IMPACT OF THE CHANGES IN HEALTH CARE ON NURSING ROLES OVER THE PAST FIVE DECADES: AN INTEGRATIVE REVIEW

by

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ABSTRACT

Background: Dean Emeritus Lucy Harris wrote a book in 1973 outlining the history and struggles of Texas Christian University's Harris College of Nursing, while also posing challenges for nursing in the future. Five decades after the publishing of Dean Harris' work, a Harris College graduate, former faculty, and now adjunct faculty member completed a new book to address Dr. Harris' challenges and discuss changes in Harris College from 1973 to 2018.

Purpose: The purpose of this integrative review is to identify changes in health care and discuss how they have impacted nursing roles over the past five decades.

Methods: Numerous health care-related databases and nursing journals were searched to find information on changes in health care and nursing roles over the past five decades. Forty-seven pertinent articles were selected based on inclusion and exclusion criteria and appraised using the Johns Hopkins Evidence Based Practice Research and Non-Research Appraisal Form.

Findings: Health care policy, technology, structure, and payment systems have changed vastly over the past five decades to create a more equitable, safe, and higher-quality health care environment. Nurses have responded to these changes by becoming better advocates for their own safety, increasing their autonomy in patient care, and championing initiatives and polices to improve patient safety.

Conclusion: A multitude of changes in health care structure and function have occurred over the past five decades, which triggered changes in nursing roles. Consequently, progression of nursing roles indicates the responsiveness of the nursing profession to health care changes.

Implications for Nursing: Although nurses have responded to health care changes well overall, progress is still needed in improving nursing education on patient care technology and reducing the nursing shortage. Further research is needed into topics discussed in this article as well.

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Impact of the Changes in Health Care on Nursing Roles Over the Past Five Decades

The health care environment is constantly changing. Buckminster Fuller's "Knowledge Doubling Curve" predicted that by the end of World War II, the accumulation of all human knowledge would double every 25 years (Fernandez-Moure, 2016). With technology now providing a new means of obtaining knowledge more efficiently, medical knowledge now doubles every 18 years. However, in areas such as nanotechnology, this expansion can occur in as little as two years (Fernandez-Moure, 2016). New knowledge developments impact all aspects of health care. Knowledge expansion then prompts innovation, requiring structural changes to the health care environment in both policy and role expansion. As key players in the health care environment, nurses are particularly affected and must readily adapt to the changes in the health care environment. Such changes often provide nurses with newly expanded roles in patient care.

Background

In 1973, Lucy Harris, former dean of Texas Christian University's Harris College of Nursing, outlined the history and struggles of Harris College in terms of developing and sustaining a nursing program that was relevant to current nursing practice (Harris, 1973). At the conclusion of her book, Dean Harris described two challenges for nursing in the future. The one pertinent to this project was developing a clear and consistent definition of nursing roles and functions in health care.

Five decades after the publishing of Lucy Harris' work, *The Harris College of Nursing: Five Decades of Struggle for a Cause*, a current adjunct faculty member in Harris College, who was a former graduate and faculty member, completed a new book to continue what Dr. Harris had begun back in 1973. The new book focuses on the changes that have occurred within Harris College from the original publishing of the book in 1973 to the current status in 2018. A summary of the major changes in health care and nursing roles appear at the beginning of each chapter, which encompasses one of the decades.

The purpose of this integrative review is to expand and explore how the role of the nurse has changed over the past five decades in response to health care in the United States.

It is important for health care professionals to develop a deeper understanding of the impact of health care on nursing roles for many reasons. First, by using the changing health care environment as the context of the changes in nursing roles, nursing professionals can better perceive the reasons nurses needed to adapt their roles. It is also vital that people at all levels of the nursing profession comprehend how far nursing has come in the past five decades so that they can better understand where nursing must go in the future. Furthermore, analyzing the changes in nursing roles concurrently with the changes in health care serves as a gauge of the responsiveness of nurses to the changes in health care.

Methodology

Project Design

This project is an integrative review of the literature. Broome (1993) defined an integrative review as a summary and analysis of significant past and current literature on a particular subject in order to deepen the understanding of a certain phenomenon or problem. The integrative review being conducted for this project will focus on changes in both the national and global health care systems and how they have influenced nursing roles over the past five decades.

Search Strategies

The student conducted a comprehensive literature search looking for articles focused on one of two primary topics: changes in the role of the nurse and changes in the health care environment. Databases searched include the Medline, CINAHL, PubMed, ProQuest, and Gray Literature. Key search terms included “nurs*,” “role*,” “chang*,” “change* management,” “transform*,” “health care,” and “United States.” The search included literature from 1973 to 2018. Also, the student conducted a manual search through volumes of *The Online Journal of Issues in Nursing, American Nurse Today, Journal of Professional Nursing,* and *American Journal of Nursing* from 1973 to 2018 to find further relevant

articles and found most of the literature on nursing roles from these sources. The author consulted with the Texas Christian University librarian specializing in literature regarding nursing and nurse anesthesia to aid in the search process and verify that the search did not exclude any literature. Forty-seven articles were found that matched the search terms and were pertinent to the topics being researched. A diagram depicting the literature search strategy is displayed in Appendix A.

Analysis of Retrieved Articles

The author read article titles, abstracts, and texts and selected the ones utilized in this paper according to the following inclusion criteria: qualitative or quantitative literature, written in English, published between 1973 and 2018, and that discussed changes in health care, nursing, or the nursing role. The author excluded items if they appeared in publication before 1973, were not in English, or did not mention changes in health care, the nurse, or nursing roles. Articles selected by the author based on the above criteria were then analyzed according to the Johns Hopkins Evidence Based Practice Research and Non-Research Appraisal Form (see Appendix B & C) (Johns Hopkins Medicine, n.d.). The author then placed a summation of the findings from each of the analyzed articles in the evidence table within this work (see Appendix D).

Findings

1973-1979

Changes in Health Care. The 1970s brought on great advances in health care. Development and growth of practices, such as genetic experimentation, in-vitro fertilization, and organ transplantation, transformed people's lives (Silvia, 1974). Additionally, as patients expressed their desire for more personalized, quality care, specialization across health care providers grew. While this specialization in health care increased patient satisfaction, there were also some negative consequences. The first negative consequence of specialization was that it began to cause more segregated rather than cohesive patient care (Weiner, 1980). The attractiveness of specialization also caused a depletion of

primary care providers in rural and poor urban areas unequipped for specialty providers (Terris, 1973). Despite this, people began to have a stronger voice in their care, specifically at the end of life, due to California passing the first living will statute in 1974 (Sabatino, 2010).

A prominent challenge of health care in the 1970s was the ever-growing cost of health care. A large part of this increase pertained to the unrestricted growth of Medicare. At its inception, Medicare only set vague parameters of "reasonable costs" to hospitals and "reasonable charges" to physicians, leading to escalation of services and charges in the fee-for-service economy of the United States (Terris, 1973, p. 314). Compounded with the limited monetary resources for health care from the government and the older and more ill patient population, the cost of Medicare seemed to be uncontrollable (Weiner, 1980). By 1973, just eight years after its founding, Medicare had contributed to a doubling of health care costs (Moseley, 2008). If this wasn't enough to put strain on the health care system, better pay for health care professionals and the development and utilization of new technology also contributed to the skyrocketing costs of health care (Terris, 1973).

In order to control these costs, the government enacted a couple of public initiatives. In 1973, President Nixon signed the Health Maintenance Organization Act. Former President Nixon enforced this act with the hope that it would both curb the costs of Medicare and improve access to health care (Moseley, 2008). Expansion in the number and utilization of free clinics in the United States also helped curb health care costs (Amenta, 1974). By 1967, 200 free clinics existed in the United States, serving over 2,000 patients across the country. Utilization of these free clinics not only improved patient access to care by removing costs but also shortened wait times, fostered more humanity in care, and improved interprofessional collaboration (Amenta, 1974).

Changes in Nursing Roles. The 1970s involved a great expansion of nursing roles. In 1971, a committee organized by the secretary of the Department of Health Education and Welfare released a statement to affirm that there were no barriers for role expansion of registered nurses (Bullough, 1976).

From 1971 to 1975, over 50% of states in the United States revised their nursing board guidelines to expand the definition of registered nurses. These board guidelines also included encouraging delegation by health care providers to allow nurses to assume a greater responsibility for patient care. Furthermore, these guidelines worked to set standardized procedures across the state for practicing nurses (Bullough, 1976).

The expanded roles for nurses included the ability for nurses to perform full physical assessments (Lynaugh & Bates, 1974). Nursing educators and other nursing professionals incorporated the skill into nursing education and nursing practice after several nursing journals brought forth the need for a registered nurse to be capable of performing a physical assessment. Nurses were also learning how to formulate nursing diagnoses. Inclusion of nursing diagnoses in the 1974 Standards of Nursing Practice for the American Nurses Association (ANA) initiated the incorporation of nursing diagnoses into nursing education and practice (Gebbie & Lavin, 1974). Nursing diagnoses are statements focused on a patient's response to his/her medical condition and treatment. The nursing diagnoses are developed after the completion of a full physical assessment and a review of assessment findings, patient history and lab data. Nursing diagnoses help nurses better understand the patient's condition and allow them to implement more targeted care (Gebbie & Lavin, 1974).

Nurse involvement in Vietnam also expanded nursing roles. Army Nurses received specialization in trauma and intensive care, gaining experience and independence unlike what they had seen before back home. These high-stakes conditions also served to reinforce interprofessional teamwork with doctors and corpsmen in a manner far superior to that seen in United States hospitals (Moore, 2018). Back in the United States, Vietnam veterans also shaped nursing practice. Although already adept at dealing with the emotional aspect of patient care, nurses treating patients that had served in Vietnam had a whole new opportunity to perfect the emotional aspect of their role as a nurse (Marrchesini, 1973). Veterans experienced emotional trauma not only from the guilt of their actions, but

also from the rejection of their fellow Americans for their service. Thus, in order to provide care according to the nursing ethical principle of justice, nurses had to set aside their personal judgements to provide patients with equal and compassionate care (Marrchesini, 1973).

Summary. Health care in the 1970s reinforced the nurse's role in patient care. Changes in the health care environment, particularly the growth of specialization, increased nurses' autonomy in practice. Coupled with the fact that nurses are the health care workers that spend the most time with patients at the bedside, this increased autonomy allowed nurses a more direct hand in improving patient outcomes. Greater independence in practice also allowed nurses to better fulfill the health care consumer's desire for more personalized care. Additionally, the initiation of advanced directives allowed nurses to reinforce their role as patient advocates in promoting patient's autonomy in end of life choices.

Looking towards the future, nurses could improve practice based on health care changes in a couple of ways. The first would be to develop strategies to help reduce health care costs. Nurses could do so by advocating for their patients not to receive any unnecessary testing or procedures, collaborating with a social worker to help make health care costs more manageable for families, or being involved in health care politics. Additionally, nurses need better ways to stay more up to date on the technological advances in health care. The incorporation of technology into health care at this time was so rapid that nurses did not have the opportunity to fully understand the technology's purpose or how to use it before the technology was integrated into patient care. A lack of this knowledge can cause frustration for both nurses and patients and negatively impact patient satisfaction in health care. Staying up to date with medical advances is vital so that nurses are better able to educate their patients on the technology used by others in their care and use it more effectively themselves as a way to improve patient outcomes.

1980-1989

Changes in Health Care. Rampant reformation of hospital structures occurred in the 1980s. Hospitals began to branch off and create independent care centers, such as urgent care and birthing centers. Independent centers increased convenience for clients and profit for the hospitals but had no systems for quality monitoring in place and were not accessible to clients of a lower socioeconomic class (Walker, 1985). Segregation of care was also occurring within the main hospitals. The development of specialty units for areas like oncology and critical care aided in providing more targeted care. In this decade, these more targeted care units improved patient outcomes (Hobbs, 2009).

Specialization of care was one of the main reasons that the rising costs of health care continued to be an issue in the 1980s. More focused care equated to increased costs, especially in the free-standing medical clinics. Unaffordable costs of both free-standing clinics and private hospitals led to a shift of the patients seeking care from private to public hospitals (Walker, 1985). An influx of new medications and monitoring technology was also a factor contributing significantly to the continued rise in health care costs. New interventions in health care allowed patients to survive formerly fatal illnesses, making these interventions become an expected part of patient care. While beneficial to patient outcomes, increased utilization of this technology resulted in a generalized increase in cost of hospital stays (Hobbs, 2009). Guterman and Dobson (1986) identified abuse of Medicare's retrospective payment system as another significant contributor to growing health care costs in the early 1980s. In place until 1983, this system permitted hospitals to spend unnecessarily exorbitant amounts of money on patient care, with little motivation to control cost. As a result, hospital costs increased at a rate greater than that of general inflation in the United States (Guterman & Dobson, 1986).

To reduce costs, policymakers included a mandate in the Tax Equity and Fiscal Responsibility Act of 1982 requiring Medicare to create a prospective payment system (PPS). The PPS, included in the Social Security Amendments of 1983, is based on diagnosis-related groups (DRGs). DRGs are fixed payments systems determined in advance based on a patient's classification into a group with similar

hospital resource utilization, such as those undergoing hip replacement. In order to ensure compliance, all hospitals under PPS policy had to utilize a peer review organization (PRO). PRO's are responsible for ensuring that all care is appropriate and meets the quality standards mandatory for compliance with the PPS (Guterman & Dobson, 1986).

Guterman and Dobson (1986) noted that inpatient facilities were responding well to the change in Medicare payment. Admission rates declined and lengths of stay shortened, indicating improvement in the quality of care. The rate of change in Medicare inpatient hospital benefit payments also decreased from an average increase of 14-20% annually to 8-10%, highlighting the impact on health care costs. Additionally, some private insurance agencies began using prospective pricing and/or DRGs in 1984, broadening the scope in which health care costs could be lowered. Medicare's impact on health care costs with the PPS system only seemed to extend to acute care facilities, though, as the cost of out-of-hospital services, such as home health and nursing homes, continued to increase (Guterman & Dobson, 1986). The lack of decline in out-of-hospital costs seemed to serve as proof that, while implementation of the PPS system provided a step in the right direction towards reducing health care cost, there was still a long way to go.

