The Critical Importance of Certified Nurse-Midwives in Contemporary Healthcare

Lynette Hamlin, PhD, RN, CNM, FACNM, FAAN
Professor and Associate Dean for Faculty Affairs
Uniformed Services University, Graduate School of Nursing
4301 Jones Bridge Rd, Bethesda, MD 20814
Tel: (301) 295-0733
Email: Lynette.Hamlin@usuhs.edu

Michelle L. Munroe, DNP, RN, CNM, FACNM,
COL, USA, AN
Former Chief Executive Officer
WINN Army Community Hospital
1061 Harmon Avenue
Fort Stewart, GA 31314
Email: mmunroecnm@gmail.com

Patrick H. DeLeon, PhD, MPH, JD
Distinguished Professor
Uniformed Services University, Graduate School of Nursing
4301 Jones Bridge Rd, Bethesda, MD 20814
Tel: (301) 295-1125
Email: Patrick.Deleon.ctr@usuhs.edu

Author Note

The authors are solely responsible for the contents of this article. The opinions represented herein are those of the authors alone and do not reflect the official positions of the institutions the authors serve including the Uniformed Services University Graduate School of Nursing, the United States Department of Defense, or the United State Government. The authors have no financial conflicts of interest. All correspondence should be directed to the first author, Dr. Lynette Hamlin.

Abstract

While the World Health Organization (WHO) designated 2020 as a celebration for the International Year of the Nurse and the Midwife (World Health Organization, 2020), the dissonance around certified nurse-midwifery practice in the U.S. is growing. While certified nurse-midwives (CNMs) have a long and distinguished history of providing quality care in the uniformed services, their long-term existence is questionable. Data on CNMs continues to grow and support positive maternal/child outcomes, yet the number of educational programs and the number of births CNMs attend is at a standstill. CNMs provide essential care for women throughout their lifespan in all settings, and with health care reform allowing full

practice authority they will be able to provide care that reaches all Americans, and particularly federal beneficiaries. Health care disparities across the nation are especially evident in the obstetric population. Racial disparities in maternal mortality and morbidity in the United States continues to rise more than in any other industrialized nation. Dissonance continues to occur when CNMs are not allowed to practice to the fullest extent of their education. The Patient Protection and Affordable Care Act opened the door for Advanced Practice Registered Nurses (APRNs) to provide care within the standards of practice of their licensure. Only 36 states have honored this quest.

Keywords: certified nurse-midwives; health disparities; Affordable Care Act; Military Health System.

Introduction

The World Health Organization (WHO) designated 2020 as the "International Year of the Nurse and the Midwife," in honor of the 200th anniversary of Florence Nightingale's birth. Nursing and midwifery associations around the world are celebrating this designation. In the U.S., Certified Nurse-Midwives (CNMs) have a long history of accomplishments, particularly in serving our nation's vulnerable populations. There continues to be a growing body of research demonstrating that CNMs provide quality care. In spite of these accomplishments, dissonance continues. The Merriam-Webster dictionary defines dissonance as an instance of inconsistency (Merriam-Webster, 2020). The purpose of this article is to celebrate successes of CNMs, discuss the work of CNMs in the military healthcare system, and offer specific suggestions on how to can address some of the barriers to practice that have created this dissonance.

Certified Nurse-Midwives (CNMs)

CNMs are educated in two disciplines: nursing and midwifery. As compared to our midwifery colleagues in many parts of the world, in the U.S. CNMs are primary healthcare providers for women from adolescence to beyond menopause. These services go beyond the traditional services of prenatal, intrapartum, postnatal, and newborn care to management of age-appropriate health screenings and common primary care problems (American College of Nurse-Midwives, 2020a). Entry into practice as a CNM requires a master's degree, and there are currently 38 accredited programs by the Accreditation Commission for Midwifery Education (ACME). Sadly, there has been no growth in the number of programs since 2009, despite the national shortage of women's health providers (Accreditation Commission for Midwifery Education, 2019). As of February, 2019, there were 12,218 CNMs in the United States (American College of Nurse-Midwives, 2019).

