

# **US Military and California Health Personnel: Select Comparisons**

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**Prepared for the California HealthCare Foundation by**

**Melissa Knox, RD, Catherine Dower, JD, and Edward O'Neil, PhD, MPA, FAAN**

**University of California, San Francisco, Center for the Health Professions**



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## Executive Summary

As California faces workforce shortages and geographic mal-distribution in many of the health care professions, policy makers are looking to expanding educational programs, rethinking practice models and improving recruitment and retention efforts among existing and new pools of workers. One potential pool of health care workers includes former military personnel returning from active duty or retiring with years available for service in the civilian labor force. This report compares a select set of U.S. military health occupations with similar civilian health occupations in California; characteristics compared include job descriptions, education and training, legal scope of practice and certification or licensure requirements.

Many military health care positions look similar to civilian health occupations. However, because training for enlisted occupations is specifically geared toward the needs of the armed services, the range of duties can vary. In some cases, these differences are negligible. In other cases, the range of duties has minimal overlap or the national certification recognized by the military is not recognized by California, and a former soldier is left either overqualified for a position or only partially qualified but not fully eligible to work in a particular civilian role. There appear to be several pools of individuals who have received significant health care training in the military but whose training and job title might not translate easily into a civilian position.

**Dental Specialists** – particularly those with an X2 Preventive Dentistry ASI – are significantly overqualified to work as dental assistants but do not easily qualify to be licensed as dental hygienists in California. With some policy changes and career guidance, these individuals might be able to help address the many dentally underserved areas in California.

Given the shortages in California and the US of allied imaging personnel, the military-trained **Radiology Specialists** could be looked to as a pool of well-prepared individuals capable of meeting some of the state's needs.

The military occupation of **Pharmacy Specialists**, who have higher education requirements and responsibilities than California's pharmacy technicians, might be a model for an emerging profession that could help address some of the state's pharmacy personnel shortages.

Though it has its roots in earlier iterations of the “medic”, the Army's **Health Care Specialist** is a relatively new military occupation that provides patient assessment, teaching, emergency care and nursing care. Individuals may be overqualified for positions in the civilian sector as EMTs but, unless they have an M6 Practical Nurse Additional Skill Identifier, they would not be close to qualifying as a Licensed Vocational Nurse in California.

The Navy's **Independent Duty Corpsmen** are highly trained individuals with clinical and management skills that enable them to work with indirect supervision providing care and administering programs, departments or clinics. Their skills are rarely known or appreciated in the civilian sector although they could make significant contributions beyond the military arena.

Despite the numerous potential opportunities for individuals separating from the military and for educators and employers recruiting health care students and employees, differences between the military and civilian health care sectors may have an impact on career transitions for individuals moving from one to the other. These fall into three main categories:

- **Education, Certification and Regulation**
  - Military training not always recognized for licensure requirements
  - Incomplete overlap of skill sets
  - Supervisory opportunities limited for civilian allied health roles
  - State-based vs. national accreditation and certification
- **Health system organization and financing**
  - Single employer and payer vs. multiple insurer-funded medicine
  - Concern over malpractice lawsuits minimal in military
  - Priorities for military and civilian health care not aligned
- **Practice culture**
  - Differences in workforce culture, occupational hierarchy and patient population characteristics may preclude some former military personnel from feeling comfortable practicing in a civilian health care setting.

Individuals with military training or experience in health care may be well-positioned to meet civilian health care needs upon their separation from service. Most of the military training is nationally accredited and/or of documented high quality, and a serviceperson retiring from military duty may still want to work for many years in the civilian sector. However, current rules and regulations may present unnecessary challenges. To facilitate smooth transitions between military and civilian work, civilian policy makers and educators might want to explore better alignment of accreditation, certification and licensure standards.

The military also offers interesting models for identifying the health care needs of a given population and developing corresponding training courses and occupational titles to meet those needs in a high quality and effective manner. These models, which by nature and design differ from the civilian, professions-based models, offer promising approaches for non-military health care training and delivery.

## **Introduction**

California, like other states, is currently experiencing health care workforce shortages, can see developing shortages on the horizon and seems to be looking at chronic maldistribution of many health professionals. Compared to urban and suburban residents, individuals in many rural and inner-city neighborhoods often face significant difficulties finding available professionals to meet their health care needs. As well there is a growing recognition that the ways in which health professionals are regulated for practice contributes to the inefficiency of the systems. The solutions to these challenges are multifaceted and educators, policy-makers and health care leaders are expanding educational programs, improving recruitment and retention efforts, and rethinking practice models. One potential pool of health care workers includes former military personnel returning from active duty or retiring with many years available for service in the civilian labor force.