Changes in Nursing Roles. Policy played a large role in the expansion of nursing practice in the 1980s. In 1980, the ANA released a policy statement that defined the scope of practice for nursing and laid out the "characteristics" of specialization (Hobbs, 2009). The significance of this statement was that it made a clear distinction between the practice of a nurse and that of a physician. The authors of the statement noted that while physicians diagnose and prescribe treatment for actual health problems, nurses provide the identification and treatment of the "human responses to actual or potential health problems" (Hobbs, 2009, p.9). The policy statement also dictated the two primary "characteristics" of specialization. One of the primary "characteristics" involved specifying the educational requirements for preparation to enter advanced practice, notably nurse practitioners and nurse anesthetists. The second

primary "characteristic" was recommending areas of nursing care that would benefit from certifications that reflected a nurse's extensive knowledge in a specialized area of nursing, such as critical care (Hobbs, 2009). Although, the ANA's policy statement provided clarity on the nurse's role in patient care for the public, it was largely controversial among nurses as it seemed to diminish nurses' extensive knowledge of disease processes (Hobbs, 2009).

Nurses also began to play a role in the certification of hospitals. Miller et al. (2002) noted that, in 1982, the American Academy of Nursing developed Magnet certification. Magnet certification is a four-year recognition awarded to hospitals that utilize nursing practice models, which allow nurses to function at their highest capacity, and provide quality working conditions for nurses. Facilities with Magnet certification proved to be more satisfying places for nurses to work when compared to those without. Hospitals with this certification also showed a marked improvement in patient outcomes, which can be directly correlated to nurses' increased satisfaction and mobility within these facilities (Miller et al., 2002).

In 1984, the National League for Nursing (NLN) published *Nursing Roles—Scope and Practice*. The NLN created this credentialing document to serve as the standard for the development of nursing education programs to prepare nursing professionals. Publication of *Nursing Roles—Scope and Practice* provided guidelines for, and aided in, the transition of nursing curricula into centers of higher education. Movement of nursing curricula into college and university settings proved to be a critical step in nursing as more emphasis was being placed on the behavioral rather than the biological aspect of nursing care (Gott, 2000). Former President Reagan bolstered the advancement of nursing into higher education by passing the Nurse Education Act in 1985 ("Reagan Signs Nurse," 1985). Reagan's Nurse Education Act allotted for a 5-7% increase in spending on nursing education from 1986-1988, allowing for improvements in current nursing programs and expanding the number of programs available in which to enroll ("Reagan Signs Nurse," 1985). The push of nursing curricula into higher education translated into

practice with hospitals moving towards staffing of only registered nurses (RNs). A consequential rapid drop in the number of licensed practical nurses (LPNs) in acute care hospitals resulted, further exacerbating the current shortage of nurses ("LPNs Are Facing," 1985).

Summary. Health care in the 1980s pushed nurses to expand their role in patient care. Specialization played a large part in the development of new nursing roles. Nurses followed the trend of the health care environment and health care providers by becoming more specialized in their practice. New positions and certifications became available, which allowed nurses greater opportunity to expand their role in health care. The nurse's expanded role included becoming increasingly more responsible for ensuring that patients received holistic care rather than care focused only on their current offending body system. More holistic care, especially when provided by experienced nurses, has the potential to promote improved patient outcomes.

Retention of experienced nurses in positions of direct patient care, however, was poor. The lack of retention resulted from inadequate hospital recognition and reward for the work of experienced nurses. Inadequate recognition led more experienced nurses to pursue further education and avenues of nursing in areas with minimal or no direct patient contact. The future health care system needs to improve upon this poor recognition in order to retain these experienced and competent care providers who could contribute significantly to promoting increased patient satisfaction and better quality of care.

Technology also greatly impacted nursing practice. Rapid advancement of technology required nurses to use the trial-and-error method to learn how to treat and monitor patients who needed to utilize these tools. Although this provided a testament to the skill and adaptability of nurses, in the future nurses need better education and preparation on new equipment before it is incorporated into practice. Whether this be in college or in the workplace, nurses must have this knowledge before they enter patient-care situations so that their patients can receive optimal care and reap the full benefits of these new technological developments. Additionally, nurses need better education on how to adapt to a health

care system with more chronic illnesses as this new technology increases patient survival rates and life expectancies.

1990-1999

Changes in Health Care. Advancements in technology and expansion of knowledge played a large part in transforming health care in the 1990s. A major technological advancement in this decade was the growth of the Electronic Medical Record (EMR), what we now know as the Electronic Health Record (EHR). Mass utilization of EMR did not occur until the 1990s, though it began its rise in the 1980s. The 1991 Institute of Medicine (IOM) report played a large part in its expansion (Dick, Steen, & Detmer, 1997). In this report, the IOM validated the EMR by noting its potential to make a great impact on health care quality and safety and pushed for all physicians to be utilizing an EMR by 2001 (Dick, Steen, & Detmer, 1997). As a result, computers and EMR systems began to increase in use at the bedside, which began the mass transformation to a technology-based health care system (Dick, Steen, & Detmer, 1997).

Another advancement that influenced health care in the 1990s was the Human Genome Project (Hood & Rowen, 2013). The Human Genome Project began in 1990 as a result of the joint effort of the National Institutes of Health (NIH) and the United States Department of Energy, along with the aid of international partners. The goal of the Human Genome Project was to develop a complete sequencing of the human genome, which no one had completed in entirety before. Motivation behind this goal was the belief that the sequencing of the entire human genome would aid in developing a better understanding of, and a more effective approach to dealing with, complex diseases such as cancer. Though this project began to have minor influences on health care in the late 1990s, this sequencing would not have a real impact until its completion in the following decade (Hood & Rowen, 2013).

New policy development also impacted health care in the 1990s. According to Andreoli (1992a), the national movement towards total quality management (TQM) primarily guided these polices. The

Joint Commission on the Accreditation of Health Care Organization (JCAHO), who had changed its focus from quality assurance and reactive interventions to quality improvement and proactive interventions, fostered and enforced the TQM movement. Under the TQM system, health care facilities would "define and streamline production processes" in order to reduce waste, improve performance, and provide the highest level of customer satisfaction (Andreoli, 1992a, p. 72).

The first example of these improvement-oriented policies is the Patient Self-Determination Act, which lawmakers passed in 1990. The Patient Self-Determination Act is an amendment to Medicare and Medicaid law that requires hospitals to inquire about and encourage patients' use of advanced directives for health care, to include medical power of attorney and the living will (Sabatino, 2010). Increased utilization of advanced directives under this policy aided in improving customer satisfaction of care by making sure that patients adequately communicated their wishes for health care with both loved ones and health care providers (Sabatino, 2010). Also released in 1990, the Occupational Safety and Health Administration's (OSHA) Bloodborne Pathogens standards improved health care quality by protecting the health of both patients and their health care providers. OSHA's Bloodborne Pathogen standards included mandatory implementation of the Center for Disease Control's (CDC) Universal Precautions (1985), education on proper management of bloodborne pathogens, hard plastic containers to be used for needle disposal, and post-exposure treatment and follow-ups ("Controversies in Care," 1990). Although legally required, cost constraints prevented effective implementation of the OSHA Bloodborne Pathogen standards in the 1990s ("Controversies in Care," 1990).

The release of further policies impacted the quality of health care later in the decade. The first of these two policies was the Health Insurance Portability and Accountability Act (HIPPA), released in 1996. One of the main foci of HIPPA is health insurance regulation. HIPPA limits the use of pre-existing conditions to exclude a person from insurance coverage and maintains coverage for a set amount of time for individuals who lose their job or are transitioning to a new one (Bowers, 2001). A

second focus of HIPPA is the setting of standards for privacy of medical records. Protection of patient privacy became increasingly vital as patient confidentiality became increasingly at risk for compromise due to the easy accessibility of patient information through the digitalization of health care records (Bowers, 2001).

Another policy change implemented at this time was the 1997 Balanced Budget Act. The Balanced Budget Act made alterations in providers' payments in order to extend the "Medicare Hospital Insurance Trust Fund" (Bazzoli, Lindrooth, Romana, & Needleman, 2004, p. 411). Payment changes made within the Balanced Budget Act also supplemented the cost-reducing efforts of the prospective payment system put in place by Medicare in the 1980s. Moreover, the Balanced Budget Act aided in increasing utilization of the TQM philosophy by forcing providers to reduce waste and improve efficiency in order to minimize costs to fit under the new payment system (Bazzoli et al., 2004).

Changes in Nursing Roles. Research throughout the history of nursing has emphasized the great impact nursing care has had on patient outcomes. A study conducted by Evans, Martin, and Winslow (1998) reinforced this prior research. In the study, the researchers' analysis of a monthly survey taken by 1,455 patients in an inpatient acute care facility identified that the nursing care a patient received primarily determined the patient's overall satisfaction with his/her hospital stay. Outside of this, no other one determinant appeared to be more influential than another (Evans et al., 1998). Therefore, changes to nursing roles in the 1990s focused on clarifying and solidifying how the nurse fits into the health care team.

One major aspect of this was the development of differentiated nursing practice models. Miller et al. (2002) defined these models as an outline of nursing responsibilities at each of the three primary levels of education in nursing practice: associates, bachelors, and masters. A benefit that comes from these nursing practice models is better care efficiency. Care efficiency increases by clarifying the nurse's role at each of these education levels, minimizing repetition of care. Nursing practice models

also ensure that nurses are involved in patient care across the continuum, which, as stated above, improves patient outcomes (Miller et al., 2002).

The enhancement of the nurse's role as a delegator of care was another way that nurses solidified their role in the health care team. Andreoli (1992b) identified that the need for better care delegation by RNs arose as a result of the expansion of the scope of nursing practice over the preceding decades. The expansion significantly increased the workload of nurses so much so that the quality of patient care by RNs began to suffer as a result. In response, nurses increasingly identified and assigned tasks that did not require direct administration by the RN, like taking vitals and feeding the patient, to non-RN personnel, such as LVNs and patient care technicians (PCTs). Delegation of this care allowed the RN to have increased focus on more critical aspects, such as assessments or medication administration, and general management of the patient's care. Increased focus by the RN on these more critical tasks in turn improves decision-making and reduces overall health care costs (Andreoli, 1992b). However, in order to streamline this process, Andreoli (1992b) recommends further education of new nurses on identifying which tasks are appropriate to delegate to non-RN personnel. The author further recommends educating nursing students on the fact that they, as the RN, are still responsible for the patient's outcomes, even though another health care provider is administering their patient's care (Andreoli, 1992b).

Changes in nursing education also increased the clarity of the nurse's role in the health care system. Introduction of interprofessional education into nursing curricula played a large part in this change. Miller et al. (2002) states that the purpose of incorporating interprofessional curricula into nursing education is to broaden the nurse's understanding of various professions' roles and responsibilities as well as to improve interprofessional collaboration in the workplace. Interprofessional education allows nurses to have a more holistic understanding of where they fit into patient care as well as how they can work better with other care providers to improve the overall quality of patient care. Unfortunately, the shortage of nursing faculty hindered this improvement. A decline in nursing

enrollment for the first time in decades made the impact of the shortage of nursing faculty evident. Compounded with the aging of the nursing workforce, the ever-present shortage of nurses began to spike (Miller et al., 2002).

Introduction of the post-graduate residency also had the potential to help combat the negative effects of the aging workforce and nursing faculty shortage. Miller et al. (2002) described these residencies as additional training and mentorship of a graduate nurse within a health care facility. In exchange, the new nurse signed a contract developed by the employer with a commitment to work at the facility for a set amount of time, typically two to three years. Designed to ease the transition from nursing school graduate to RN, nurse residencies increased the recruitment, commitment, and retention of nurses. Additionally, residencies provided new nurses with a better understanding and real-life application of how they fit into the health care system (Miller et al., 2002).

Summary. Developments in health care in the 1990s pushed nurses to further their role as advocates. Nurses' advocacy role eased slightly with the passing of the Patient Self-Determination Act by providing nurses grounds to push for legal documentation and enactment of a patient's wishes at the end of life. However, nurses still had to fight for their patient's psychological needs at the end of life, to include solidifying their patient's understanding of the disease process, addressing their spiritual preferences, and discussing financial implications. Advanced directives do not address the psychological needs during the end of life, which are aspects of care often neglected by other care providers. The neglect in psychological care by other providers required nurses to continue to educate and advocate for their patients in these areas. Additionally, while advanced directives promote documentation of end-of-life wishes, they do not require patients to have conversations with their health care provider or loved ones about these decisions. The lack of end-of-life discussions with health care providers and/or loved ones prevented the accurate implementation of patient desires when serious illness and/or end-of-life care is necessary, resulting in overall patient dissatisfaction. Nurses worked to prevent this

dissatisfaction with care by encouraging patients to have these conversations and even facilitating the conversations with health care providers or loved ones when necessary as another way to advocate for their patient to receive their desired end-of-life care.

Changes in health care also impacted the nurse's role as an advocate for him/herself. OSHA's Bloodborne Pathogen standards received a lot of pushback from the medical community largely as a result of the cost of implementation ("Controversies in Care," 1990). However, while the overall medical community pushed back, nurses were OSHA's biggest advocates. With an estimated 12-18,000 nurses infected with Hepatitis B each year, one of the diseases that OSHA's new standards could prevent, nurses provided numerous testimonials on the impact of Hepatitis B on their lives and fought for implementation of OSHA standards ("Controversies in Care," 1990). Though these nurses' testimonials did not solve costs issues, they did lessen the overall pushback by identifying the importance of implementation of these standards. The testimonials also helped prevent nurses from acquiring these diseases in the future by making gloving as routine as vital signs ("Controversies in Care," 1990).

However, the nursing profession still needed to make changes in certain areas of nursing practice in order to stay on track with the changes in health care. One of these areas was caring for patients with Human Immunodeficiency Virus (HIV). Although nurses proved to be great advocates for themselves when infected with a bloodborne disease, there was still a large stigma against caring for patients with such illnesses, namely those with HIV. Reduction of this stigmatization is critical as HIV had an increasing incidence in patients throughout the 1990s (Downes, 1991). Increasing incidence of patients with HIV necessitated the need for nurses to reflect on their professional ethical responsibility to uphold the core nursing value of social justice. Social justice, in terms of caring for patients with HIV, means that all nurses should care for these patients just like they would care for any other patient and serve as a resource for compassion and advocacy against any maltreatment.

