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# State of Constant Readiness:
## *Lessons Learned From the Military*

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The purpose of this article is to compare and discuss the preparation of civilian and military nurses in meeting the demands of the COVID-19 pandemic. The military nursing system exemplifies a program of ongoing training and evaluations to prepare nurses to care for patients in austere environments. The lessons learned during the pandemic include adapting, collaborating, and expanding current practices in nursing to train and validate nursing skills continuously. The COVID-19 pandemic brought out the best in nursing and also provided a platform for further advancements toward organizing and delivering extraordinary care under unexpected circumstances.

The COVID-19 pandemic created many unprecedented challenges in health care. The surge in volume of critically ill patients due to the COVID-19 virus being highly contagious and challenging to treat resulted in many sudden changes. For example, families were not allowed to visit, leaving many patients to die alone.[1] The number of codes and deaths per shift were higher than any experienced clinicians had ever seen before, and it was not uncommon to see body bags stacked up in hallways. It was also not unusual to see an organization opening an additional 100 critical care beds, leading to challenging staffing requirements for nursing and other health care providers. Elective surgeries were cancelled, and surgery nurses, who had never worked in critical care, were being trained to provide care in the critical care units. Additionally, nurses were being "deployed" from other states to those with the highest numbers of COVID-19 patients. Due to the large numbers of traveling nurses being sent, the credentialing and onboarding requirements were reduced.

Communication from the Centers for Disease Control about the needed types of protective personal equipment (PPE) changed frequently. Subsequently, ensuring there was enough PPE proved to be a major challenge, which added stress to the staff that were already working long hours and felt a growing concern about infecting their families. The extraordinary transformation of the work environment was being characterized as a "war zone." This article addresses lessons from the military's response about how to sustain a constant state of readiness.

### NURSING'S RESPONSE TO A GLOBAL PANDEMIC

As far back as the time of Florence Nightingale in the Crimean War, nursing has historically responded to the call to serve during times of humanitarian crisis. The response of nurses during the unprecedented COVID-19 global pandemic highlighted the essential role nurses play in managing disease outbreak in the hospital frontlines and throughout community settings. In addition to visible direct patient care roles, nurses influenced policy through advising key governmental

**KEY POINTS**

- **The COVID-19 pandemic highlighted the best in nurses providing care under extraordinary circumstances.**
- **The military system provides ongoing training and evaluations to prepare nurses to care for patients in austere environments, beneficial practices for civilian nurses as well.**
- **Civilian and military nurses sharing lessons learned during the pandemic are opportunities to expand and advance new organizational practices in nursing.**

leaders regarding disease control strategies and safe practices to reduce spread of COVID-19. Furthermore, nurses conducted research to better understand the disease, advance evidence-based practices, and develop vaccines, while also coordinating public health initiatives to evaluate, monitor, and mitigate risk.[2]

Nurses, who make up the largest portion of the health care workforce,[3] were physically the closest to patients and often exposed to high-risk working conditions amidst severe resource limitations, such as access to personal protective equipment and hospital supplies needed to safely provide care. Nurses were able to adapt workforce models to quickly train individuals without requisite critical care knowledge to care for very ill COVID-19 patients, while facing exceptional challenges in a constantly changing, unprecedented situation. Civilian and military nurses deployed to hard-hit areas to provide support in a variety of roles, such as direct patient care, COVID-19 testing, contact tracing, and vaccine administration. Many nurses also volunteered hours to support their local communities. A primary nursing goal was to provide sufficient numbers of nurses to prepare the nursing workforce to effectively manage the pandemic, while minimizing risk and optimizing patient safety and outcomes.[3]

## CONTINUOUS TRAINING IN THE MILITARY

The mission of the Air Force Medical Service (AFMS) is "to ensure medically fit forces, provide expeditionary medics, and deliver Trusted Care to all we serve."[4] This constant state of readiness is accomplished through recurrent training focused on maintaining fundamental proficiencies and sharpening the unique skills encountered in expeditionary settings. Readiness training is aligned as a top priority for leadership and is integrated into standard work for Air Force nurses. This allows them to be rapidly deployed across multiple domains to a broad range of locations and to support wartime operations as well as humanitarian crises, natural disasters, or global pandemics. Routine evaluation of readiness training ensures that the skill sets remain relevant to evolving medical needs on military installations and in deployed environments.