As U.S. military personnel retire or separate from their respective branches, they will often seek opportunities to be employed in the civilian sector. For those employed in health occupations, the movement from military to civilian life may be a straightforward movement between strikingly similar roles or may be a maddening leap to a new culture which may not recognize the full set of skills developed via military training and experience. This issue brief seeks to compare a select set of U.S. military health occupations with similar civilian health occupations in California and to explore some of the ways in which the utilization of labor is affected by the way health care is staffed and delivered in the two systems.

This issue brief begins with a short description of the occupations selected for this study. The second section provides an overview of various aspects of the military and its health care workforce. The third section identifies several specific opportunities within military health occupations for policy makers to explore to help address California's workforce shortages. The fourth section analyzes possible barriers an individual might face making a career transition from the military to civilian health workforce. The fifth section provides a brief analytical summary of the issues. The final section of the main document contains the chart outlining the selected occupations and their characteristics. Two appendices are included: A) provides an overview of the evolution of the physician assistant profession as an example of the possible interplay of military and civilian sectors in the development of a new profession and B) provides details of a subset of the specialties an Army health care specialist can choose to pursue.

## **I. Selected Military Occupational Specialties in Health Care**

Highlighted in the chart in section VI are four Military Occupational Specialties (MOS)<sup>1</sup> for Active Duty soldiers in the Army and one Navy Enlisted Classification (NEC) code<sup>2</sup>

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<sup>1</sup> DA PAM 611-21: Military Occupational Classification and Structure ("MOS SmartBook")

<sup>2</sup> NAVPERS 18068F: Manual of Navy Enlisted Manpower and Personnel Classifications and Occupational Standards

for Active Duty sailors. Each MOS encompasses a set of skills, a training pathway and a defined career ladder. Soldiers typically are assigned to or choose their MOS at the time they join the service, and can progress within the designation over the course of their career.<sup>3</sup> In addition, Army personnel may acquire Additional Skill Identifiers (ASI)<sup>4</sup> with additional training and experience. The ASI is generally a more specialized or advanced role within a particular MOS. Navy NEC codes are defined and utilized somewhat differently from Army MOS designations.

The military occupations selected include those that are not exact matches to civilian occupations but have significant similarities and have sufficient numbers to be worthy of investigation for this research study. The authors intentionally did not include comparisons of occupations or professions that are exactly the same in the military and civilian worlds – primarily commissioned officer positions – because transition for individuals between the two environments is relatively easy. Instead, focus is on military occupations filled with individuals with high quality health care skills who may be strong but unacknowledged candidates for meeting some of the state’s health care provider needs. The selected Military Occupational Specialties and Navy Enlisted Classification are:

- 1.) Army Dental Specialist 68E (“sixty-eight echo”)
- 2.) Army Radiology Specialist 68P (“sixty-eight papa”)
- 3.) Army Pharmacy Specialist 68Q (“sixty-eight quebec”)
- 4.) Army Health Care Specialist 68W (“sixty-eight whiskey”)
- 5.) Navy Independent Duty Corpsman

For each MOS and NEC, a brief job description, prerequisites, training requirements, and scope of practice certifications are outlined. In addition, opportunities for career advancement and specialization are described. These are then compared to California requirements for education, examination, certification, and/or licensure for civilian occupations that utilize similar skill sets. The authors note that health care roles and titles are defined somewhat differently in the various branches of the US Armed Forces. Although much of section II below uses Army terminology for sake of simplicity, the other military branches usually have similar concepts and structures.

## **II. Health Care Workers in the US Military**

Several aspects of the US military – and their relation to the health care workforce – are worth noting when exploring possible transitions between civilian and military health

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<sup>3</sup> Soldiers may change to a different MOS while in the Army. This usually requires completing a training or educational program to qualify for the new role. Some restrictions apply as to who is eligible to make such a transition.

<sup>4</sup> Comparable designations are available in the other branches

care labor forces. These include the distinction between enlisted and officer status; training; career progression; labor utilization; and case priorities and patient population.

### **A. Enlisted and Officer**

There are two ways to join the Army<sup>5</sup>, as an enlisted soldier or as a commissioned officer. Enlisted soldiers are usually younger at the time of entering the service and typically join shortly after high school. Officers typically have at least a Bachelor's degree and are on average a few years older than entering enlisted soldiers. Distinct differences exist between the training of the two groups and the level of responsibility to which soldiers in each group are held.

Health care occupations and professions are included either as enlisted or officer roles. For example, physicians, nurses, dentists, occupational therapists, physical therapists, dietitians, and physician assistants are Army officers. Most technical health fields are enlisted positions.