As patient populations in acute care facilities increase and the nursing shortage worsens, nurses also need to advocate for improved staffing ratios. Inadequate staffing ratios result in nurses having a greater than optimal patient load, which negatively impacts patient outcomes (Evans et al., 1998). Though discussing staffing ratios with administrators could aid in the improvement, the best solution to improve staffing ratios would be to increase the overall population of RNs in the United States. Achievement of an increased number of RNs in the workforce can occur in multiple ways. The first method would be to reach out and promote the profession to prospective nursing students of high school age. Reaching out to these students would increase application to and enrollment in nursing education programs, which would ultimately expand the nursing workforce. Growing the number of nurse educators through the encouragement of RNs to seek higher education degrees would also increase the nursing workforce. Increasing the number of nurse educators allows for growth in the nursing workforce by providing more opportunities for students to receive an education in nursing practice. Expanding and improving nurse residencies is another beneficial means to increase the number of nurses in the workforce. Improvements in nurse residency programs create an optimal way to smooth the transition from nursing school to the workforce, resulting in the retention of a greater number of nurses. Additionally, advocating for adoption of hospital policies that promote a more positive and productive workplace for nurses, such as facilities with Magnet certification have, would allow for growth in the nursing workforce by creating more environments in which nurses want to start and stay working at.

2000-2009

Changes in Health Care. In 1999, the IOM reported that anywhere from 44,000 to 98,000 deaths each year were attributable to medical errors, which amounts to more deaths than those due to breast cancer, Acquired Immunodeficiency Syndrome (AIDS), or motor vehicle accidents (Quigley, 2003). The IOM also noted that medical errors were costing the United States between 17 and 29 billion dollars each year (Quigley, 2003). Recognition of the large-scale problem of medical errors led the IOM

to conduct research in order to find the root cause of such mistakes. Following their analysis, the IOM reported that, unlike what researchers previously thought, these errors were due to system failures rather than individual shortcomings. Based on these findings, the IOM made suggestions in its' report on how to improve systems of care, such as developing new error reporting systems on both the local and national levels (Quigley, 2003). All of this transpired in order to promote patient safety, as many new policies would do throughout the 2000s.

In response to this first IOM report, one of the measures implemented was the Leapfrog Group. Former in 2000, the Leapfrog Group is a non-profit alliance of major employers, including Fortune 500 companies, who agreed to make changes on how they purchase health care (The Leapfrog Group, 2018). The goal of this group was to improve the quality and safety of patient care by increasing the transparency of health care information. In order to achieve their goal, the Leapfrog Group paired with experts in health care and patient safety to develop a survey for hospitals to complete. The Leapfrog Group's first survey, sent in 2001 to approximately 500 health care facilities, queried for the use of computerized physician order entry, adequate staffing of intensive care units, to include physicians trained in critical care, and the capability of the facility and its staff to perform certain high-risk surgical procedures safely. Two hundred hospitals responded to the Leapfrog Group's survey. The Leapfrog Group compiled these responses and published the findings on their website, a location that gives both employers and individual health care consumers the ability to view the information (The Leapfrog Group, 2018).

Quigley (2003) noted that access to this information helped health care on both an individual and a national level. On an individual level, Americans felt more in control and had the ability to be smarter purchasers of health care. On a national level, the health care environment experienced progress towards better quality care as increased consumer use of facilities with superior patient safety policies in place promoted improvements in facilities with care processes not quite up to par with quality standards.

Additionally, the Leapfrog Group had an increase in membership over the next few years in response to the public's positive reception of this process, including the addition of an established a partnership with JCAHO. The expansion in the number of participants in the Leapfrog Group's subsequent surveys also indicated employers' and consumers' positive reception of the content and availability of the survey data (Quigley, 2003).

The second IOM report, released in 2001, emphasized that improving the delivery of health care in the areas of "patient safety, patient-centered care, efficiency, effectiveness, timeliness, and equity" could positively impact patient outcomes (Quigley, 2003). Findings from the IOM report prompted JCAHO to release new facility standards that promoted a "culture of safety." One way in which they did so was to standardize the review of sentinel events. JCAHO promoted a process known as "root cause analysis" to review these sentinel events. A root cause analysis identifies specific actions leading up to the sentinel event and requires hospitals to note the causes and to develop ways to improve the health system in order to prevent further sentinel events. Root cause analysis also helped promote the premise of the 1999 IOM report that medical errors were due to systemic rather than individual failures (Quigley, 2003).

JCAHO reinforced their goal of creating a "culture of safety" with the release of their first six National Patient Safety Goals in 2002. The organization developed these goals by identifying and targeting areas in which medical errors were common. JCAHO's first six National Patient Safety goals consisted of the following: accurate patient identification, effective communication, elimination of wrong-site surgery, and safe use of high-alert medication, infusion pumps, and clinical alarms (Quigley, 2003). Achievement of these goals would serve to improve patient safety by eliminating situations that have a high-risk of causing medical error.

Another major step in health care in the 2000s was advancements in the use of technology in clinical practice. One example of this was the growth in the use of telehealth services. Mass

urbanization of providers made access to health care increasingly difficult for patients in rural areas, especially for those seeking specialized care. Telehealth services improve patient access to specialized care services by utilizing phone calls or internet chats to connect urban providers to patients that are in more remote areas. Patients with better access to health care services are more likely to utilize them, making telehealth an opportunity for providers to improve the life expectancy and overall quality of life of rural patients (Russo, 2001).

Introduction of the Electronic Medication Administration Record (eMAR) and the Bedside Medication Verification (BMV) into hospitals was another technological advancement that occurred in the 2000s. Hunter (2011) describes the eMAR as an addition to the EHR system that provides a single location for listing and documenting administration of scheduled and as-needed medications. Nurses can document ordered medications by using the BMV system. The BMV system allows nurses to document medication administration through the scanning of the newly applied barcodes on the medication packaging at the bedside. Provider use of the barcoding system has been shown to decrease medication errors by 60-97% percent, which would contribute greatly to the decline in medical errors overall (Hunter, 2011). Unfortunately, by the end of the 2000s, only 10-12% of hospitals had a barcoding system in place, leaving medication errors to continue to be a large contributor to overall medical errors at this time (Hunter, 2011).

The completion of the Human Genome Project in 2003 also influenced health care. Finalization of the human genome allowed researchers to pinpoint the location of approximately 100 new disease-causing genes, including those for diabetes, cancer, and Alzheimer's Disease (Bashyam & Hasnain, 2003). Identification of the specific locations of the disease-causing genes helped improve diagnostic measures for these diseases as well as allowing for earlier recognition of a genetic predisposition to these conditions (Bashyam & Hasnain, 2003). Completion of the genome also allowed researchers to discover several new targets for drugs. New drug targets would allow for the development of custom

drugs and the overall growth of pharmacogenomics as a way to provide more effective patient-specific treatments (Bashyam & Hasnain, 2003). Although these mark great developments in the field of genetic medicine, the completion of the human genome project would continue to make a great impact on health care into the 2010s with the hopes of finding better treatments and potentially cures for the vast amount of existing diseases.

Changes in Nursing Roles. Stone, Clarke, Cimiotti, and Correa-de-Araujo (2004) presented data in their report that supported the premise that inadequate nurse staffing and poor working conditions contributed significantly to the incidence of medical errors and work-related injuries for nurses. The authors of this article cited both the IOM report, *Keeping Patients Safe, Transforming the Work Environment of Nurses*, and an evidence-based practice report conducted by Hickman, Severance, and Feldstein (2003), *The effect of health care working conditions on patient safety*, within the piece in order to support their argument. Nurses have had to take on an increased patient load and work more overtime hours in order to compensate for the nursing shortage and increase in patient census, even though they have self-reported a tendency to make more mistakes when having to work more than 12 hours in a shift or 40 hours in a week. Errors that can occur due to overworked nursing staff include more falls and medication errors, greater spread of infection, and an increased amount of patient deaths. Additionally, the report by Hickman, Severance, & Feldstein (2003), backed by the Agency for Healthcare Quality and Research, found that the lower the number of nurses on staff during a shift, the higher the incidence of poor patient outcomes. Despite the above statistics and the authors of the IOM report stating that “nursing is inseparably linked to patient safety,” health care systems have done little to improve working conditions (Stone et al., 2004, p.1985). Lack of initiatives by the health care system to improve working conditions is the main reason why nurses in the 2000s focused on self-advocacy and efforts to positively change their work environment.

Initiatives spearheaded by the ANA served as the primary ways in which nurses improved their role as self-advocates. Foley (2004) discussed the first initiative by the ANA: The Needle Stick Safety and Prevention Act, an amendment to the OSHA Bloodborne Pathogen Standard of 1990. Implemented into practice in 2001, this law requires hospitals to use safety needles, develop needle stick prevention plans, ensure all staff members have up-to-date vaccinations, provide post-exposure treatment and follow-up, and keep a record of all sharps-related injuries. The ANA's goal with this law is to further protect nurses against bloodborne illnesses, since research had revealed that the use of safety needles reduced percutaneous injuries by 51% (Foley, 2004). Also, as a direct result of decreasing the amount of needle-stick injuries and nurses incapacitated by bloodborne illnesses, the act helps improve patient safety by increasing the number of nurses available to work (Foley, 2004).

Development of the National Database of Nursing-Sensitive Quality Indicators (NDNQI) program was the second of the ANA's initiatives to directly improve the nursing work environment. Quigley (2003) stated that prior to the implementation of the NDNQI, no all-inclusive or organized system to monitor patient safety existed in nursing. The NDNQI initiative joined the efforts of the Leapfrog Group and JCAHO to improve patient safety after the release of the IOM reports in 1999 and 2001 (Quigley, 2003). Montalvo (2007) describes the NDNQI program as a national database that provides quarterly and annual research reports of over 1,000 hospitals' achievements of the ANA's quality indicators on a unit level. Quality indicators monitor the structure, process, and outcomes of nursing units to include nursing hours, patient falls, and the amount of nosocomial infections. Data from these reports have provided key evidence in supplying researchers with the nursing unit characteristics that have a positive impact on patient outcomes. Evidence from NDNQI reports has consequently improved nursing practice through facilities providing additional education, improving nursing staffing, and changing nursing processes to those that reduce adverse patient events (Montalvo, 2007).

The third initiative used by the ANA to advocate for nurses was the "Handle with Care" campaign that began in September 2003. Trossman (2004) states that this campaign stemmed from the ANA's position statement, *The Elimination of Manual Patient Handling to Prevent Work-Related Musculoskeletal Disorders*, released in June of 2003, which sought to disprove the myth that body mechanics alone can prevent all musculoskeletal injuries in nurses. The "Handle with Care" movement teaches nurses the proper techniques to use patient handling technology as well as methods to increase its use in hospitals. Use of this campaign is vital because the risk for musculoskeletal injuries is higher in the nursing profession than it is in a majority of other professions in the United States. Prevalence of these injuries in nurses is evident in the 52% of nurses who state that they have chronic back pain and the 12% of nurses who have to end their nursing career because of a back injury (Trossman, 2004). The ANA stepped in to advocate for the safety of their own profession, as well as that of their patients, since health care administrators had known these facts for years but had still not implemented any change. Utilization of this campaign not only improves patient safety by reducing falls and friction but also protects nurses from debilitating injuries that could prevent them from working and contributing to the already sparse nursing workforce (Trossman, 2004).

Outside of expanding their role as self-advocates, nurses also further developed their role as researchers. Nursing professionals' integration of evidence-based practice (EBP) into both nursing practice and nursing education served as the primary mechanism of nurses' development of their role as researchers. Initially referred to as "evidence-based medicine," evidence-based practice is the merging of clinical expertise, patient preferences, and the best available evidence from research to develop the best processes of care. Evidence-based practice has been around in minor capacities since the origin of modern nursing with Florence Nightingale, but did not come to the forefront of attention by the medical community until 1992 (Dunbar-Jacob, 2005).

Dunbar-Jacob (2005) states that one of the contributing factors to the rise of EBP was the endorsement of McMaster University. Professionals at the university encouraged the use of EBP because it improves both clinical decision-making and patient outcomes. Though the use of evidence-based practice began to rise after this endorsement, widespread incorporation of EBP into health care did not come until well into the 2000s. Larger inclusion of evidence-based practice into health care came as a result of the two IOM reports in 2001 and 2003. The 2001 report aimed at prompting the general health care environment to utilize evidence-based procedures in order to improve practice, while the 2003 report targeted institutions educating future health care providers to include education on EBP in their undergraduate curriculum. Since the IOM reports, hospitals have actively encouraged nurses and other health care providers to integrate evidence-based procedures into their practice and nursing schools have worked to incorporate teaching on EBP into at least one of their courses. Additionally, the rise in use of evidence-based practice has been key in improving the quality of the health care and reducing adverse patient events (Dunbar-Jacob, 2005).

Summary. Technological and intellectual developments in health care in the 2000s had a great impact on nursing care. One of these developments was the Human Genome Project. Completion of the Human Genome Project expanded the possibilities of genetic testing, increasing both the diagnosis and prediction of certain disorders. With this being a relatively new phenomenon, patients were often concerned about the process and felt as if it were an invasion of privacy to have the literal foundation of their being put on display. Patients also had to contemplate if the testing was worth the risk of discovering a genetic predisposition for a disorder to come later in life and consequently developing a fear for the future. Recognizing that this could be a daunting decision for their patients, nurses stepped in to ease the process. In this capacity, nurses served as educators, listening ears, and ethical guides in order to help patients determine if genetic testing was the right step for their care.

Integration of eMAR into patient care was another technological advancement in the 2000s that greatly impacted nursing practice. Combined with EHR, the use of EMAR in practice allowed nurses to have quicker and easier access to a vast amount of patient data and improved the safety of medication administration. The alerts, error notifications, and verification warnings serve as checks on a nurse's decision making, greatly decreasing medication errors and improving patient safety. However, use of the EMAR was not without its faults. Implementation of this system was costly and training of nursing staff prior to implementation of these technologies was poor. Nurses were also becoming largely dependent on this technology, failing to realize the system could not eliminate all errors without the vigilant attentiveness of a trained professional to assess things, such as the five rights of medication administration (right patient, dose, medication, route, and time). Additionally, the use of EMAR and other technology was necessitating a greater amount of better-quality nursing care that was currently unavailable to be delivered as a result of the nursing shortage.