In the United States, CNMs are licensed, independent providers in all 50 states, the District of Columbia, and U.S. territories. Despite this status, CNMs still have state restrictions dictating how their practice can occur. CNMs truly only have independent practice in 27 states, one state requires a hybrid model (independent but consultation agreement required), 12 states require a collaborative agreement to practice, six states require a collaborative practice for prescriptive authority, and four states still require physician supervision for practice (American College of Nurse-Midwifes, 2018). These practice restrictions remain in 23 states, despite the

2011 American College of Nurse-Midwifes (ACNM) and American College of Obstetricians and Gynecologists (ACOG) Joint Statement of Practice Relations between Obstetrician-Gynecologists and Certified Nurse-Midwifes/Certified Midwives (American College of Obstetricians and Gynecologists, 2018). This statement, revised and reaffirmed in 2018, states that CNMs practice to the fullest extent of their education, training, experience, and licensure and that quality of care is enhanced by national uniformity in full practice authority and licensure across all states.

According to the most recent birth data (2019), CNMs attend 9.4 percent of all U.S. births, and 94 percent of those births are in hospital settings (Martin, Hamilton, Osterman, Driscoll, & Mathews, 2019). Compare this data to the United Kingdom data from the same time period where midwives attended 39.9 percent of all births (United Kingdom National Health Service, 2018). Or the most recent available New Zealand birth data (Midwifery and Maternity Providers Organisation, 2016), where midwives attended 50.8 percent of all births. This dichotomy between the U.S. and other countries is not new but persists despite U.S. data on positive birth outcomes when care was provided by CNMs.

Recent studies indicate that women whose births were attended by CNMs had less odds of a cesarean delivery, preterm birth, and low birth weight infants (Yang, Attanasio, & Kozhimannil, 2016). Thornton examined the characteristics of spontaneous vaginal births attended by CNMs and physicians in U.S. hospitals, and his data reflect that, in U.S. hospitals, CNMs cared for women with a range of risks similar to those of women who were attended by physicians (Thornton, 2017). Women who were cared for by CNMs had fewer labor inductions, epidural analgesia use, third- and fourth-degree lacerations, and newborn admissions to the neonatal intensive care unit. In a study that compared birth outcomes of women who saw a CNM versus women who saw a physician for prenatal care, women who received midwifery care had fewer cesarean section births and a lower risk of preterm birth (Loewenberg, Weisband, Klebanoff, Gallo, Shoben, & Norris, 2018). The number of CNMs at a hospital also has an influence on care outcomes, including reduced risk of cesarean section and episiotomy and lower overall use of birth interventions (Attanasio & Kozhimannil, 2018; Neal et al., 2018).

In Military Treatment Facilities (MTFs), in which CNMs have full practice authority, CNMs attended greater than three times more births than the national average (30.8 percent v. 9.4 percent) (Hamlin & Patel, 2018). In MTFs, CNMs care for both women in uniform and their dependents, who may or may not have risk factors impacting their pregnancy. While the average U.S. cesarean birth rate in the years 2012 through 2014 was 32.6 percent, the overall cesarean birth rate in the MTFs during this study period was 27.4 percent (Hamilton, Martin, Osterman, Curtin & Mathews, 2015; Martin, Hamilton, Osterman, Curtin & Mathews, 2015; Martin, Joyce, Hamilton, Osterman, Curtin & Mathews, 2013). When comparing national data to the MTF data, women who are cared for in MTFs were less likely to have a cesarean section and more likely to have a VBAC (vaginal birth after cesarean) than women in the U.S. generally. In breaking the data down further, results demonstrate that women in MTFs who were cared for by CNMs had significantly higher odds of having a vaginal birth, a VBAC, and initiating breastfeeding, and significantly lower odds of having an augmentation or induction of labor than when cared for by a physician. Overall, these results speak positively to CNMs' ability to provide optimal care with fewer medical interventions.

Ensuring the Highest Quality of Care

Infant mortality rates in our nation rank among the highest for developed nations and mortality rates for infants born to low-income mothers are even higher. Accordingly, the National Academy of Medicine (NAM) has entered into a multiyear collaborative effort with the Robert Wood Johnson Foundation to deepen understanding of this disparity, mobilize evidence, and identify strategies to create and sustain conditions that support equitable good health for all Americans effectively addressing the fundamental issue of Health Disparities in the United States. In our collective judgment, history and the large body of scientific evidence accumulated over decades clearly suggests that facilitating timely access to the clinical services of CNMs will be a critical step in accomplishing this most important social policy objective (DeLeon, 2017) and reconciling the dissonance between data and current policies.