Health care is somewhat different than the rest of the Army in that technical patient care skills are a requirement for health care officers as much as the formulation and implementation of management and strategy objectives. Health care officers also enter the Army a few years later in life than most other officers, as most complete the training for their profession prior to joining the service.

Several scholarships for use at civilian educational institutions are available to those who choose to become military health care officers after graduation. Also, the Uniformed Services University of the Health Sciences has degree granting programs with military-focused training components in medicine, nursing, and graduate fields.

### **B. Training**

Training is considered to be an essential element of Army duty. Soldier readiness is emphasized and is ensured with a combination of classroom and practical training, on-the-job training, and periodic skill verifications.

All enlisted soldiers attend a nine-week Basic Combat Training Course upon entering the Army. Then enlisted soldiers go to Advanced Individual Training (AIT) to learn the specific skills of their MOS. This is the foundation for all future classroom and on-the-job training. The AIT will last from a few weeks to a few months. These courses are based on the concept of Battle-Focused Training, which is intended to confer those skills that the soldiers will use either routinely or in emergent situations once training is complete.

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<sup>5</sup> As noted above, the information in this section is primarily about the Army. There are differences among the service branches but the details go beyond the scope of this paper. For this reason, we use the Army as the model, noting that while differences do exist, many of the concepts are applicable across the branches.



Many of the military training courses for health care roles are accredited by national organizations in their respective fields, making graduates of the courses eligible for certification by national certification bodies.<sup>6</sup> Although military programs may exceed the accrediting organizations' standards, the military's efforts to have its programs accredited by civilian bodies indicate appreciation for the value of standards in the field and help facilitate career transition from the military to civilian life. However, it should be noted that California's health professions' regulatory boards often do not recognize national accreditation as a substitute for state-based accreditation of programs or national certification of individuals as a substitute for state-based testing and credentialing for licensure. As enlisted soldiers advance in rank they participate in courses designed to develop their leadership capacity as well as to maintain and enhance their technical competencies.

Army commissioned officers are also given formal training in leadership and have opportunities to maintain and enhance their patient care skills.

Army tuition assistance to pursue civilian education is available for soldiers who, in addition to meeting other requirements, have a designated amount of time left in their contracted service or who extend their service obligation. In addition, GI bill funds can be used while on active duty to pay the cost of obtaining certifications and to supplement tuition assistance. Utilizing these options may ease the transition to the civilian sector upon leaving the military.<sup>7</sup>

### **C. Career Progression**

Soldiers can advance in rank as a result of time in service, by accumulating promotion points, and/or approval by a promotion board. For the lowest ranks, time in service is the only requirement, while a recommendation from the promotion board is required for the highest enlisted ranks. Promotion points are awarded for a multitude of factors, including duty performance evaluation (competence, military bearing, leadership, training, responsibility and accountability), awards and achievements, education, and those awarded as a result of appearance before the board. Education is encouraged as 300 of a possible 800 points can be earned via either military or civilian education.<sup>8</sup>

All soldiers, regardless of their MOS, can move into supervisory and leadership positions with advances in rank. This creates a hierarchical matrix, in which roles typically bound by established hierarchical roles in civilian health care are intermixed with the Army's hierarchical structure. The formal Army hierarchy and respect for rank is described as tempering the informal hierarchy and struggles for position that arise in civilian health care among the occupations and professions.

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<sup>6</sup> MEDCOM Reg 40-50: Career Management Field 91 Clinical Baseline Competencies for Enlisted Medical Personnel Performing Direct Patient Care at the Military Treatment Facility

<sup>7</sup> Army Regulation 621-5: Army Continuing Education System, Chapter 5; Veterans Affairs Pamphlet 22-90-2: The Montgomery GI Bill – Active Duty

<sup>8</sup> <https://www.hrc.army.mil/site/Active/select/JrEnSys.htm>; Thirtle, M. Educational Benefits and Officer-Commissioning Opportunities Available to U.S. Military Servicemembers. (2001). Rand Corporation.

#### **D. Labor utilization**

Many of the Army health care positions are organized along the same general lines as civilian health care occupations. However, because training for enlisted occupations is specifically geared toward the needs of Army service, the range of duties is often at least slightly different than that seen in the civilian sector. In some cases these differences are negligible and have little bearing when the time comes to transition from the Army to a civilian career. In other cases the range of duties has minimal overlap, and a former soldier is left either overqualified for a position, or only partially qualified but not fully eligible to work in a particular civilian role. Health care officer positions are the most likely to align in education and practice with civilian roles. Enlisted positions may or may not align with civilian roles.