Carrying over from the 1990s, the nursing shortage and consequent large patient load continued to plague nurses in their ability to provide safe and quality care for patients. Budget cuts, aging of the nursing workforce, and the scarce number of nursing faculty and clinical sites all contributed significantly to exacerbating the nursing shortage and reducing the quality of patient care. Reduced availability of clinical sites is largely due to the stricter quality guidelines hospitals have put in place to improve patient outcomes, limiting the opportunities for student participation in patient care. While nurses may not have the power or desire to alter these quality guidelines, the nursing profession has the opportunity to expand the nursing workforce by continuing its efforts to find ways to increase the number of nursing faculty and undergraduate enrollees. Increasing the number of nursing faculty gives the nursing community the ability to improve both the nursing shortage and health care environment overall. Once the nursing profession has addressed this issue, the profession should turn its focus towards improving the deficits in the education of nurses both during nursing school and in practice.

More in-depth and widespread incorporation of evidence-based practice techniques into nursing care and the curricula of future health care professionals needs to occur as well. Nursing students are gaining a vast amount of knowledge about EBP in school but need better teaching on how to translate what they learn about EBP in school into their nursing practice. EBP can also be better incorporated into nursing care by teaching nurses already in practice, who may not have had education on EBP in their pre-licensure curricula, how to incorporate these techniques into their care.

Additionally, nursing students and nurses in practice need better education on the technology that has been incorporated into practice. The best method to do so would be for instructors to utilize both classroom and hands-on teaching methods in educating nursing students or practicing nurses. Repeated exposure to and practice with new technology enables nurses to better utilize this technology in practice, which contributes to better patient outcomes. Along with this, nurses need to be better prepared for a patient population that has a greater amount of knowledge and investment in their care as a result of the increasing accessibility of medical information online.

2010-2018

Changes in Health Care. In the early years of the current decade (2010-2018), health care in the United States was characterized by an environment with fragmented, specialized care and a limited number of primary care providers. Also, gaps in care existed for people in low-income and rural populations. In addition, a growing older population, afflicted with largely preventable chronic illnesses, forced providers to learn and adopt a new way to care for patients (Salmond & Echevarria, 2017). A combination of these factors fostered an environment with a lack of patient involvement in care, poor communication among providers, inadequate follow-ups, and poor continuity of care (Hirschman, Shaid, McCauley, Pauly, & Naylor, 2015). Hirschman et al. (2015) also noted that these gaps in our health care system provided unnecessary costs for the federal government, as a result of increased

hospitalizations and emergency room encounters that would be preventable if a more cohesive health care environment existed.

Officials in the United States also began to take note of the astounding opioid epidemic occurring in the country. Although Americans only constitute 4.6% of the world's population, they consume almost 80% of the global supply of opioids and 99% of the total supply of hydrocodone (Blozen, 2013). In 2010, over 12 million citizens of the United States had taken a prescribed painkiller for a reason other than its prescribed purpose (Blozen, 2013). Exemplified by the fact that 91 people in the United States die from an overdose each day, health care and/or government officials needed to address the opioid crisis (Painter, 2017).

Former President Barack Obama championed and passed the Patient Protection and Affordable Care Act, commonly referred to as Obamacare or the Affordable Care Act (ACA), in order to address these issues. The overarching goal of the ACA was to bridge the gaps in care and help transform the health care environment from one that is fragmented, patient-exclusive, and fee-for-service based to an environment that is team-centered, patient-inclusive, and provides payments based on quality (Salmond & Echevarria, 2017). A major provision of this law was insurance reform. Insurance reform under the ACA increased both the amount of services covered and the number of people with health insurance. The ACA expanded coverage by broadening the definition of those eligible for Medicaid and requiring private health care insurance companies to offer coverage to all persons regardless of pre-existing health conditions. The insurance reform provision of the ACA served to reduce the disparities in health care for low-income populations by decreasing the number of persons without health insurance by almost 50% (Salmond & Echevarria, 2017).

Outside of increasing insurance coverage, the Affordable Care Act also provided multiple measures to establish a health care environment focused on quality improvement. One of these measures was the promotion of the use of new payment systems. The first of these new payment modalities is the

Value Based Purchasing (VBP) system. Salmond and Echevarria (2017) discussed VBP as a pay for performance system in which insurers, like Medicare, establish payment incentive programs based on facilities meeting set health care quality expectations rather than being reimbursed for specified services, such as procedures or laboratory tests. The VBP system encourages providers to deliver high-quality care that is "safe, timely, efficient, effective, equitable, and patient-centered" (Salmond & Echevarria, 2017, p.17).

Another new payment system endorsed by the ACA is bundled payments. Bundled payments involve paying providers a single lump sum to cover the average costs of care for a specific medical condition or surgical procedure, such as a knee replacement. The single payment includes coverage of pre- and post-procedure care, as well the procedure itself. Supporters of the ACA encourage utilization of the bundled payment system because it promotes the practice of quality, timely, and cost-efficient care (Salmond & Echevarria, 2017).

The ACA implemented another quality measure known as the Hospital Acquired Conditions Reduction Program. Salmond and Echevarria (2017) stated that the Hospital Acquired Conditions Reduction Program is a system that monitors quarterly hospital-acquired condition (HAC) scores and penalizes facilities who are high scoring in critical HAC areas. The HAC Reduction Program joined the Centers for Medicare and Medicaid Services' (CMS) removal of reimbursements to hospitals for hospital-acquired conditions in 2008 as a means of achieving better quality care. Utilization of the HAC Reduction Program also encourages health care facilities to institute measures that prevent adverse patient outcomes secondary to HACs because these measures reduce health care costs. Another CMS measure used to improve quality is the Hospital Readmissions Reduction Program, which functions in a similar fashion to the Hospital Acquired Conditions Reduction Program. The CMS, through the Hospital Readmissions Reduction Program, reduces a hospital's payment if the facility has a high 30-day readmission rate. The Hospital Readmissions Reduction Program promotes better care quality and

coordination in order to reduce readmission rates and foster more positive patient outcomes (Salmond & Echevarria, 2017).

The Affordable Care Act further influenced improvements in the health care environment by supporting the implementation of models of health care delivery already in practice. One model of health care delivery encouraged by the ACA was the expansion of primary health care. Salmond and Echevarria (2017) noted that a health care system based on the primary care model emphasizes prevention and health promotion rather than focusing solely on the improvement of treatment modalities. Additionally, the primary health care model, under the ACA, pushes for continuous, comprehensive, and team-based care and fosters participation by community members. A second model of care that the Affordable Care Act helps promote is Accountable Care Organizations (ACOs). ACOs are groups of health care organizations and care providers committed to providing quality care to Medicare patients. Providers involved in ACOs ensure that their patients receive the correct type of care with no duplications in services. The ACO system not only reduces medical errors but is also predicted to save Medicare up to 940 million dollars (Salmond & Echevarria, 2017).

Patient-Centered Medical Homes (PCMHs) is a third type of care model encouraged in the Affordable Care Act. PCMHs aren't necessarily a physical place, but rather a philosophical approach aiming to improve the delivery of primary care services. Any facility under the PCMH umbrella must deliver coordinated, comprehensive, patient-centered care with increased accessibility of services in order to ensure quality care and patient safety. Although the ACA did not enforce these care models, clarification of their definitions and promotion of them on a national level helped foster an increase in the utilization of these practice models nationwide. The three above care models were also vital in emphasizing that health care is not just about the care itself, but also the physical and social environment in which care occurs (Salmond & Echevarria, 2017).

The government utilized the Affordable Care Act as one way to address the current opioid crisis. The ACA's health insurance reform measures addressed the opioid epidemic by requiring insurance companies to include coverage for addiction-related drug therapy (Painter, 2017). Painter (2017) noted that the ACA's mandate requiring insurance companies to cover addiction, along with the efforts of the Mental Health Parity and Addiction Equity Act of 2008, provides over 10 million Americans the opportunity to seek treatment for drug addiction. The Mental Health Parity and Addiction Equity Act also helped curb the opioid epidemic by creating programs on a state and community level to promote health and prevention of mental illness, to include addiction. Outside of these two polices, Former President Obama delegated 133 million dollars of the 2016 Fiscal Year budget to promote further measures to prevent and treat opioid addiction and to address any issues that are caused by this crisis. All of these initiatives can facilitate the Department of Health and Human Service's goals of safer prescribing, increased use of Naloxone, and further incorporation of medication assisted treatment, which combines the use of medication and psychotherapy to treat addiction (Painter, 2017).

Changes in Nursing Roles. The primary focus of nursing in the current decade is improving the education of undergraduate nurses in order to expand and solidify the role of the nurse within the health care system. Motivation for this focus came largely as a result of the 2011 IOM report: "The Future of Nursing: Leading Change, Advancing Health Care" (Institute of Medicine, 2011). The IOM's report identified four key areas in which nurses can improve both their individual practice and the structure of the health care system in order to enhance patient outcomes. The four key areas included 1) allowing nurses to deliver care to the "full extent of their education", 2) refining nursing education in order to "promote seamless academic progression" of nurses to higher levels of nursing education, 3) allowing nurses to be "full partners" with all other health care professionals in order to remodel the United States health care system, and 4) improving data collection and sharing in order to improve workforce organization and policy development (Institute of Medicine, 2011, p.29). The IOM also recommended

that 80% of registered nurses (RNs) be educated at the baccalaureate level by the year 2020 (Institute of Medicine, 2011). The push for an increase in baccalaureate level nurses is largely based on a multitude of research conducted by various nurse scientists, such as Dr. Linda Aiken, that proves patient mortality decreases and patient outcomes improve the higher the level of education of the RN (O'Connor, 2012). The health care community revealed a push for both expansion and improvement of nursing programs through these two areas of focus in the IOM report.

One way in which nursing education programs made improvements was through the growth of the Quality and Safety Education for Nurses (QSEN) program. Dolansky and Moore (2013) stated that nursing leaders developed the QSEN guidelines in 2005 in response to the IOM's appeal in their 2001 and 2003 reports to improve the quality and safety of the health care system. The initiative presents key competencies that nurse educators should model their curriculum around in order to aid in the advancement of both the quality and safety of health care. Competencies of the QSEN initiative include patient-centered care, teamwork and collaboration, evidence-based practice, safety, quality improvement, and informatics. QSEN was introduced in phases from its inception until it was deemed ready for widespread use in nursing education in the early 2010s. Nearly 10 years after its initial incorporation into nursing education, the QSEN initiative has enhanced rapid progress in the safety and quality of health care, something largely unseen before its development in 2005 (Dolansky & Moore, 2013).

Nursing education also advanced monumentally through increased utilization of simulation. The National Council of State Boards of Nursing (NCSBN) define clinical simulation as an activity modeling a clinical situation through the use of highly advanced manikins or actors, skills-based scenarios, and student role-playing (Sofer, 2018). Simulation allows students to refine their classroom-taught skills in a safe environment where both nursing faculty and peers can provide useful feedback to improve students' clinical practice. A rise in simulation use came in part due to the declining number of

clinical sites available in the prior decade (2000s) and the climbing number of undergraduate nursing programs in the current decade. Use of this technology was so prevalent that 87% of respondents in a NCSBN study utilized advanced manikins in their curricula in 2010 (Sofer, 2018). A NCSBN study published in 2014 on the use of simulation also played a significant role in the growth of simulation (Hayden, Smiley, Alexander, Kardong-Edgren, & Jeffries, 2014). Utilizing scores from the Assessment Technologies Institutes' ATI RN Comprehensive Predictor® 2010, NCSBN found that students with 25% or 50% of clinical curriculum based in simulation had no statistically significant difference in clinical knowledge, p=0.478, than students in a traditional clinical curriculum with no simulation (Hayden et al., 2014, p.17). Researchers also found, based on global assessments by clinical instructors or preceptors, that no statistically significant difference, p= 0.688, existed in clinical competency or readiness for practice between the groups receiving 25% or 50% simulation and the students who had not participated in simulation (Hayden et al. 2014, p.18). Additionally, when simulation was performed according to the NCSBN's Simulation Guidelines for Prelicensure Nursing Education Programs, developed in 2015, nursing students' ability to effectively make decisions, solve problems, and work in a team improved (Sofer, 2018). Simulation and manikins have also become useful as continuing education opportunities for practicing nurses in hospital settings (Sofer, 2018).

The improvement of interprofessional education (IPE) programs further enhanced nursing education. Although interprofessional education had been introduced into nursing curricula back in the 1990s, entering the 2010s, IPE program initiatives were minimal and included only basic content. Moss, Seifert, and O'Sullivan (2016) reported this deficiency of IPE in nursing curricula as one of the reasons that the American Association of Colleges of Nursing (AACN) and five other health care education organizations came together to form the Interprofessional Educational Collaborative (IPEC) in 2009. The purpose of this collaboration was to monitor and support educational institutions in their efforts to advance the use of interprofessional education in their curriculum. In their 2011 core competencies, the

IPEC promoted teaching students the roles and responsibilities of various health care professionals, the basic practices of working in a team, and how best to communicate with team members. As a result, IPE today has grown to include both classroom education on the roles of other providers in the health care system and situations where future providers from various disciplines interact to solve patient scenarios. Progress in the IPE structure not only facilitates a more positive working environment but also promotes better patient outcomes (Moss, Seifert, & O'Sullivan, 2016).

Evidence-based practice is another area in which nursing improved in the current decade. The impact of EBP on nursing practice is largely seen outside of the classroom. Approximately 10 years following the initial introduction of EBP into nursing curricula, EBP is now increasingly utilized in practice due to an increased number of EBP-educated nurses entering the workforce. Nurses are the most receptive and provide advocacy for its incorporation into their practice even though EBP has already been implemented into the practice of many health care disciplines. The Magnet Recognition Program, developed by the American Academy of Nursing, is another key factor aiding in the incorporation of EBP into professional practice (Stevens, 2013). Stevens (2013) stated that the *2011 IOM Future of Nursing Report*, in which the IOM advocated for the transfer of research-acquired knowledge into nursing practice, was also vital in advancing the use of EBP in professional practice. Additionally, new evidence forms, systematic reviews, and better interprofessional collaboration make the use of research in practice through EBP more enticing. Growth in the use of EBP has improved both the quality and safety of patient experienced by increasing incorporation of research-based interventions into patient care (Stevens, 2013).