Our nation's health care spending far exceeds that of any other industrialized nation and yet consistently various health policy reports highlight that our nation's citizens are not obtaining the overall quality of care which one should reasonably expect. Looking through a Culture of Health Lens, the National Academies of Sciences, Engineering, and Medicine (NASEM) reported:

> Other wealthy developed countries outperform the United States in health status, despite our high level of spending on health care. For example, not only does the nation's life expectancy when compared to peer nations lag behind, but life expectancy in the United States also varies dramatically--by roughly 15 years for men and 10 years for women--depending on income level, education, and where a person lives. In the poorest parts of the country, rates of obesity, heart disease, cancer, diabetes, stroke, and kidney disease are substantially higher than in more affluent regions. Tragically, infant mortality--the number of deaths under 1 year of age, per 1,000 live births--is much higher in certain populations (National Academies of Sciences Engineering and Medicine 2017, pp. ix-x).

The 2010 enactment of the landmark Patient Protection and Affordable Care Act (ACA) (P.L. 111-148) addressed a vision shared by nearly every president, regardless of political orientation, since Theodore Roosevelt (Patient Protection and Affordable Care Act, 2010).

Advanced practice nursing is recognized in a number of the laws, including providing support for nurse administrated health centers/clinics and nursing residencies. Wellness-oriented, patient-centered, preventive, and holistic care; team-based care; and evidence-based care are several of the underlying tenants of the legislation. Pursuing the objectives of the "Triple Aim" (Berwick, Nolan, & Whittington, 2008) was to become a significant component of the national strategy for tackling healthcare issues. The stated underlying objective of this approach is to improve the individual experience of care, improve the health of populations, and reduce the per capita costs of care for populations. By embracing the exciting potential for measurable change resulting from the unprecedented advances occurring within the computer and technology fields, the ACA provided the nation's healthcare system with the opportunity to finally establish quantifiable benchmarks for measuring access and the overall quality of care being provided. The long-term significance of this capability cannot be overstated.

Another visionary concept which was included in the ACA, and one that is particularly significant, was systematically encouraging interprofessional collaboration/education which, to be successful, would ultimately require the various health professions to engage collaboratively

in their early training experiences (DeLeon, Sells, Cassidy, Waters & Kasper, 2015; Saperstein, Lilje & Seibert, 2015). That is, individually each of the health professions would have to expand beyond their traditional and isolated professional silos, as has been recommended by the Institute of Medicine (IOM) in a number of reports (Institute of Medicine, 2011) and now actively encouraged by the Uniformed Services University (USU) of the Department of Defense. Team-based, collaborative interprofessional care, has long been the hallmark of the health services provided by federal and state health systems, and particularly those within the Department of Defense, Department of Veterans Affairs, and U.S. Public Health Service.

To significantly improve upon the effectiveness of our nation's healthcare system over the long term, it will become increasingly important for the leaders of professional nursing to actively engage in strategic planning with colleagues from other disciplines, including law, economics, journalism, and those actively pursuing political and administrative positions of authority. Over the years, the Congressional Research Service (CRS) has consistently reported that those with legal backgrounds represent the dominant profession of the Members of Congress, while those elected officials possessing actual healthcare expertise represent only a significant minority (Congressional Research Service, June 1, 2020). Accordingly, it is important to appreciate that those actually involved in shaping our nation's healthcare policies and priorities at the highest level really do not possess an intimate appreciation for the nuances of healthcare clinical delivery; just as the vast majority of our nation's healthcare professionals similarly do not appreciate the unique culture, language, nor history of the political/public policy process.

One of the authors worked with the late U.S. Senator Daniel K. Inouye for more than 38 years and retired as his Chief of Staff. The Senator had a long and distinguished history of seeking to ensure that all Americans would have timely access to the quality of healthcare that they deserved. He was proud that he had the privilege of voting for the original Medicare and Medicaid legislation and during his lengthy career sponsored most, if not nearly all, of the federal legislation recognizing and reimbursing advanced practice nurses as autonomous providers. Among his accomplishments were the establishment of the National Institute of Nursing Research at the National Institutes of Health, the Graduate School of Nursing at USU, star-rank appointments for military nursing leaders, and various nursing provisions included in the ACA. Given the hierarchical command structure of the military, having qualified nurses deemed eligible to be appointed to senior rank and healthcare administrative positions (such as clinic and hospital commanders), as well as the expressed expectation by the Congress for this to occur, turned out to be critical for modifying the historical physician-dominated promotion system. Early on, the Senator understood the importance of the historical "disconnect" between the backgrounds of his elected colleagues and that of nursing and the other health professions. Accordingly, in pursuing legislative modifications, he would purposely select visual examples which could be readily understood and appreciated by his usually more senior Senate colleagues to explain and advance his legislative recommendations. He preferred to "talk story" about the bigger picture, rather than rely on important, but perhaps distractingly minor, details.

