistic admissions. Retrieved from https://http://www.aamc.org/initiatives/holisticreview/about/ 2014.

Bender, M. (2014). The current evidence base for the Clinical Nurse Leader: A narrative review of the literature. *Journal of Professional Nursing,* 30(2), 110-123.

Bender, M., Connelly, C. D., Glaser, D., Brown, C. (2012), Clinical Nurse Leader impact on microsystem care quality. *Nursing Research*, October 1, 2012, 326-333.

Blegan, M. A., Goode, C. J., Park, S. H., Vaughn, T., & Spetz, J., (2013). Baccalaureate education in nursing and patient outcomes. *Journal of Nursing Administration*, 43(2), 89-94.

Bodenheimer, T. & Mason, D. (2017). Registered Nurses: Partners
Of a conference Sponsored by the in Transforming Primary Care Proceedings of a Conference sponsored by the Josiah Macy Jr. Foundation in June 2016. New York: Josiah Macy Jr. Foundation, 2017. Accessed at www.macyfoundation.org.

Bratcher, E. (August 2016). Can associations attract millennials with credentials? Accessed at https://associationsnow.com/2016/08/can-associations-attract-millennials-with-credentialing/

Center for Generational Kinetics. (2016). Generational Breakdown: Info about all of the generations. Retrieved from http://genhq.com/faq-info-about-generations/

Chronicle of Higher Education. (2014) http://www.chronicle.com/blogs/ticker/college-enrollments-drop-for-3rd-straight-year/91025

Department of Labor. (2015) (TEGL 15-10) Training and Guidance Labor Letter 15-10. Retrieved from https://ows.doleta.gov/dmstree/tegl/tegl2k10/tegl_30-10.pdf

Educause (2018). Badging. Retrieved from https://www.educause.edu/badging

Englander, R., Cameron, T., Ballard, A. J., Dodge, J., Bull, J., & Aschenbrener, C.A. (2013). Toward a common taxonomy of competency domains for the health professions and competencies for physicians. *Academic Medicine,* 88(8), 1088-1094.

Fang, D., Bednash, G. D., & Arietti, R. (2015). Identifying barriers and facilitators to nurse faculty careers for PhD nursing students. *Journal of Professional Nursing*, Vol. 32, No. 3, pp 193-201

Fang, D., & Kesten, K. (2017). Retirements and succession of nursing faculty in 2016-2025. *Nursing Outlook, 65:5,* 633-642. doi: https://doi.org/10.1016/j.outlook.2017.03.003

Farmer, P., Gerardi, T., Thompson, P., & Hoffman, B. (2018). Academic Progression in Nursing (APIN) Final program summary and outcomes.   https://nepincollaborative.org/wp-content/uploads/2018/03/FINAL-APIN-REPORT.pdf

Frank J. R., Mungroo, R., Ahmad Y., Wang, M., DeRossi S., & Horsley, T. (2010). Toward a definition of competency-based education in medicine: a systematic review of published definitions. *Medical Teacher (32)* 631-637.

Frank J. R., Snell L. S., Cate O. T. et.al.(2010). Competency-based medical education: Theory to practice. *Medical Teacher* (32), 638–645.

Friese, C. R., Lake, E. T., Aiken, L. H., Silber, J. H., & Sochalski, J. (2008). Hospital nurse practice environments and outcomes for surgical oncology patients. *Health Services Research*, 43(4), 1145-1163.

Glazer, G., & Bankston, K. (September 2014). Holistic admissions in the health professions – Results of a National Study. Retrieved July 18, 2016, from http://urbanuniversitiesforhealth.org/media/documents/holisticadmissionsinthehealthprofessions.pdf.

Glazer, G., Clark, A., Bankston, K, Danek, J., Fair, M., & Michaels, J. (2016). Holistic admissions in nursing: We can do this. *Journal of Professional Nursing,* Vol. 32, 4, 306-313.

Harper, D. C., McGuinness, T. M., & Johnson, J. (2017). Clinical residency training: Is it essential to the Doctor of Nursing Practice for nurse practitioner preparation? *Nursing Outlook*, 65(1), 50-57.

Hicks, P. J., Schumacher, D. J., Benson, B. J., Burke, A. E., Englander, R., Guralnick, S., Ludwig, S., & Carraccio, C. (September 2010). The pediatrics milestones: Conceptual framework, guiding principles, and approach to development. *Journal of Graduate Medical Education*, pp 410-418.

Bodenheimer, T. & Mason, D. (2017). Registered Nurses: Partners in Transforming Primary Care. Proceedings of a Conference sponsored by the Josiah Macy Jr. Foundation in June 2016. New York: Josiah Macy Jr. Foundation, 2017. Accessed at www.macyfoundation.org/docs/macy_pubs/Macy_Monograph_Nurses_2016_webPDF.pdf.

Josiah Macy Jr. Foundation. (June 2017). Achieving Competency-Based, Time-Variable Health Professions Education Recommendations from the Macy Foundation Conference. Accessed at http://macyfoundation.org/docs/macy_pubs/JMF_CBTVHPE_Summary_web_JMF.pdf.

Kavanagh, J. M. & Szweda, C. (2017). A crisis in competency: The strategic and ethical imperative to assessing new graduate nurses' clinical reasoning. *Nursing Education Perspectives*, 38(2), 57-62.

Kogan, J. R., Whelan, A. J., Gruppen, L. D., Lingard, L. A., Teunissen, P. W., ten Cate O. (2018). What regulatory requirements and existing structures must change if competency-based, time-variable training is introduced into the continuum of medical education in the United States? *Academic Medicine*, 93 (3)/ March 2018 Supplement; 527-531.