Summary. The Affordable Care Act had a large impact on nursing practice and health care overall. The ACA's expansion of insurance coverage resulted in a rise in the number of persons seeking medical care and an increase in patients receiving inpatient care, placing further stress on an already sparse nursing workforce. Currently, nurses must take on an increased patient workload, up to five

patients on day shifts and six on night shifts, in order to keep up with the patient influx into the hospital system. Increasing patient load is not a safe way to provide nursing care because greater nurse to patient ratios ultimately lead to a decline in quality patient care. The resulting decline in quality of patient care is counterintuitive to the ACA and many other prior efforts to improve care quality, necessitating that the nursing community bolster its efforts to increase the nursing workforce.

Although the ACA increased stress on the nursing workforce with the expansion of insurance coverage, it also opened up opportunities for nurses to improve the quality of patient care through the use of evidence-based practice interventions. The ACA's emphasis on improving care quality through monetary incentives or penalties, such as Value-Based Purchasing and the Hospital Acquired Conditions Reduction Program, forced hospitals to find methods to reduce costs and improve quality of care. Nurses championed EBP measures by providing research-based interventions that reduced cost, enhanced care quality, and improved patient outcomes. Despite the increase in EBP interventions, the lack of both time and overall organizational support for these measures hindered further adoption of EBP, especially in rural areas or free-standing hospitals.

The opiate crisis also impacted nursing practice (Painter, 2017). Recognition of a nationwide crisis necessitated stricter control on administration of opiate medication and required nurses to face frequent ethical dilemmas surrounding appropriate administration of these medications. The opioid epidemic also required nurses to exercise their core value of social justice in providing pain management to those with an opioid addiction. Patients with an opioid addiction, as all patients with an addiction, need the compassion and lack of judgement a nurse should always utilize while providing care, but even more so at a time when their addiction is at its peak of national publicity and stigmatization. Regardless of their addiction to one of the most common pain management strategies in health care, these patients still feel pain and deserve their nurse to take their pain for what they say it is and treat it as such with whatever means the nurse deems necessary (Bernhofer, 2011).

Although great strides occurred in curricula improvements in nursing education, more work is still required before these areas are truly refined. One area in which these improvements need to be made is QSEN. QSEN principles have been well integrated into nursing education and then into individual nursing practice through recent graduates. However, further work is still needed at the systems level to utilize the QSEN principles to create a quality and safe environment for both patients and staff. Additionally, the newness of the expanding interprofessional curricula has impeded the transfer of positive interprofessional practices to the workplace. Further work needs to be done on strategies to smooth this transition, such as incorporating interprofessional work into in-service education. Finally, even though simulation has reduced the need for time at clinical sites, it does not wholly eliminate the need for them. A lack of clinical sites and insufficient amount of nursing faculty remain the top two hinderances for increasing the acceptance rate of nursing schools and ultimately increasing the nursing workforce.

Conclusion

Health care in the United States underwent significant changes between 1973-2018. Advancements in science and technology, which included completion of the Human Genome Project, refinement of life-prolonging procedures like organ transplantation, and the development of EHR and eMAR, opened the opportunity to extend patient's lifespans and provide a safer health care environment. Completion of the Human Genome Project allowed for earlier identification and treatment of diseases, as well as more effective drug therapies targeted to complement a patient's specific genes. The development of and improvements in life-sustaining procedures during this decade, like organ transplantation, gave patients of all ages the opportunity to live longer and more fulfilling lives. Integration of EHR and eMAR into health care over subsequent decades also had a tremendous impact on altering health care during this time. EHR permitted greater accessibility of patient information

across the spectrum of health care disciplines, while utilization of eMAR aided in reducing errors and improving patient outcomes during medication administration.

The structure of health care also evolved over the five decades discussed in this integrative review. Structural changes in health care began with provider specialization. Health care providers were increasingly honing in on one specialized area of care, providing deep insight into specific aspects of a patient's condition. However, this change left primary care providers, who addressed patients holistically, to become increasingly rare. Changes in provider demographics also encouraged the health care environment in the U.S. to continue focusing on tertiary interventions rather than the primary prevention interventions that other developed countries emphasize. Focus on tertiary over primary prevention leads to a health care environment that is not only more costly, but negatively impacts patient outcomes.

Another structural change in health care during this time was the growth of free-standing medical clinics, to include urgent care centers. More free-standing medical clinics allowed for easier access and increased utilization of health care services, but also created a segregated health care environment. Segregation of care, when compounded with rampant poor interprofessional communication, leads to duplication of care services and loss of vital patient information between care providers, ultimately racking up costs for patients and causing errors in patient care that have the potential to cause great harm. Fortunately, health care policy changes from 1973-2018 would come to address the problems in health care, including those caused by segregation and specialization of care.

Policy changes from 1973-2018 led to improvements in the health care environment. OSHA's Bloodborne Pathogens Standards and the CDC's Universal Precautions in the 1990s and the introduction of JCAHO's National Patient Safety Goals in the 2000s enhanced patient safety. Quality of health care increased with measures such as the total quality management philosophy in the 1990s and the Leapfrog Group initiative in the 2000s. Changes in health care policy also reinforced patient's rights.

In the 1990s, patients gained improved information confidentiality with HIPPA and more voice in care services with the Patient Self-Determination Act. Implementation of other policy measures helped to control rising health care costs, an issue that persisted throughout the decades addressed in this integrative review. Some of these measures included the introduction of HMOs in the 1970s and Medicare's change to a prospective payment system in the 1980s. However, no policy change would quite alter the health care environment like the ACA did in the 2010s. The ACA not only serves to increase accessibility and decrease costs of health care, but to also create an optimal health care environment that is focused on prevention, quality improvement, and more cohesive, patient-centered care.

Changes in the health care environment from 1973-2018 significantly impacted nursing practice. Specialization of care altered nursing practice by expanding the nurse's autonomy in patient care. Physicians and other health care providers often spend limited time with patients at the bedside. Coupled with the fact that providers are becoming increasingly focused on specific body systems, providers often miss key indicators of changes in a patient's condition that necessitate intervention. Nurses, as the care providers who spend the most time at the patient's bedside, are in a unique position to recognize these indicators and bridge the gap to keep providers informed about their patient's status. In order to do so, nurses needed a better method to monitor their patient's condition. The method chosen to fill this need was physical assessments, a skill previously confined to physicians and other advanced practice care providers. Once this skill was identified to be within the RN's scope of practice, institutions began incorporating physical assessment skills into pre-licensure curricula and nursing practice. Utilization of physical assessments in nursing practice increases the nurse's autonomy by allowing RNs to be able to independently identify pertinent patient problems based on assessment findings, implement needed nursing interventions, and coordinate patient care with the appropriate providers to meet the patient's needs. Additionally, specialization of other health care practitioners

inspired nurses to develop specialty certifications that serve as a marker of a nurse's proficiency in providing safe and effective care in a specified area, such as critical care or oncology.

Nurses also enhanced their advocacy skills as a result of the changes in health care. The Patient Self-Determination Act supports nurses' efforts to advocate for and meet their patient's needs and desires for care at the end of life. However, this policy only addressed physical patient care needs, not psychological care needs. Nurses must still actively practice their advocacy skills in order to ensure that patients' psychological care needs are also being met at the end of their life. Additionally, new patient-centered care models, promoted in the ACA, allow nurses to better advocate for patients and their loved ones to be involved in all health care decisions. Developments in knowledge and technology, which included EHR and genetic advancements, provided another area in which nurses could enhance their abilities in patient advocacy. Utilization of EHR allows for greater accessibility of patient information, but also places this highly sensitive data at risk for being compromised or accessed by inappropriate health care personnel. Nurses advocate for their patient's safety in this area by promoting and complying with the measures instituted with the implementation of HIPPA. In terms of growth in the knowledge and use of genetics, nurses address their patient's concerns with genetic testing by advocating for their patient's right to utilize or refuse genetic testing and to be in control of the depth of testing and the extent in which it is used to improve their own or others' care.

Initiatives to improve the safety and quality of health care, such as the Leapfrog Group and JCAHO's National Patient Safety Goals, motivated the nursing profession to develop its own primarily nursing-specific measures to achieve these goals. The ANA's monitoring and reporting on nursing unit quality indicators, using the National Database of Nursing Sensitive Quality Indicators (NDNQI) system, is one measure that nurses took to supplement general health policy methods to improve health care quality and safety. The ANA's amendment to OSHA's Bloodborne Pathogen Standards, The Needle Stick Safety and Prevention Act, provides a safer environment for nurses to work in, which

improves the quality of patient care. The American Academy of Nursing's Magnet certification, though developed prior to the Leapfrog Group and the National Patient Safety Goals, improved the quality of the work environment for nurses, which enables nurses to provide safer, more quality patient care. Nursing measures to improve the safety and quality of health care also extended to education. Incorporation of evidence-based practice techniques into pre-licensure education and nursing practice provide nurses with the tools needed to utilize care techniques that are safer for patients and improve the quality of patient outcomes. Finally, the introduction of interprofessional education into pre-licensure curricula facilitates a collaborative health care environment focused on the safety and needs of the patient.

Limitations

A limitation of this integrative review is that the articles utilized were primarily low-level evidence articles. The nature of this integrative review did not support the identification of high-level evidence articles in the literature, with limited experimental studies being found to support the topic. Another potential limitation of this integrative review was that it only included articles that were written in English. Use of English-only articles could have resulted in the exclusion of articles that might have been pertinent to this integrative review.

Implications for Nursing Practice

Completion of this integrative review gives professionals in the field of nursing a heightened understanding of how greatly changes in the health care environment can alter nursing practice. Even minor shifts in health care policy or in the health care environment can have tremendous impact on changing how nurses care for their patients, as is evidenced by the findings stated throughout this integrative review. Findings from this integrative review can also be used to gauge how responsive nurses have been to the changes in the health care environment. While there have been some areas that nurses have responded well to, such as health policy, in other areas, such as technological changes,

nurses have been slower to respond. Variances in responsiveness to health care changes may largely be a result of alignment of the changes with current nursing practice and ideals. For example, where recent health policy changes are geared towards safe, cohesive, and patient-centered health care, technological changes can lend themselves towards more impersonal and complex care that could jeopardize patient safety. Furthermore, establishing a better understanding of the vast changes in nursing practice over the past five decades highlights both the great strides that have occurred in nursing practice and the areas of nursing practice which could still be improved upon.

One area in which nursing can be improved in the future is in the education of nurses and nursing students on patient care technology. Rapid advancement of technology occurred both outside of and within health care throughout the five decades discussed in this integrative review. Technology is being incorporated into patient care at such a rapid pace that often nurses do not have the opportunity to learn about or use the technology until it is immediately needed for their patient's care. Nurses' inexperience with medical technology before using it in patient care situations can portray poor nurse competence in patient care techniques and reduce the positive impact that the technology could have on patient outcomes. Better incorporation of education on, and practice with, these patient care technologies in pre-licensure education programs is beneficial because it increases nursing students' exposure to and knowledge of these technologies before entering clinical practice. Health care facilities should also provide practicing nurses with both classroom and hands-on training before utilization of a new technology in practice, giving them the opportunity to better understand the technology before it is used for patient care. Incorporation of better education into both collegiate curricula and health care facility education standards will improve nurse confidence in technology-based patient care and lead to more positive patient outcomes.

Another target area for the nursing profession in the future is the shortage in the nursing workforce. The nursing shortage has been a perpetual problem for nursing throughout most of the

profession's history, not just the decades discussed in this integrative review. While this has been a concern begging to be addressed for a long time, it has become increasingly important in recent decades as the volume of hospitalized patients has grown due to the aging of the Baby Boomer generation and more marginalized patients having better access to care services as a result of the ACA. Due to this volume increase and insufficient nurse staffing, nurses are being required to take on larger patient loads and more work hours, leading to stress and nurse burnout as well as negatively impacting patient outcomes.

A major contributing factor to the nursing shortage is deficits in nursing education. One of the areas for improvement within nursing education is addressing the insufficient population of nurse educators. One step in improving the nurse educator deficit would be education of RNs on the presence of the deficit, the benefits of increasing the number of nurse educators, and on how he/she can become a nurse educator. Another step would be to expand the number of health care facilities that utilize tuition reimbursement programs to encourage RNs to pursue masters or doctoral degrees to become nurse educators. Tuition reimbursement programs reduce the financial burden of graduate degrees and would increase the number of nurses who can seek further education. Both initiatives would increase the pool of nurse educators, opening more spots in nursing schools, and ultimately increasing the nursing workforce.

Another contributing factor negatively impacting the nursing workforce in education is the decline in the number of clinical sites. The primary and most effective method being utilized at this time to combat this decline is the incorporation of simulation into nursing curricula. Incorporation of simulation into pre-licensure curricula reduces the number of clinical hours needed in a hospital, allowing nursing schools to increase their numbers of admitted nursing students. If this technique is used on a more widespread scale it has the potential to lead to a greater pool of new RNs entering the workforce.

Poor retention of nurses is a factor outside of nursing education in which the nursing profession could improve upon in order to increase the nursing workforce. For new nurses, inadequacies in smoothing the transition from schooling to nursing practice has contributed to poor nurse retention rates. A primary way to improve in this area is by continually analyzing, refining, and expanding nurse residency programs. Nurse residency programs provide a vital stepping stone from student to practicing nurse. Retaining the high volume of nurses graduating from pre-licensure programs will help to replenish the large number of nurses in the Baby Boomer generation being lost to retirement. On top of retaining new nurses, the nursing profession needs to improve retention of experienced nurses who are often lost due to lack of recognition, leading them to pursue advanced practice positions. Retention of nurses in the RN position can be improved by providing frequent recognition of experienced nurses' achievements and contributions to a positive work environment or by providing monetary incentives for longevity in RN positions. A greater number of experienced nurses in the workforce will help stabilize nursing practice as the Baby Boomer generation of nurses leave the workplace and an influx of brand-new nurses enter the workforce. Incorporation of the recommendations above into nursing practice would place nurses in a position to be the leaders of the global movement to improve the quality and safety of health care.