For example, when he initially offered an amendment to the then-Department of Defense CHAMPUS annual appropriations legislation to directly reimburse CNMs and psychiatric mental health nurses, he found that his colleagues could appreciate the value of certified nurse midwives, several even commenting that they had been delivered by a CNM, while they were

hesitant to expand the program to cover psychiatric mental health nursing services, no matter how important that care might also be. Accordingly, he modified his proposal to only cover CNMs. Over the years, he had similar success in including nurse-midwifery as a mandated benefit under Medicaid, Medicare, and the Federal Employees Health Benefit program. In 1987, the United States General Accounting Office (GAO) reviewed for him the extent to which the various states covered the services of CNMs under their Medicaid program, as mandated by the Comprehensive Omnibus Budget Reconciliation Act of 1980. At that time, all states had a law or regulation that allowed nurse midwives to practice with 44 states covering their services under Medicaid, while the Health Care Financing Administration was working with the other six states to bring their programs into compliance (United States General Accounting Office, 1982).

Eventually, over time, the Senator's successes were expanded to recognize the wide range of nursing services across a number of federal programs. In essence, from a higher-level public health/policy perspective, Senator Inouye was able to bridge the gap between two very different cultures--law and nursing--while appreciating that they essentially possessed very similar objectives; that is, ensuring that the highest possible quality of care would be available to the beneficiaries of the various federal programs in a timely and patient-centered manner. He understood that many of the most important underlying principles embedded within the landmark Patient Protection and Affordable Care Act (ACA), such as patient-centered care; its emphasis upon wellness, culturally sensitive engagement, and prevention had long been the foundations for quality nursing care, and particularly that provided by CNMs.

Reflecting upon a fundamental change in healthcare delivery and education perspectives, the IOM noted:

> In 2002, the Institute of Medicine (IOM) convened a summit of diverse stakeholders who made the case for reforming health professions education to improve the quality and safety of health care. While many of their recommendations remain relevant today, much has changed over the past decade, necessitating new thinking. Innovators at that time stressed the importance of "patient-centered care," while today they think of patients as partners in health promotion and health care delivery. Patients are integral members of the care team, not solely patients to be treated, and the team is recognized as comprising a variety of health professionals. This changed thinking is the culmination of many social, economic, and technological factors that are transforming the world and forcing the fields of both health care and education to rethink long-established organizational models (National Academies of Sciences Engineering and Medicine, 2016, pp. xv-xvi).

Nevertheless, it is an unfortunate reality today that non-physician healthcare providers still face numerous artificial barriers to being fully recognized, authorized to practice to the fullest extent of their education and training, and appropriately reimbursed. Historically, scope-of-practice decisions have been made at the state legislative and individual facility level with the policy rationale of "protecting the public." Notwithstanding objective evidence to the contrary, organized medicine has been impressively successful over time in systematically narrowing the parameters under which their non-physician competitors have been authorized to practice, including frequently limiting their third-party payor insurance reimbursement rates. This latter result can cause certain treatment facilities to prefer physicians per se for purely economic reasons, when either profession could competently provide the required services. Medicine has also been successful, including at the federal level, in effectively coding "nursing services" within

"physician services," for example within hospital inpatient care, with the result being that it becomes very difficult to accurately determine what care nursing is actually providing.

The adverse clinical and economic impact of these restrictions to society have been highlighted in numerous reports issued by the IOM, which consistently stress the need for fundamentally modifying the clinical environment to allow all practitioners to practice without supervision by another profession to the fullest extent of their education and training, including in team-based care (Institute of Medicine, 2011). Various federal agencies, including the Federal Trade Commission (FTC), the Government Accountability Office (GAO), and the White House, have come to similar conclusions (The Council of Economic Advisers, February 2019). Economist Jeffrey Bauer estimates that by fully empowering non-physician providers to practice to the fullest extent of their education and training, our nation's health care costs could be reduced by 32 percent, which would result in an annual savings of $155 billion. He further makes the telling point that he has expressly, and unsuccessfully, sought to find any evidence demonstrating that non-physician practitioners have clinical outcomes that are less successful than those of their physician counterparts (Bauer, 2020).