## DESCRIPTION OF CATEGORIES OF CARE

The Air Force nursing mission requires a series of training platforms to maintain a constant state of readiness. There are three training categories that provide nurses with the levels of preparedness required for the numerous deployment specifications. Category I fulfills fundamental clinical skills, generally obtained through local medical education and in-garrison care. The clinical currency offered in this category supports a foundation on which readiness skills are built. Category II contributes to Readiness Skills Training. This training is specific to the specialty of the airman and includes both the enlisted and officer specialty codes. The specialty codes are 4 (officer) or 5 (enlisted) digit alphanumeric codes used to identify and arrange airmen by their area of professional concentration.[5] The training provided allows the members to perform at the full scope of their duties. Category III is known as the Unit Type Code training. This presents training defined as platform-specific or environmental-specific, producing a preparation for the real-world expectations for downrange care.[6]

## CONTINUUM OF CARE

The training each Air Force member receives ensures they have the capabilities to administer en route care from the point of injury (POI) to full recovery. The care starts on the battlefield and ends at the definitive care facilities. The goal in providing the continuum of care to injured patients is to reduce the time to medical or surgical intervention and improve outcomes. As a rule, there is no level of care that will be bypassed except on the grounds of medical urgency, efficiency, or expediency. In 2017, the Secretary of Defense mandated that all Armed Forces would develop and be trained in "standardized combat casualty care instruction."[7] With this training, POI care can be provided directly on the battlefield, or any scene where an individual requires medical treatment.[7]

After POI, there are five more formal levels of care that align with the spectrum of support an injured patient may experience. Role 1 is the first level of medical care military personnel receive. This role includes immediate lifesaving measures, disease and nonbattle injury prevention and care, and combat and operational stress prevention measures. Role 2 provides advanced trauma management and emergency medical treatment. Resuscitation measures continue with greater capabilities than what was provided in Role 1. Although damage control surgery may be conducted, there are limited patient holding capabilities. In Role 3, additional resuscitation, wound surgery, and postoperative treatments are available. Specialty surgery is also a possibility to include general, orthopedic, or neurosurgery. Local nationals can also have surgery conducted in the Role 3 environment. The patients remain until they can tolerate and survive movement over long distances. Role 4 care is found in the United States and robust overseas hospitals. Role 4 represents the most definitive medical care available within the medical care system. Rehabilitation is the last category, and it is the care offered in the United States. Common locations including Walter Reed in Bethesda, Maryland, or the Center for the Intrepid in San Antonio, Texas.[8] Rehabilitation offers the wounded military personnel the opportunity to recover and gain new skills associated with their injuries, both physically and mentally.[8]

## SKILLS TRAINING AND SUSTAINMENT

As the mission of the AFMS constantly changes, the training for medical personnel must also evolve. The AFMS utilizes regional currency sites, partnered within civilian medical communities to ensure their staff remain clinically current and trained. The Sustained Medical and Readiness Trained (SMART)[9] program is a mechanism to help Air Force medical personnel maintain clinical proficiency in their particular medical specialty. Advanced medical readiness training, such as at Centers for the Sustainment of Trauma and Readiness Skills (C-STARS), builds even further on that foundation.[10]

The SMART and C-STARS platforms utilize standardized curriculum and clinical immersion to fulfill readiness and training requirements. Multidisciplinary military teams, including physicians, surgeons, nurses, technicians, and respiratory therapists are embedded in large, civilian Level 1 trauma centers. These teams operate the training platform that allows military personnel from all over the world to come and train at high-volume trauma centers, providing them with the opportunity to refresh their skills and develop new skills. The complement of instructor's specialties mirrors the students' that attend, so each class includes a diverse group of disciplines. In addition to providing hands-on care to real-world patients, each class spends time in high-fidelity simulation labs, working as a team to perform life-saving skills based on scenarios from real-world events.