Implications for Nursing Research

Based on the minimal high-level evidence articles found on the topics discussed within this integrative review and the recommendations for improvement of nursing practice in the section above, the following areas require more research in order to provide solid evidence to recommend practice change. One of the broad focal points of expanded research in nursing should be education. A more specific research area within education would be education on technology both in practice and during pre-licensure curricula. Nurses should investigate technology in education and primarily focus on the impact of exposing all levels of nursing students to newer, more advanced technology in pre-licensure

curricula on nurse confidence in practice and patient outcomes. Another aspect of education that should be more thoroughly researched is simulation. Nurses should explore what specific aspects of simulation in nursing education make it more, less, or just as effective as direct clinical hours in a health care facility. It would also be beneficial to understand what percentage of clinical hours can be spent in simulation before negatively impacting student outcomes in practice post-graduation. In addition, nurses should conduct longitudinal prospective studies to compare nurse competence and patient outcomes of nurses who utilized simulation verses those with only in-hospital clinical hours.

The shortage of nurse educators is another area that needs to be addressed more in-depth in nursing research. Topics to be investigated in this area include exploring the cause of the shortage of nurse educators, finding effective methods to increase the number of nurse educators, and comparing outcomes of programs with a sufficient number of nurse educators to those with insufficient staffing to better understand the benefits of increasing the number of nurse educators. In addition to these improvements in nursing education, more research into nurse residency programs should be conducted. Further research into nurse residency programs should address the various existing nurse residency programs, comparing duration, structure, and content of the different programs to see which provides the most optimal outcomes for graduate nurses. Research in this area should also include exploring alternatives or supplements to nurse residency programs that help aid in smoothing the transition from nursing student to practicing graduate nurse. Finally, the best methods for retaining experienced nurses, especially in the immediate post-residency phase, should be further explored in order to reduce the nursing shortage and ultimately provide for more positive patient outcomes.

References

Amenta, M.M. (1974). Free clinics change the scene. *The American Journal of Nursing, 74* (2), 284-288. Retrieved from https://www.jstor.org/stable/3469732

Andreoli, K. G. (1992a). Total quality management—a new culture. *Journal of Professional Nursing, 8* (2), 72. Retrieved from https://www.sciencedirect.com/science/article/pii/8755722392900657

Andreoli, K. (1992b). Primary nursing for the 1990s and beyond. *Journal of Professional Nursing*, *8* (4), 202. Retrieved from https://www.sciencedirect.com/science/article/pii/875572239290080I

Bashyam, M.D. & Hasnain, S.E. (2003). The human genome sequence: Impact on health care. *Indian Journal of Medical Research, 117*, 43-65. Retrieved from https://pdfs.semanticscholar.org/e5b0/f9dd050248cb5b0351b00d1118796fb772f7.pdf

Bazzoli, G. J., Lindrooth, R.C., Romana, H., & Needleman, J. (2004). The Balanced Budget Act and U.S. hospital operations. *Inquiry: The Journal of Health Care Organization, Provision, and Financing, 41*, 401-417. doi: 10.5034/inquiryjrnl_41.4.401

Bernhofer, E. (2011). Ethics: Ethics and pain management in hospitalized patients. *Online Journal of Issues in Nursing, 17*(1). doi: 10.3912/OJIN.Vol17No01EthCol01

Blozen, B. B. (2013, November). Prescription opioids: A growing epidemic of abuse. *American Nurse Today*, 8 (11). Retrieved from https://www.americannursetoday.com/prescription-opioids-a-growing-epidemic-of-abuse/

Bowers, D. (2001). The Health Insurance Portability and Accountability Act: Is it really all that bad? *Baylor University Medical Center Proceedings, 14* (4), 347-348. doi: 10.1080/08998280.2001.11927786

Broome, M. E. (1993). Integrative literature reviews for the development of concepts. In Rodgers, B.L. & Knafl, K. A. (Eds.), *Concept Development in Nursing, 2nd Edition* (pp. 231-250). Philadelphia, P.A.: W.B. Saunders Co.

Bullough, B. (1976). Influences on role expansion. *The American Journal of Nursing, 76* (9), 1476-1481. doi: 10.2307/3424083

Controversies in care: New OSHA rules under fire from all angles. (1990, January). *The American Journal of Nursing*. Retrieved from https://www.jstor.org/stable/3426217

Dick, R.S., Steen, E.B., & Detmer, D.E. (Eds.). (1997). *The computer-based patient record: An essential technology for health care, revised edition*. Washington, D.C.: National Academy Press. Retrieved from http://eds.a.ebscohost.com/ehost/ebookviewer/ebook?sid=8f6ee4ab-511f-4e31-aeeb-260a352fc711%40sdc-v-sessmgr01&vid=0&format=EB

Dolansky, M. A. & Moore, S.M. (2013). Quality and safety education for nurses (QSEN): The key is systems thinking. *Online Journal of Issues in Nursing, 18* (3). doi: 10.3912/OJIN.Vol18No03Man01

Downes, J. (1991). Acquired immunodeficiency syndrome: The nurse's legal duty to serve. *Journal of Professional Nursing, 7* (6), 333-340. doi: 10.1016/8755-7223(91)90010-I

Dunbar-Jacob, J. (2005). Special issue: Moving evidence-based nursing into nursing education. *Journal of Professional Nursing, 21* (6), 329. doi: 10.1016/j.profnurs.2005.10.010

Evans, M. L., Martin, M. L., and Winslow, E. H. (1998). Nursing care and patient satisfaction. *The American Journal of Nursing, 98* (12), 57-59. doi: 10.2307/3471729

Fernandez-Moure, J. S. (2016). Lost in translation: The gap in scientific advancements and clinical application . *Frontiers in Bioengineering and Biotechnology*, *4* (43), 1-6. doi: 10.3389/fbioe.2016.00043

Foley, M. (2004). Update on needlestick and sharps injuries: The Needlestick Safety and Prevention Act of 2000. *The American Journal of Nursing, 104* (8), 96. Retrieved from http://www.jstor.org/stable/29746112

Gebbie, K. & Lavin, M. (1974). Classifying nursing diagnoses. *American Journal of Nursing, 74* (2), 250-253. Retrieved from https://www.jstor.org/stable/3469719

Gott, M. (2000). *Nursing practice, policy, and change*. Abingdon, Oxon: Radcliffe Medical Press. Retrieved from http://eds.b.ebscohost.com/ehost/ebookviewer/ebook?sid=42c4ca66-4fd2-46c2-8129-f10be308d25d%40sessionmgr120&vid=0&format=EB

Guterman, S. & Dobson, A. (1986). Impact of the Medicare prospective payment system for hospitals. *Health Care Financial Review, 7* (3), 97-114. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4191526/

Harris, L. (1973). *The Harris college of nursing: Five decades of struggle for a cause.* Fort Worth, TX: Texas Christian University Press.

Hayden, J. K., Smiley, R. A., Alexander, M., Kardong-Edgren, S., & Jeffries, P. R. (2014). The NCSBN national simulation study: A longitudinal, randomized controlled study replacing clinical hours with simulation in prelicensure nursing education. *Journal of Nursing Regulation, 5* (2). Retrieved from: https://www.ncsbn.org/JNR_Simulation_Supplement.pdf

Hirschman, K., Shaid, E., McCauley, K., Pauly, M., Naylor, M. (2015) Continuity of care: The transitional care model. *Online Journal of Issues in Nursing, 20* (3). doi: 10.3912/OJIN.Vol20No03Man01

Hobbs, J. L. (2009). Defining nursing practice: The ANA social policy statement, 1980–1983. *Advances in Nursing Science, 32* (1), 3-18. doi: 10.1097/01.ANS.0000346283.29730

Hood, L. & Rowen, L. (2013). The Human Genome Project: Big science transforms biology and medicine. *Genome Medicine, 5* (9), 79. doi: 10.1186/gm483

Hunter, K. M. (2011). Implementation of an electronic medication administration record and bedside verification system. *Online Journal of Nursing Informatics, 15* (2). Retrieved from http://ojni.org/issues/?p=672

Institute of Medicine (2011). *The future of nursing: Leading change, advancing health*. Washington, DC: The National Academies Press. Retrieved from https://www.nap.edu/read/12956/chapter/1

Johns Hopkins Medicine. (n.d.). Johns Hopkins Nursing Evidence-Based Practice Model. Retrieved from http://www.hopkinsmedicine.org/evidence-based-practice/jhn_ebp.htm

LPNs are facing harder times with trend to RN-only staffing. (1985, October). *The American Journal of Nursing*. Retrieved from https://www.jstor.org/stable/3425217

Lynaugh, J. E. & Bates, B. (1974). Physical diagnosis: A skill for all nurses? *The American Journal of Nursing, 74* (1), 58-59. Retrieved from https://www.jstor.org/stable/3469589

Marrchesini, E. H. (1973). Vietnam veterans are different. *The American Journal of Nursing, 73* (1), 74-76. Retrieved from https://www.jstor.org/stable/3422416

Miller, K. L., Bradley, C., Jones, R., McCausland, M. P., Potempa, K., Rendon, D., & Stanley, J. (2002). Hallmarks of the professional nursing practice. *Journal of Professional Nursing, 18* (5), 295-304. doi: 10.1053/jpnu.2002.129231

Montalvo, I. (2007). The National Database of Nursing Quality Indicators (NDNQI). *Online Journal of Issues in Nursing, 12* (3). Retrieved from http://ojin.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/TableofContents/Volume122007/No3Sept07/NursingQualityIndicators.aspx

Moore, C.J. (2018). Highlights in the history of the Army Nurse Corps, 1960 to 1990. Retrieved from https://e-anca.org/History/ANC-Eras/1960-1990

Moseley, G. B. (2008). The U.S. health care non-system, 1908-2008. *AMA Journal of Ethics, 10* (5), 324-331. doi: 10.1001/virtualmentor.2008.10.5.mhst1-0805.

Moss, E., Seifert, P. C., & O'Sullivan, A. (2016). Registered nurses as interprofessional collaborative partners: Creating value-based outcomes. *Online Journal of Issues in Nursing, 21* (3). Retrieved from

http://ojin.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/TableofContents/Vol-21-2016/No3-Sept-2016/Registered-Nurses-as-Interprofessional-Collaborative-Partners.html

O'Connor, B. (2012). New American association of colleges of nursing data show significant enrollment increases in baccalaureate, master's, and doctoral nursing degree programs. *Journal of Professional Nursing, 28* (1), 3-4. Retrieved from https://www.sciencedirect.com/science/article/pii/S8755722311002109

Painter, S. G. (2017). Opiate crisis and healthcare reform in American: A review for nurses. *Online Journal of Issues in Nursing*, *22* (2). Retrieved from http://ojin.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/TableofContents/Vol-22-2017/No2-May-2017/Opiate-Crisis-and-Healthcare-Reform-in-America.html

Quigley, E. D. (2003). Contributions of the professional, public, and private sectors in promoting patient safety. *Online Journal of Issues in Nursing, 8* (3). Retrieved from http://ojin.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/TableofContents/Volume82003/No3Sept2003/ContributionsinPromoting.html

Reagan signs nurse ed act; New nursing institute bill runs aground. (1985, October). *The American Journal of Nursing*. Retrieved from https://www.jstor.org/stable/3425217

Russo, H. (2001). Window of opportunity for home care nurses: Telehealth technologies. *Online Journal of Issues in Nursing, 6* (3). Retrieved from http://ojin.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/TableofContents/Volume62001/No3Sept01/TelehealthTechnologies.html

Sabatino, C. P. (2010). The evolution of health care advance planning law and policy. *The Milbank Quarterly, 88* (2), 211-239. doi: 10.1111/j.1468-0009.2010.00596.x

Salmond, S. W. & Echevarria, M. (2017). Healthcare transformation and changing roles for nursing. *Orthopaedic Nursing, 36* (1), 12-25. doi: 10.1097/nor.0000000000000320

Silvia, M. C. (1974). Science, ethics, and nursing. *The American Journal of Nursing, 74* (11), 2004-2007. Retrieved from https://www.jstor.org/stable/3423198

Sofer, D. (2018). The value of simulation in nursing education. *The American Journal of Nursing, 118* (4), 17-18. doi: 10.1097/01.NAJ.0000532063.79102.19

Stevens, K. R. (2013). The impact of evidence-based practice in nursing and the next big ideas. *Online Journal of Issues in Nursing, 18* (2). Retrieved from http://ojin.nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/TableofContents/Vol-18-2013/No2-May-2013/Impact-of-Evidence-Based-Practice.html

Stone, P. W., Clarke, S. P., Cimiotti, J., & Correa-de-Araujo, R. (2004). Nurses' working conditions: Implications for infectious disease. *Emerging Infectious Diseases, 10* (11), 1984-1989. doi: 10.3201/eid1011.040253

Terris, M. (1973). Crisis and change in America's health system. *American Journal of Public Health, 63*(4): 313-318. doi: 10.2105/AJPH.63.4.313

The Leapfrog Group. (2018). *History*. Retrieved January 5, 2019 from http://www.leapfroggroup.org/about/history