To successfully change this historical situation and ultimately to overcome these unfortunate practice barriers, it will require the leadership of professional nursing to adopt the vision of the late U.S. Senator Daniel K. Inouye as to the importance of consistently pursuing one's long-term objectives, while at the same time appreciating the necessity of learning how to meaningfully dialogue with professionals, from perhaps radically different backgrounds, in order to achieve mutually desirable and obtainable goals. Perhaps we can learn from the successes of CNMs in the military health system and extrapolate those lessons learned to reconcile the dissonance between data and current policies.

A Proud Legacy – U.S. Army Nurse Midwifery

There has been an increased need for healthcare providers during and following every U.S. war, including the Vietnam War. The nurse-midwifery model of care has existed in the United States since 1928. Interest in U.S. Army CNMs began in response to the physician shortage in 1972 and CNMs have been a part of Army medicine ever since. Beginning with one CNM at Fort Knox, Kentucky, to presently having over 40 designated Army CNMs at 13 different locations, nurse-midwifery continues to have a substantial presence in the military.

The first CNM in the Army was Captain Barbara Schroeter, who began at Ireland Army Hospital, Fort Knox, Kentucky, in September, 1972. Midwifery began there because it served a young, healthy, and fertile population and was close to Frontier Nursing Service (FNS), which had been training midwives since 1928. Similar to FNS, Capt. Schroeter's vision for a CNM service guided the initial development of practice standards and data collection. The midwifery service at Ireland was easily established given patient requests for such a service. The next year, Lt. Col. Mary Mulqueen joined the program. By the following year there were four CNMs who accounted for 22 percent of the total deliveries.

Not surprisingly, those patients who used CNMs praised their service. The common themes in patients' comments included decreased waiting times, increased time spent with patients, personal attention, and rapport with the all-female midwifery staff. No male CNMs were in the military at that time. There were some negative feelings initially by obstetricians,

but that quickly changed when they saw the benefits of having CNMs on board. A brigadier general officer commented: "In some countries, England for example, all normal deliveries in civilian hospitals are performed by midwives" (Marker, 1973). The Army was moving the U.S. towards the staffing standard for delivery that many other countries already had adopted. From a population health perspective, approximately 124,000 babies were born in military hospitals in 1972. The majority of these babies were born to low-risk mothers who are good candidates for services from certified nurse-midwives. The Army's expressed goal at that time became to increase the number of CNMs to 50 within the next five years to take care of the abundance of low risk women.

During the initial stages of this development, the Army partnered with the University of Kentucky to start a nurse midwifery education program at the baccalaureate and master's degree levels, called the Army nurse clinician program. It was projected that six Army Nurse Corps officers would attend every year, starting in 1974. It was felt that in the future all deliveries in the Army could be performed by a CNM, except for those complicated cases which required an obstetrician. And, by 1974, CNMs were indeed delivering over half the babies born in the military hospital.

In 1976, a total of seven CNMs were on the staff and an integral part of the University of Kentucky's master's degree program educating future Army CNMs. The first graduates were assigned to Fort Campbell, Kentucky, with successive graduates being assigned to Darnall Army Hospital, Fort Hood, Texas. Capt. Lloyd Seipert, the first male CNM, joined the practice at Darnall. Germany and Alaska were added to the assignment locations in 1979 and 1980 respectively. With the establishment of the Graduate School of Nursing in 1993 at the Uniformed Services University of the Health Sciences, Bethesda, MD. initial plans were proposed for nurse-midwifery, along with the other traditional nursing specialties. Most unfortunately, in our judgment, the university administration ultimately decided not to pursue this track, even though it did establish programs for nurse anesthesia and family nurse practitioner specialties.

Over the years, CNMs have been deployed to combat and non-combat zones in many different roles including research nurse, and chief nurse and staff on combat stress teams. For example, as a research nurse, one CNM collected data for multiple research studies and augmented the staff of the Combat Support Hospital in the Green Zone of Iraq when it received mass casualties. As the chief nurse of a Combat Support Hospital, another CNM was responsible for all nursing assets assigned to the hospital and oversaw all the medical and surgical nursing care performed to improve outcomes of care for battle and non-battle injuries. Female CNMs have also deployed with Army Cultural Support Teams, augmenting Special Forces and Ranger units. They are particularly tasked with securing the trust of the local female community, with the ultimate mission of gaining vital intelligence and providing social outreach and humanitarian care.