## MILITARY NURSES AND CIVILIAN NURSES

Civilian and military nurses were challenged to provide nursing care in austere and warlike conditions when the COVID-19 pandemic began. Nurses in civilian settings are not continuously trained to respond to events such as a pandemic. Resources and supplies were limited to provide ongoing training and experiences to meet the unprecedented demands. In an online webinar, when asked via virtual polling whether or not nurses felt prepared to respond to the COVID-19 pandemic, 59% of civilian nurses did not feel prepared, whereas 79% of military nurses felt prepared.[11] When asked what was needed to feel more prepared for the pandemic, civilian nurse responses included caring leadership, additional trainings, collaboration and information sharing, funding to purchase equipment and support advanced trainings, and being provided reliable data.[11] One civilian respondent stated, "health care decisions being made by scientists and health care providers rather than politicians."[11] When asked what was needed by military nurses to feel better prepared, responses included additional trainings, equipment, and increased budgets, in addition to manning (staffing) increases. Military nurses also felt broad training rotations, including care of patients on ventilators, was needed. One military nurse stated, "training that exposes nursing staff to crisis standards of care, i.e., 2 patients on 1 vent."[11]

As the reality of a global pandemic emerged, nursing organizations established guidelines encouraging nurse educators and health care organizations to collaborate to ensure clinical skills and competencies aligned to meet the roles and responsibilities needed to address overwhelming workforce demands.[12] Continuing education (CE) requirements to renew nursing licenses vary widely among the United States. State boards of nursing CE requirements range from 45 to 0 hours, with no CE requirements for licensure renewal in 12 states.[13] Consistency and standardization in training requirements across the United States are needed to ensure civilian nurses are continuously prepared to meet future health care demands, especially in cases such as the pandemic.

## LESSONS LEARNED

As the global pandemic unfolded in 2020, it became increasingly clear that frontline nurses caring for patients in dour environments desired, and needed, additional training and skills to meet the demands. While performing nursing skills under extraordinary circumstances, nurses rose to the occasion and did what we do best…care for patients and their families. We learned that the military nursing corps had a plan in place to ensure continuous training and validation of nursing skills. Innovative collaborations and sharing resources led to new pathways for success. As Lt. Gen. Hogg stated, our thinking should be "without the box."[11] Nurse leaders should not impede innovation, but rather advocate through accrediting bodies to explore innovative solutions for the future. Through purposeful advocacy, the valuable changes that occurred over the past year will continue to move forward.

The use of telehealth and simulated learning increased dramatically during the pandemic when physical presence was not possible at times. Advancing simulated learning and telehealth initiatives are changes requiring ongoing evaluation and consideration for future use.[11] Faculty taught remotely, nurses provided patient care via telehealth, and attendance at virtual meetings became the norm, including webinars and conferences…all practices that can continue to be implemented and evaluated for their effectiveness. Incorporating simulated learning scenarios that include unexpected or dire outcomes may promote critical thinking beyond standard training skill sets.[11]

Highly trained military Special Operations Forces' (SOF) medics were part of a team providing clinical care in the New York-Presbyterian/Columbia University Irving Medical Center.[14] Through collaboration and innovative approaches, the skills implemented by the SOFs contributed to the development of a tracheostomy ward with SOF medics providing direct patient

care and training staff. Nurses in the military are often cross-trained to provide care in multiple practice settings. A nurse who is trained to provide care in medical/surgical may be asked to work in a different department such as obstetrics or oncology. Cross training in areas outside our comfort zones creates increased flexibility and more confident nurses in changing circumstances. Most of all, sharing experiences and understanding the unique challenges faced by nurses in times of crisis will move the profession forward globally. A willingness to consider alternative solutions and think differently allows for growth and new possibilities.

## CONCLUSIONS

The COVID-19 pandemic created unprecedented challenges and scenarios that had never been experienced in civilian nursing. Collaborating with our military nurse colleagues seemed to be natural when words like *war zone*, *deployment*, and possible *PTSD* verbiage was being used. There are several calls-to-action for civilian nursing leaders to explore. For example, how do we begin to train nurses in more "austere" environments, maintain more of a constant state of readiness in the workforce, and be better prepared to sustain disaster-like responses for longer periods of time? How do we better support the families of the nurses and other health care providers who are expected to work longer hours and may expose their families to a deadly virus? How do we maintain a work environment that supports staff development of innovative educational opportunities? Should the Crisis Standards of Care[15] be discussed in nursing school and other forums so staff can be proud of what they were able to do for their patients instead of feeling guilty about what else they should have done? Capturing lessons learned and innovations that were created during this pandemic should be documented and shared broadly. Organizations may want to re-evaluate how they do their disaster planning and incorporate some "what if" scenarios that reflect the kind of challenges that have been seen in this pandemic. Lastly, the workforce needs to feel supported and encouraged to take care of themselves. The mental health and rejuvenation of our caregivers needs to be a top priority as we continue to move through the pandemic.

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