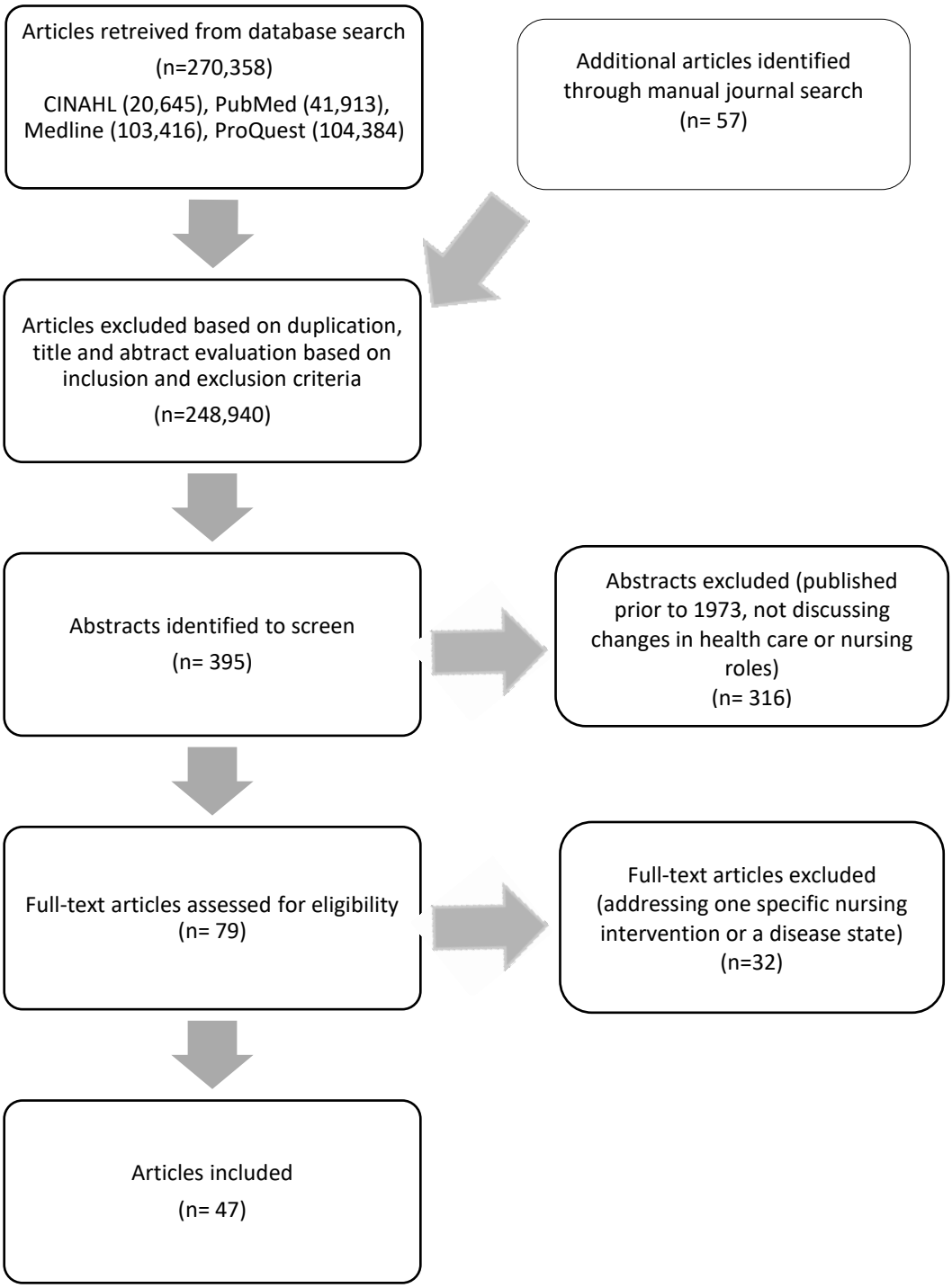
Trossman, S. (2004). Handle with care: The ANA launches a multifaceted campaign to prevent workplace injuries. *The American Journal of Nursing, 104* (1), 73-75. Retrieved from https://www.jstor.org/stable/29745507

Walker, B. (1985). Health care in the 1980s. *Journal of the National Medical Association, 7* (8), 601-604. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2571147/pdf/jnma00283-0015.pdf

Weiner, S. M. (1980). Health care policy and politics: Does the past tell us anything about the future? *American Journal of Law and Medicine, 5* (4), 331-341. Retrieved from https://heinonline.org/HOL/P?h=hein.journals/amlmed5&i=347

Appendix A

Literature Search Strategy Diagram



Appendix B

JHNEBP Non-Research Evidence Appraisal Tool

Name: Evidence Level:_____

Article Reference:			
☐Systematic Review	☐Clinical Practice	☐ Organizational (QI, financial data)	☐ Expert opinion, case study, literature review

Does review/expert opinion address my practice question?	☐ Yes	☐ No
If the answer is No, STOP here (unless there are similar characteristics).		
Systematic Review		
• Is the question clear?	☐ Yes	☐ No
• Are search strategies specified, and reproducible?	☐ Yes	☐ No
• Are search strategies appropriate to include all pertinent studies?	☐ Yes	☐ No
• Are criteria for inclusion and exclusion of studies specified?	☐ Yes	☐ No
• Are details of included studies (design, methods, analysis) presented?	☐ Yes	☐ No
• Are methodological limitations disclosed?	☐ Yes	☐ No
• Are the variables in the studies reviewed similar, so that studies can be combined?	☐ Yes	☐ No
Clinical Practice Guidelines		
• Were appropriate stakeholders involved in the development of this guideline?	☐ Yes	☐ No
• Are groups to which guidelines apply and do not apply clearly stated?	☐ Yes	☐ No
• Have potential biases been eliminated?	☐ Yes	☐ No
• Were guidelines valid (reproducible search, expert consensus, independent review, current, and level of supporting evidence identified for each recommendation)?	☐ Yes	☐ No
• Are recommendations clear?	☐ Yes	☐ No
Organizational Experience		
• Was the aim of the project clearly stated?	☐ Yes	☐ No
• Is the setting similar to setting of interest?	☐ Yes	☐ No
• Was the method adequately described?	☐ Yes	☐ No
• Were measures identified?	☐ Yes	☐ No
• Were results adequately described?	☐ Yes	☐ No
• Was interpretation clear and appropriate?	☐ Yes	☐ No
Individual expert opinion, case study, literature review		
• Was evidence based on the opinion of an individual?	☐ Yes	☐ No
• Is the individual and expert on the topic?	☐ Yes	☐ No
• Is author's opinion based on scientific evidence?	☐ Yes	☐ No
• Is the author's opinion clearly stated?	☐ Yes	☐ No
• Are potential biases acknowledged?	☐ Yes	☐ No
PERTINENT CONCLUSIONS AND RECOMMENDATIONS (Include info following Research Literature Review Form)		
Were conclusions based on the evidence presented?	☐ Yes	☐No
Will the results help me in caring for my patients?	☐ Yes	☐No

Quality Rating (scale on back):

Basic quality rating of the study under review (check one)	☐ High (A)	☐ Good (B)	☐ Low/major flaws(C)

STRENGTH OF EVIDENCE

LEVEL 4

SYSTEMATIC REVIEW

- Research review that compiles and summarize evidence from research studies related to a specific clinical question
- Employs comprehensive search strategies and rigorous appraisal methods
- Contains an evaluation of strengths and limitations of studies under review

CLINICAL PRACTICE GUIDELINES

- Research and experiential evidence review that systematically develops statements that are meant to guide decision-making for specific clinical circumstances
- Evidence is appraised and synthesized from three basic sources: scientific findings, clinician expertise, and patient preferences.

LEVEL 5

ORGANIZATIONAL

- Review of quality improvement studies and financial analysis reports
- Evidence is appraised and synthesized from two basic sources: internal reports and external published reports.

EXPERT OPINION, CASE STUDY, LITERATURE REVIEW

- Opinion of a nationally recognized expert based on non-research evidence (includes case studies, literature review, or personal experience).

QUALITY RATING (SUMMATIVE REVIEWS)

A High quality: well-defined, reproducible search strategies; consistent results with sufficient numbers of well-designed studies; criteria-based evaluation of overall scientific strength and quality of included studies, and definitive conclusions

B Good quality: reasonably thorough and appropriate search; reasonably consistent results, sufficient numbers of well-designed studies, evaluation of strengths and limitations of included studies, with fairly definitive results

C Low quality or major flaws: undefined, poorly defined, or limited search strategies; insufficient evidence with inconsistent results, conclusions cannot be drawn

QUALITY RATING (EXPERT OPINION)

A High quality: expertise is clearly evident.

B Good quality: expertise appears to be credible.

C Low quality or major flaws: expertise is not discernable or is dubious.

Appendix C

JHNEBP Research Evidence Appraisal

Name: Evidence Level:

Article Reference:					
SETTING:			SAMPLE (COMPOSITION/SIZE)		
☐ Experimental	☐ Meta-analysis	☐ Quasi-experimental	☐ Non-experimental	☐ Qualitative	☐ Meta-synthesis
Does this study apply to my patient population?				☐ Yes	☐ No
If the answer is No, STOP here (unless there are similar characteristics).					
Strength of Study Design					
• Was sample size adequate and appropriate?				☐ Yes	☐ No
• Were study participants randomized?				☐ Yes	☐ No
• Was there an intervention?				☐Yes	☐ No
• Was there a control group?				☐ Yes	☐ No
• If there was more than one group, were groups equally treated, except for the intervention?				☐Yes	☐No
• Was there adequate description of the data collection methods				☐Yes	☐No
Study Results					
• Were results clearly presented?				☐ Yes	☐ No
• Was an interpretation/analysis provided?				☐ Yes	☐ No
Study Conclusions					
• Were conclusions based on clearly presented results?				☐ Yes	☐ No
• Were study limitations identified and discussed?				☐ Yes	☐ No
PERTINENT STUDY FINDINGS AND RECOMMENDATIONS (Include info following Research Literature Review Form)					
Will the results help me in caring for my patients?				☐ Yes	☐ No

Evidence Rating (scales on back)

Strength of Evidence Rating			
Quality Rating (check one)	☐ High (A)	☐ Good (B)	☐ Low/major flaws(C)

STRENGTH OF EVIDENCE

LEVEL 1 (HIGHEST)

EXPERIMENTAL STUDY (RANDOMIZED CONTROLLED TRAIL OR RCT)

- Study participants (subjects) are randomly assigned to either a treatment (TX) or control (non-treatment) group.
- May be:
  - Blind: neither subject nor investigator knows which TX subject is receiving.
  - Double-blind: neither subject nor investigator knows which TX subject is receiving.
  - Non-blind: both subject and investigator know which TX subject is receiving; used when it is felt that the knowledge of treatment is unimportant.

META-ANALYSIS OF RCTS

- Quantitatively synthesizes and analyzes results of multiple primary studies addressing a similar research question
- Statistically pools results from independent but combinable studies
- Summary statistic (effect size) is expressed in terms of direction (positive, negative, or zero) and magnitude (high, medium, small)

LEVEL 2

QUASI-EXPERIMENTAL STUDY

- Always includes manipulation of an independent variable
- Lacks either random assignment or control group.
- Findings must be considered in light of threats to validity (particularly selection)

LEVEL 3

NON-EXPERIMENTAL STUDY

- No manipulation of the independent variable.
- Can be descriptive, comparative, or relational.
- Often uses secondary data.
- Findings must be considered in light of threats to validity (particularly selection, lack of severity or co-morbidity adjustment).

QUALITATIVE STUDY

- Explorative in nature, such as interviews, observations, or focus groups.
- Starting point for studies of questions for which little research currently exists.
- Sample sizes are usually small and study results are used to design stronger studies that are more objective and quantifiable.

META-SYNTHESIS

- Research technique that critically analyzes and synthesizes findings from qualitative research
- Identifies key concepts and metaphors and determines their relationships to each other
- Aim is not to produce a summary statistic, but rather to interpret and translate findings

QUALITY RATING (SCIENTIFIC EVIDENCE)

A High quality: consistent results, sufficient sample size, adequate control, and definitive conclusions; consistent recommendations based on extensive literature review that includes thoughtful reference to scientific evidence.

B Good quality: reasonably consistent results, sufficient sample size, some control, and fairly definitive conclusions; reasonably consistent recommendations based on fairly comprehensive literature review that includes some reference to scientific evidence

C Low quality or major flaws: little evidence with inconsistent results, insufficient sample size, conclusions cannot be drawn.

Appendix D

Literature Findings Table

Author (s), Year	Design	Findings	Evidence Level
Amenta, 1974	Expert Opinion	• Increase in the number of free clinics since their initial appearance in 1967 • Benefits: o No cost o Easy access o More humanity and less judgement in care o Shorter wait times o Team atmosphere of care providers	V
Andreoli, 1992a	Expert Opinion	• National movement towards total quality management (TQM) • Joint Commission on the Accreditation of Health Care Organizations o Focus on quality improvement rather than quality assurance o Emphasize proactive rather than reactive improvements	V
Andreoli, 1992b	Expert Opinion	• Increased workload on nurses • Need for better understanding and practice of delegation • Benefits of delegation include reduced cost and improved decision making	V
Bashyam & Hasnain, 2003	Literature Review	• The human genome project was officially completed in 2003 • The physical map of the human genome has assisted directly in identifying about 100 more disease causing genes o Knowledge of the human genome can also hopefully help in improving	V

		treatment and curative techniques for some of these conditions • Analysis of the human genome draft sequence is already beginning to reveal several new drug targets	
Bazzoli, Lindrooth, Romana, & Needleman, 2004	Financial Evaluation	• 1997: Balanced Budget Act (BBA) o Includes many changes in provider payments o Goal: slow the growth in Medicare spending to help end deficit spending & extend the Medicare "trust fund" • Supplement the change of Medicare from a retrospective to a prospective payment system	V
Bernhofer, 2011	Literature Review	• Improvements in the understanding and treatment of pain has done little to increase patient satisfaction of pain management while hospitalized • The standard definition of pain should be "whatever the experiencing person says it is, existing whenever the experiencing person says it does" • Deliberate use of ethical principles when making pain management decisions for hospitalized patients may provide more optimal outcomes.	V
Blozen, 2013	Literature Review	• Americans account for 4.6% of the world's population but consume approximately 80% of the world's opioid supply. • More than 12 million people used prescription painkillers	V

		for nonmedical reasons in 2010. • Some experts believe prescription opioids are important "gateway" drugs. • In 2012, the first national study of its kind found the number of infants born addicted to prescription opioids had tripled over the previous 10 years	
Bowers, 2001	Expert Opinion	• 1996: Health Insurance Portability and Accountability Act (HIPAA) was developed and: o Restricted use of pre-existing conditions in health insurance coverage determinations o Protected health care coverage for individuals who lose or change their jobs. o Set standards for medical records privacy o Established tax-favored treatment of long-term care insurance	V
Bullough, 1976	Literature Review	• Shortage of primary care physicians is leading to an increase in funding for nurse practitioner programs. • 1971: first statement issued that nurses with proper education, i.e. nurse practitioners, could diagnose and treat patients • Development of medical technology has encouraged the development of autonomy in nursing specialties • 1972 was the first year more nurses graduated from	V

		collegiate than hospital schools • Women's liberation movement encouraged nurses, the majority of which are women, to recognize their capability as autonomous, independent thinkers in terms of patient care • Increase of men in nursing has led to an increase of respect of the field, and thus allowed for more responsibility to be delegated • American Nurse's Association's model definition of nursing practice has helped in the development of more comprehensive nurse practice acts that allow for more autonomy in practice (pg. 1478)	
"Controversies in Care", 1990	Case Report	• OSHA's new standard requires employers to employ safer practice in regard to needles and infectious diseases o Employers must promote universal precautions, educate employees how to deal with bloodborne pathogens, and supply hard plastic containers for needle disposal. • Cost controversy prevents application	V
Dick, Steen, & Detmer, 1997	Book: Background Information / Expert Opinion	• The demand for timely, accurate health data continues to grow, placing more demands on the information capabilities of health care providers and systems. • 1991: IOM made the case that all physician's offices should have EHR by 2001	V