Over the course of 45 years, the role of CNMs within the U.S. Army has grown from one post to more than 15 locations and from one pioneer to more than 40 CNMs. The U.S. Army has recently reiterated its support for the ongoing role of CNMs in the Army Nurse Corps, recognizing the important role CNMs play in the care of women. Transposing these lessons learned can play an important role in reconciling the dissonance between data and current policies in our U.S. civilian CNM workforce.

Women's Healthcare Providers -- U.S. Navy Nurse-Midwifery

In February 2020, RADM Bruce L. Gillingham, Surgeon General of the Navy, approved the Female Readiness Strategy (Navy Medicine Female Force Readiness Strategy, 12 February 2020). One priority of this strategy is the establishment of embedded women's health care. Navy CNMs will be piloting themselves as embedded women's health providers in operational settings. Navy CNMs are also serving vital roles in the Navy Female Force Readiness Clinical Community (FFRCC). Under the leadership of CDR Candace Foura, 22 walk-in contraceptive clinics that provided same-day service were opened. Due to the success of this initiative, the Department of Health Affairs (DHA) is implementing walk-in contraceptive clinics throughout the Military Health System (Luna & Schulz, 2020).

The Importance of Capturing Accurate Data

While the U.S. data on CNM birth outcomes continue to grow and support positive outcomes, the number of educational programs and the number of births CNMs attend is at a standstill. The American College of Nurse-Midwives publishes their policy agenda yearly, and each year the agenda remains constant: reduce the barriers to midwifery care and increase the midwifery workforce (American College of Nurse-Midwives, 2020b). CNMs may perhaps perceive themselves as being limited in their ability to influence policy solely by their relatively small numbers. Yet, by escaping a siloed vision and learning to dialogue strategically with those truly concerned about our nation's health care system, a meaningful progress can evolve.

In 2019 the U.S. General Accounting Office (GAO) provided a report to Congressional Committees outlining actions needed to determine the required size and readiness of operational medical and dental forces (United States General Accounting Office, February 2019). The GAO made six recommendations, including that the Department of Defense (DOD) establish a method for assessing medical personnel requirements and a clinical readiness metric for medical providers. The GAO includes the number of all uniformed APRNs within the general category of "nurse" for the composition of DOD military personnel. In other words, the number of APRNs in uniform is not accounted for in GAO reports of DOD personnel. Yet when identifying non-deploying specialties, nurse-midwife is listed. To date, there has been no analysis of applying a clinical readiness metric for CNMs, nor is there currently any plan to apply the metric for CNMs.

While uniformed CNMs have been targeted for reduction based on these recommendations, no data were presented that CNMs are not providing quality readiness-related care. The majority of this report, and other military health care provider reports, focus on physician providers--patient productivity, readiness capability, and skill level. There is little to no information on the billeted nursing workforce, and even less information about the billeted Advanced Practice Registered Nurse (APRN) workforce (Whitley et al., 2018). While the section on nursing workforce in the IDA report addresses the civilian APRN workforce, the section does not address any APRN military nursing workforce pathways, including for CNMs. The report concludes with a brief note on the military nursing workforce. The report further states that, unlike their military physician peers, whose primary focus is on highly technical skill tasks, nurses must leave clinical practice in order to make forward progress in their military careers. This custom does not allow nurses to fully employ their clinical education and training to remain current in practice. The time has come for the leadership of the USU

Graduate School of Nursing to actively engage with their Nursing Corps Chief colleagues to develop clinical placements and responsibilities commensurate with the advanced education and training that CNMs receive. This collaborative approach and shared vision would be consistent with the ongoing efforts of medicine, within the public and private sector, and further assist to decrease the dissonance between data and policy.

A Long-Term Vision

CNMs provide outstanding primary care. Their emphasis upon prevention; patient-centered, holistic treatment, including well-baby care, should become the aspirational benchmark for military families and active duty female personnel. To accomplish their increased availability, is it is critical that their natural allies such as women's and children's health spokespersons as well as those committed to addressing health disparities actively engage in promoting their recognition and military utilization.

The leadership of the nation's nursing educational institutions, including that of the GSN at USU and national nursing organizations, will appreciate their societal responsibility to collaboratively promote the active utilization of CNMs, including in administrative and clinical capacities, as schools of medicine and their national organization have historically done for their various specialties.