LaVeist, T. A & Pierre, G. (2014) Integrating the 3Ds-social determinants, health disparities, and health-care workforce diversity. *Public Health Reports, 2014 supplement* 2, Vol. 129.

Lipstein, S. H, Kellermann, A. L., Berkowitz, B., Phillips, R., Sklar, D., Steele, G. D., & Thibault, G. E. (September 2016). Workforce for 21st century health and health care: A vital direction for health and health care. National Academies of Medicine. https://nam.edu/wp-content/uploads/2016/09/Workforce-for-21st-Century-Health-and-Health-Care.pdf

Litwack, K., & Brower, A. M. (2018). The University of Wisconsin-Milwaukee flexible option for bachelor of science in nursing degree completion. *Academic Medicine,* 93, 3/March 2018 supplement; pp. 537-541.

Murphy, E. A. (2014). Healthcare reform-A new role for changing times: Embracing the Clinical Nurse Leader role–A strategic partnership to drive outcomes. *Nurse Leader*, August 2014, 53-57.

NCSBN. (2018). Life Cycle of the NCLEX Test Plan. Accessed February 2018 at https://www.ncsbn.org/The_Life_Cycle_of_the_NCLEX_Test_Plan.pdf

NCSBN (2018 a). Accessed February 2018 at http://www.aacnnursing.org/Portals/42/AcademicNursing/pdf/APRNReport.pdf?ver=2017-05-15-111341-617.

NCSBN. (2018 b) APRN Campaign for Consensus. Accessed February 2018 at https://www.ncsbn.org/aprn-consensus.htm.

NCSBN. (2018c). The Next Generation NCLEX. https://www.ncsbn.org/next-generation-nclex.htm.

National Rural Health Association. (2012). *Policy Brief: Health Care Workforce Distribution and Shortage Issues in Rural America. Retrieved from https://www.ruralhealthweb.org/getattachment/Advocate/Policy-Documents/HealthCareWorkforceDistributionandShortageJanuary2012.pdf.aspx?lang=en-US.*

Ott, K. M., Haddock, K. S., Fox, S. E., Shinn, J. K. et. al. (2009). *Nursing Economics* 27(6), 363-383.

Panopto™. (2018). Are you ready to support 4 generations of learners? Retrieved from https://www.panopto.com/blog/are-you-ready-to-support-4-generations-of-learners/.

Rechtoris, M. (2016, March 9). 7 statistics on urgent care centers, EDs & retail clinics. Retrieved from https://www.beckersasc.com/asc-quality-infection-control/5-statistics-on-urgent-care-centers-emergency-departments.html.

Ring, M., Tieraona L. D., Sierpina, V., Bailey, M., Locke, A., Kogan, M., Rindfleisch, J. A., & Saper, R. (2014). Developing and implementing core competencies for integrative medicine fellowships. Academic Medicine 89(3), 421-428.

Roach, K. E., Frost, J. S., Francis, N. J., Giles, S., Nordrum, J. T., & Delitto, A. (2012). Validation of the Revised Physical Therapist Clinical Performance Instrument: Version 2006. *Physical Therapy*, Volume 92, 3, pp 416-428.

Rugen, K. W., Dolansky M. A., Dulay M., King S., & Harada, N. (2018). Evaluation of veterans affairs primary care nurse practitioner residency: Achievement of competencies. *Nursing Outlook* 66(1), 25-34.

Rural Health Information Hub. (2018). Rural Healthcare Information https://www.ruralhealthinfo.org/topics/health-care-workforce#workforce.

Seemiller, C., & Grace, M. (2016). Generation Z goes to college. Wiley & Sons: San Francisco, CA.

Sheets, M., Bonnah, B., Kareivis, J., Abraham, P., Sweeney, M., & Strauss, J. (2012). CNLs make a difference. *Nursing2012*, August 1, 2012, 54-58.

Urban Universities for Health (2014). Holistic Admissions in the Health Professions. Retrieved from http://urbanuniversitiesforhealth.org/media/documents/Holistic_Admissions_in_the_Health_Professions.pdf 2014.

U.S. Census Bureau. (2016). Quick Facts United States. Accessed March 2018 at https://www.census.gov/quickfacts/fact/table/US/PST045216.

U.S. Department of Health and Human Services, Health Resources and Services Administration, Bureau of Health Workforce, National Center for Health Workforce. (July 2017). Supply and Demand Projections of the Nursing Workforce: 2014-2030. https://bhw.hrsa.gov/sites/default/files/bhw/nchwa/projections/NCHWA_HRSA_Nursing_Report.pdf

Vesely R. (2014). The great migration. *Hospitals & Health Networks.* American Hospital Association. Accessed at www.hhnmag.com/articles/5005-the-great-migration.

Wagner, L. M., Dolansky, M. A., & Englander, R. (2018) Entrustable professional activities for quality and patient safety. *Nursing Outlook*, 66, 3, pp. 237-243.

Williams, A. (2015, September 20). Move Over, Millennials: Here Comes Generation Z. Retrieved from https://www.nytimes.com/2015/09/20/fashion/move-over-millennials-here-comes-generation-z.html.

Yakusheva, O., Lindrooth, R., & Weiss, M. (2014). Economic evaluation of the 80% baccalaureate nurse workforce recommendation: A patient-level analysis. *Medical Care*, 52(10), 864-869.

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