		○ IOM drove home the idea that the EHR is needed to transform the health system to improve quality and enhance safety.	
Dolanksy & Moore, 2013	Expert Opinion	• Only slight improvement in quality and safety had been reported in 2005 since the release of the 2003 IOM report • 2005: nursing leaders responded to the IOM call to improve the quality of healthcare by forming the QSEN initiative • Incorporation of QSEN into nursing education is vital ○ Guides nurses to redesign nursing care to ensure high-quality, safe care • Current challenge: move QSEN from individual patients to the system • Almost 10 years have passed since the QSEN competencies were developed, and the field of quality and safety is rapidly advancing.	V
Downes, 1991	Literature Review	• By June 1990, 139,765 people in the United States have HIV/AIDS, with a 60 percent mortality rate. • Some nurses are reluctant to care for human immunodeficiency virus (HIV)-infected clients • Various federal, state, and local antidiscrimination statutes, as well as employment contracts and professional codes of ethics, limit the right of the nurse to refuse to care for people with AIDS or HIV	V

		• Nurses have rights as well as responsibilities in caring for AIDS or HIV-infected patients. • Nurses also have a professional responsibility to institute measures that minimize the need for litigation and ensure access to health care for everyone.	
Dunbar-Jacob, 2005	Editorial	• 1992: McMaster University advocated for the use of "evidence-based medicine" • 2003: Institute of Medicine issued five core recommendations for the education of health professionals, as a component of its quality series, to include use of evidence in practice in all aspects of health care • Increasing interest on the part of hospitals to incorporate evidence into the practice of nursing in order to improve care quality • These measures have highlighted the need for nursing students to learn conduct EBP in their future	V
Evans, Martin, & Winslow, 1998	Non-experimental: Descriptive Research—Survey Method	• Analysis of 1,455 inpatient surveys revealed that nursing care was the primary determinant of overall patient satisfaction o Reinforced old research on this subject • Identifies the importance to administrators of creating an environment that is conducive to quality nursing care o Includes adequate staffing ratios, proper equipment and	III

		supplies, good support staff, and effective educators	

Foley, 2004	Expert Opinion	• Needle Stick Safety and Prevention Act was signed into law in November 2000 and became effective in April 2001
		• Law Requires:
		  o Use of safer medical devices chosen by floor RNs
		  o Post-exposure control plans
		  o Record keeping of sharps injuries
		• Recent evidence has revealed a 51% reduction in percutaneous injuries when safer devices are used
			V

Gebbie & Lavin, 1974	Expert Opinion	• Nursing Diagnoses as the end-result of physical assessments • Different from medical diagnoses o Focus on patient response to medical condition vs. medical condition itself • Nursing diagnoses now included in the Standards of Nursing Practice developed by the ANA	V
Gott, 2000	Book: Background Information / Expert Opinion	• Advances in nursing curricula and relocation into higher education led to increasing weight on the behavioral, rather than the biological, aspect of nursing • Beginning of the push for interdisciplinary care	V
Guterman & Dobson, 1986	Financial Evaluation	• Medicare reimbursement was on a retrospective cost basis prior to 1983 and caused hospital costs to increase at a	V

		rate higher than overall inflation • The Tax Equity and Fiscal Responsibility Act (1982) mandated the development of a Prospective Payment System (PPS) for Medicare reimbursement to help curb costs • 1983: PPS for inpatient hospital services was legislated • Results of implementation o Medicare inpatient hospital benefit payments decreased o Admission rates and lengths of stay fell o Increased rates for out-of-hospital services	
Hayden, Smiley, Alexander, Kardong-Edgren, & Jeffries, 2014	Longitudinal Randomized Control Trial	• NCSBN study on the results of using simulation in nursing curriculum • Found that students with 25% or 50% of clinical curriculum based in simulation, compared to those with no simulation, had no statistically significant difference in clinical knowledge, competency, or readiness for practice	I
Hirschman, Shaid, McCauley, Pauly, & Naylor, 2015	Integrative Review	• Six overlapping categories of problems have been associated with negative outcomes among older adults with multiple chronic conditions concerning their care after discharge • These problems lead to high rates of preventable hospitalizations and ED visits, which contribute to increased costs of care	V
Hobbs, 2009	Literature Review	• Increase in access for specific patient populations occurred during the 1980s	V

		• Influx of new drugs and new monitoring technologies were increasing patient's lifespans and expectations for their care • Areas dedicated to specialized practice emerged to better support the care delivery desired by patients	

Hood & Rowen, 2013	Literature Review	• 1990: beginning of the Human Genome Project
		• Goals:
		  o Facilitate a better understanding of the cause of cancer and other chronic diseases
		  o Develop more effective approaches to treating diseases
		  o Be internationally competitive in biology and medicine
			V

Hunter, 2011	Program Evaluation	• Information technology, including EHR and medication barcoding, has been shown to decrease medication errors
		  o Unfortunately, only 10 to 12% of hospitals had barcoding in place in the 2000s
		• Benefits of eMAR and medication barcodes
		  o Quicker access to pertinent patient information
		  o Supports better decision making
		  o Provides safety to the patient and the nurse
		• Cons:
		  o Dependency on computers to prevent errors
		  ▪ Technology is not going to make all errors
			V

		disappear completely without use of nursing judgement	
Institute of Medicine, 2011	Clinical Practice Guidelines	• The four key messages for the future of nursing were: o Nurses should practice to the full extent of their education and training. o Nurses should achieve higher levels of education and training o Nurses should be full partners in redesigning health care in the U.S. o Effective workforce planning and policy making require better data collection and an improved information infrastructure.	IV
Lynaugh & Bates, 1974	Clinician Experience	• 1971-1975: over 50% of U.S. states changed board guidelines o Expanded definition of RNs ▪ Physical assessments ▪ Nursing Diagnoses o Encouraged delegation by HCPs o Standardized nursing procedures	V
Marrchesini, 1973	Clinician Experience	• Treatment of Vietnam veterans improved nurses' compassion in care o Veterans experienced the guilt of their actions plus rejection of their fellow	V

		Americans for their service. • Justice-based care o Nurses had to set aside personal judgements in order to provide fair patient care	
Miller et al., 2002	Position Statement	• Recommend utilizing the following guidelines/practices to improve the nursing work environment o Magnet recognition o Preceptorships & residencies o Differentiated nursing practice models o Interdisciplinary collaboration	IV
Montalvo, 2007	Literature Review	• NDNQI: a national database of research reports of over 1,000 hospitals' achievements of the ANA's quality indicators • Quality indicators monitor the structure, process, and outcomes of nursing units • Data has provided researchers with the nursing unit characteristics that have an impact on patient outcomes. • Evidence from these reports have consequently improved nursing practice	V
Moseley, 2008	Literature Review	• 1970s Health Care o Rise of cost due to Medicaid and Medicare o National health expenditures doubled during the 1970s • HMOs o Goal: improve access, while reducing costs o Noted to reduce resource utilization rates, specifically,	V

		hospital admissions and lengths of stay • 1973: Health Maintenance Organization Act o Signed by Nixon o Passed to encourage growth of HMOs	
Moss, Seifert, & O'Sullivan, 2016	Integrative Review	• AACN established the Interprofessional Education Collaborative (IPEC) in 2009 to improve competencies for interprofessional practice • IPEC Core Competencies for Interprofessional Collaborative Practice established in 2011 to provide specific means to improve interprofessional collaboration • Strong, collaborative interprofessional teams enable members to utilize team-based and patient-centered care policies and protocols o Use of these ultimately improves patient quality of care • Practices are being utilized in academia but not in professional practice	V
O'Connor, 2012	Non-experimental: Descriptive Research—Survey Method	• A growing body of research shows that higher levels of RN education are linked to better patient outcomes and lower mortality rates • AACN also found a strong hiring preference for nurses prepared at the baccalaureate level and a high job placement rate for new BSN graduates o Trending with IOM Future of Nursing (2010) report's call for more BSN prepared nurses	III

Painter, 2017	Literature Review	• The Centers for Disease Control and Prevention (CDC) confirm opiate related death is a public health crisis
		• Legislation to Improve the Issue
		  o Affordable Care Act
		  o Mental Health Parity and Addiction Equity Act (MHPAEA) of 2008
		  o President Obama's Fiscal Year 2016 budget
		  ▪ $133 million dollars, to addressing the opioid crisis
		  o DHHS 2015 initiatives
			V

Quigley, 2003	Literature Review	• Tens of thousands of medical errors occur each year, costing the U.S. millions
		• Responses by Professional Organizations
		  o 1999 IOM Report recommendations to improve quality of care by:
		  ▪ Developing reporting systems to identify and learn from errors
		  ▪ Raising the standards for safety of care
		  o Leapfrog Group Initiative
		  o JCAHO
		  ▪ 2001: focus on creating a "culture of safety"
			V

		▪ Promotion of sentinel review and reporting ▪ 2002: release of first 6 National Patient Safety Goals o ANA's development of the National Database of Nursing-Sensitive Quality Indicators (NDNQI)	
Russo, 2001	Expert Opinion	• Rise of telehealth services has improved access to services and quality of life for those in living in rural areas • General technology improvements allow for: o Improved access to care o Facilitated collaboration in care delivery o Improved transparency of information • Concern for privacy and confidentiality with the use of these technologies	V
Sabatino, 2010	Literature/ Statutory Review	• The first living will statute was passed in 1974 o Allowed patients to better advocate for themselves & participate more in care • Passing of the Patient Self-Determination Act in 1990 encouraged adults to think about and plan for future health care decisions • By the end of 1997, every state had enacted some version of a health care power of attorney statute	V

Salmond & Echevarria, 2017	Integrative Review	• Shift to team-based, patient-centered care, with reimbursement based on quality
		• Environment
		  o Disparities in care
		  o Fragmented system
		  o Abundance of specialized providers with a lack of PCPs
		  o Aging population
		  o Rise in preventable chronic illnesses
		• 2010 Affordable Care Act
		  o Includes insurance reforms & greater insurance access
		  o CMS programs to improve quality & control costs
		  o Encourages team-based care models
		  o Focus is on prevention
			V

Silvia, 1974	Expert Opinion	• Innovative medical practice is on the rise and has the great opportunity to change patient's lives • Ethical implications of utilizing these techniques need to be considered and taken into account when providing patient care	V
Sofer, 2018	Clinician Experience	• Utilization of clinical simulation in nursing education is on the rise • A landmark NCSBN study in 2014 found no statistically significant differences in clinical competency or comprehensive nursing knowledge between students who had undergone traditional clinical experiences and those	V

		who had traditional clinical hours replaced by simulation. • Simulation supplements learning outside of the classroom and can be used as to further explore such difficult subjects • Simulation training also exists in hospitals as programs to help practicing clinicians further their training or to assist hospitals to achieve benchmarks	
Stevens, 2013	Integrative Review	• Utilization of EBP in clinical practice is expanding • EBP use in practice has fostered the development of new evidence forms (systematic reviews), and promoted a focus on interprofessional teamwork • Nurses have been the champions of EBP use in the clinical setting • The complex plans needed for integration into care and executive pushback from higher ups have been barriers to use of EBP in practice	V
Stone, Clarke, Cimiotti, & Correa-de-Araujo, 2004	Integrative Review	• Staffing patterns and nurses' working conditions are risk factors for adverse events for both patients and nurses • Institute of Medicine report, *Keeping Patients Safe, Transforming the Work Environment of Nurses* o Concluded that nursing is inseparably linked to patient safety o Emphasized that poor working conditions and inadequate nurse staffing levels increase the risk for errors	V

Terris, 1973	Expert Opinion	▪ Increased desire for personalized, quality care at minimal cost ▪ Beginning of problem with Medicare funding ▪ Health care system targeted towards the affluent, but not the poor ▪ Unrestricted growth of provider specialization with a decline in general practitioners ▪ Movement of providers from rural and poor urban areas to more affluent parts of cities ▪ Increase in health care cost due to increasing age of patients and chronicity of conditions on top of the use of more complex technology	V
Trossman, 2004	Clinician Experience	• Research shows that nursing personnel are at greater risk for sustaining musculoskeletal disorders than most other U.S. workers. • Few RNs have ever heard of or seen the wide array of available patient-handling equipment • ANA efforts to prevent musculoskeletal injuries in nurses o September 2003 "Handle with Care" campaign o June 2003 position statement: *The Elimination of Manual Patient Handling to Prevent Work-Related Musculoskeletal Disorders* • By preventing nurse injuries, you can also prevent issues cause by staffing shortages	V
Walker, 1985	Expert Opinion	• Influx of treatment from private care into public	V

		hospitals due to uncontrolled costs • Domination of technology-based treatment over preventive primary care • Increase in separate hospital units such as urgent cares and birthing centers • Increasing number of patients on Medicaid and Medicare	
Weiner, 1980	Expert Opinion	• Health care had limited funding from the government in the 1970s • People were largely skeptical about the motivations and competency of health care institutions • Oversupply of physicians • Increasing competition for roles based on expanding care specialties • Problems with cost containment • Expansion of hospital systems to include ambulatory care clinics and home health services	V