CNMs have long demonstrated that they are an essential component of the Department of Defense's humanitarian and global health mission. Accordingly, deployment opportunities should be optimized. Nurse-midwifery has a long history of demonstrating the knowledge, skills, and personal attributes that are necessary in diverse and austere settings without access to the technology that is frequently employed in military treatment facilities; for example, in American Samoa, rural Africa, and throughout Southeast Asia. Addressing the truly pressing maternal and child health needs throughout the world where limited obstetric services result in nearly 400,000 maternal deaths annually, with more than three million infants' deaths within the first four weeks of life, is very much in our national interest. History would definitely affirm that certified nurse-midwifery, and particularly military certified nurse-midwifery, is well positioned and prepared to take on these critical challenges.

Conclusion

While the World Health Organization (WHO) designated 2020 as a celebration for the International Year of the Nurse and the Midwife (World Health Organization, 2020), the dissonance around CNM practice in the U.S. is growing in the public and private sectors, with continued historical artificial barriers being maintained. CNMs have a long and distinguished history of providing quality care especially in underserved communities. By engaging those most impacted, a reasonable pathway for increased availability is possible with maximizing the ACA recommendations and the use of full practice authority throughout the U.S. Women, and especially those who have decided to become involved in the public policy/political process in order to make a real difference in the lives of our citizenry, should appreciate the clinical and policy significance of embracing the choice of every woman to make the personal decision to receive care from CNMs, if they so desire. The military health care system provides a model of

practice that should be leveraged in other public and private healthcare sectors. This example is an exciting opportunity to expand quality services for women's health, while obtaining objective confirmation (i.e., data) on a large-scale basis. The resulting quality of care provided can have a long-term impact upon our nation's health disparities.

References

Accreditation Commission for Midwifery Education. (2019). *Midwifery Education Trends Report 2019*. Silver Spring MD.

American College of Nurse-Midwives. (2018). Practice Environments for Certified Nurse-Midwives as of June 2018. Silver Spring MD.

American College of Nurse-Midwives. (2019). Essential Facts About Midwives. Silver Spring MD.

American College of Nurse-Midwives. (2020a). ACNM Core Competencies for Basic Midwifery Practice. Silver Spring MD.

American College of Nurse-Midwives. (2020b). ACNM Policy Agenda 2019-2020. Retrieved from https://www.midwife.org/acnm-policy-agenda#:~:text=Specifically%2C%20during%20the%20116th,%2C%20training%2C%20certification%20and%20experience.

American College of Obstetricians and Gynecologists. (2018). Joint Statement of Practice Relations Between Obstetrician-Gynecologists and Cerified Nurse-Midwives/Certified Midwives. Washington D.C.

Attanasio, L., & Kozhimannil, K. (2018). Relationship Between Hospital-Level Percentage of Midwife-Attended Births and Obstetric Procedure Utilization. *Journal of Midwifery & Women's Health, 63*(1), 14-22. doi:10.1111/jmwh.12702.

Bauer, J. C. (2020). *Not what the doctor ordered: Liberating caregivers and empowering consumers for successful health system reform.* (3rd ed.). New York: Routledge.

Berwick, D. M., Nolan, T. W., & Whittington, J. (2008). The triple aim: care, health, and cost. *Health Affairs, 27*(3), 759-769.

Congressional Reasearch Service. (June 1, 2020). Membership of the 115th Congress: A profile (R45583). Retrieved from https://www.aacnnursing.org/Portals/42/Foundation/Faculty-Scholars-Grant-Application-Details-2020.pdf

DeLeon, P. H. (2017). Foreward - An exciting future for the nation. Foreward. Using Nursing *Research to Shape Health Policy*. (pp. xiii). New York: Springer.

DeLeon, P. H., Sells, J. R., Cassidy, O., Waters, A. J., & Kasper, C. E. (2015). Health policy: Timely and interdisciplinary. *Training and Education in Professional Psychology, 9*(2), 121.

Dissonance. 2020. in Merriam-Webster.coom. Retrieved August 7, 2020 from https://www.merriam-webster.com/dictionary/dissonance

Hamilton, B. E., Martin, J. A., Osterman, M. J., Curtin, S. C., & Mathews, T. (2015). Births: Final Data for 2014. *National Vital Statistics Reports, 64*(12), 1-64.

Hamlin, L., & Patel, A. (2018). *Perinatal Outcomes by Provider Type in a Universally-Insured Population*. Paper presented at the ICN 10th APN/NP Conference, Rotterdam, Netherlands.

Institute of Medicine. (2011). The future of nursing: Leading change, advancing health: National Academies Press. Washington, D.C.

Loewenberg Weisband, Y., Klebanoff, M., Gallo, M. F., Shoben, A., & Norris, A. H. (2018). Birth Outcomes of Women Using a Midwife versus Women Using a Physician for Prenatal Care. *Journal of Midwifery & Women's Health, 63*(4), 399-409.

Luna, C., & Schulz, K. (2020). The Certified Nurse Midwife Role in COVID-19. *Nurse Corps News*. May 2020 Special Edition.

Martin, J. A., Hamilton, B. E., Osterman, M., Driscoll, A., & Mathews, T. (2019). Births: Final Data for 2018. National Vital Statistics Reports, Hyattsville, MD, National Center for Health Statistics, CDC.

Martin, J. A., Hamilton, B. E., Osterman, M. J., Curtin, S. C., & Mathews, T. (2015). Births: final data for 2013. *National Vital Statistics Reports, 66*(1), 1-70.

Martin J.A., Hamilton, B. E., Osterman, M. J., Curtin, S. C., & Mathews, T. (2013). Births: Final data for 2012. *National Vital Statistics Reports, 62*(9), 1-87.

Midwifery and Maternity Providers Organisation. (2016). *Report on New Zealand's MMPO Midwives*. Retrieved from Christchurch New Zealand: https://www.midwife.org.nz/wp-content/uploads/2019/01/MMPO-report-2016.pdf

National Academies of Sciences Engineering and Medicine. (2016). Assessing progress on the Institute of Medicine report The Future of Nursing: National Academies Press.

National Academies of Sciences Engineering and Medicine. (2017). Communities in action: Pathways to health equity: National Academies Press.

Navy Medicine (12 February 2020). Navy Medicine Female Force Readiness Strategy.

Neal, J. L., Carlson, N. S., Phillippi, J. C., Tilden, E. L., Smith, D. C., Breman, R. B., . . . Lowe, N. K. (2018). Midwifery presence in United States medical centers and labor care and birth outcomes among low-risk nulliparous women: A Consortium on Safe Labor study. Birth (Berkeley, Calif.). Retrieved from: https://onlinelibrary.wiley.com/doi/abs/10.1111/birt.12407

Patient Protection and Affordable Care Act. 42 U.S.C. 18001 Stat. 124 (2010).

Saperstein, A. K., Lilje, T., & Seibert, D. (2015). A model for teaching reflective practice. *Military Medicine, 180*(4 Suppl), 142-146.

United Kingdom National Health Service (2018). NHS Maternity Statistics, England 2017-18.

The Council of Economic Advisers. (February 2019). Deregulating Health Insurance Markets: Value to Market Participants. Washington D.C.

Thornton, P. (2017). Characteristics of Spontaneous Births Attended by Midwives and Physicians in US Hospitals in 2014. *Journal of Midwifery & Women's Health, 62*(5), 531-537. https://doi.org/10.1111/jmwh.12638.

United States General Accounting Office. (1982). Availability of Nurse-Midwife Services Under Federal Health Care Programs. (B-207636). Washington D.C.

United States General Accounting Office. (February 2019). Defense Health Care: Actions Needed to Determine the Required Size and Readiness of Operational Medical and Dental Forces. Washington D.C.

Whitley, J. E., Bishop, J. M., Burns, S. K., Guerrera, K. M., Lurie, P. M., Rieksts, B. Q., . . . Wu, L. (2018). Medical Total Force Management: Assessing Readiness and Cost. Institute for Defense Analyses: Alexandria VA.

World Health Organization. (2020). Year of the Nurse and the Midwife 2020. Retrieved from https://www.who.int/news-room/campaigns/year-of-the-nurse-and-the-midwife-2020.

Yang, Y. T., Attanasio, L. B., & Kozhimannil, K. B. (2016). State scope of practice laws, nurse-midwifery workforce, and childbirth procedures and outcomes. *Women's Health Issues, 26*(3), 262-267. Retrieved from https://www.gwdocs.com/documents/services/midwifery%20services/states_where_midwives_practice_independently_have_lower_rates_of_cesarean_deliveries_and_preterm_births-_womens_health_issues_study_says.pdf