Within the Army, opportunities to change the scope of practice of certain positions generally fall within the responsibility of Army leadership. Because the Army can control the training, internal regulation of roles, and service delivery, it can choose to identify health care needs and design new modes of care for efficient and effective care to patients. For example, non-medical personnel who have taken the Army's Combat Lifesaver Training Course are approved to perform tasks, some of which are rather advanced medical procedures, in order to stabilize their fellow soldiers who may have incurred a life-threatening injury. In studying the causes of combat casualties, it was determined that a select set of procedures performed immediately after injury could have a significant impact on whether or not a casualty survived. With a patient-centered systems approach, the Army was able to put a few key skills in the capable hands of non-medical enlisted soldiers. As a result and in combination with rapid evacuation capabilities, the percentage of wounded warriors who die of their wounds has decreased dramatically from previous conflicts.<sup>9</sup>

While Army regulation indicates delegated duties should fall within the officially documented competencies for a soldier within his/her assigned MOS<sup>10</sup>, some leeway exists for health providers to use their best clinical judgment in deciding when to delegate. Responsibility for duties which have been delegated fall to the higher ranking soldier, and if it has been determined that they have done so irresponsibly, discipline can be meted out by marks in their performance record (which affect promotion opportunities) or via the military justice system.

A license to practice from a US state or territory is required for many Army health care positions. Most of the health care officer positions fall in this category, while only a few of the enlisted positions do. This may be due in part to inconsistency in state requirements for licensure of allied and technical health care roles.

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<sup>9</sup> Army Regulation 350-1: Army Training and Education, Section 4-12;  
<http://www.defenselink.mil/home/blog/pdf/200704/20070419Wieman.pdf>

<sup>10</sup> MEDCOM Reg 40-50: Career Management Field 91 Clinical Baseline Competencies for Enlisted Medical Personnel Performing Direct Patient Care at the Military Treatment Facility

### **E. Care priorities and patient population**

The military health system provides care and treatment to military personnel and their families, and provides care to those in the midst of conflict and at the site of humanitarian missions. The primary goals of military health care, however, are to ensure military personnel are in battle-ready condition and to limit the impact of injuries incurred in the field. This focus has a great bearing on how care is structured and delivered.

All soldiers are required to undergo medical and dental evaluation, and minimum standards for health must be met prior to deployment. It is in the Army's best interest to ensure these standards are met for the widest set of soldiers at any given time. Since the population of soldiers includes many who have not had regular access to medical and dental care, treatment for these individuals will involve moving them from a low level of health on Army-defined criteria to the baseline necessary for deployment.

In addition, injuries while deployed can be extreme in nature and may require distinctive methods of care delivery and creative responses to physical and situational conditions.

As a result, soldiers who work in the health occupations will be exposed to a wide variety of conditions that may either go untreated in segments of the American population or that are more extreme than those regularly seen in civilian treatment facilities.

Regular acute and preventive treatment are also a substantial component of military health care, and much of the work performed by Army health providers is indistinguishable from that provided in civilian settings.

### **III. Opportunities**

Some military personnel return to civilian life after a relatively short-term tour of duty. Others might complete two or more decades of service and be eligible to retire from the military while still in their 40s or 50s and interested in ongoing or new careers. For whatever reason for the transition from military to civilian workforces, it might be worth exploring what California's health care needs are and how some of those needs might be met by former military personnel trained to provide health care. As can be seen in the chart comparing the selected military with civilian occupations, there appear to be several pools of individuals who have received significant health care training in the military but whose training and job title might not translate easily into a civilian position.

The Dental Specialists – particularly those with the X2 Preventive Dentistry Additional Skill Identifier (ASI) – are significantly overqualified to work as civilian dental assistants but do not easily qualify to be licensed as dental hygienists in California. With some policy changes and career guidance, these individuals might be able to help address the many dentally underserved areas in California.

Given the increasingly dire shortages in California and the US of imaging personnel, the military-trained Radiology Specialists could be looked to as a pool of well-prepared individuals capable of meeting some of the state's needs.

The military occupation of Pharmacy Specialists, who have higher education requirements and responsibilities than California's pharmacy technicians, might be a model for an emerging profession that could help address some of the state's pharmacy personnel shortages.

Though it has its roots in earlier iterations of the "medic" the Army's Health Care Specialist is a relatively new military occupation that provides patient assessment, teaching, emergency care and nursing care. Individuals may be overqualified for positions in the civilian sector as EMTs but, unless they have an M6 Practical Nurse Additional Skill Identifier, they would not be close to qualifying as a Licensed Vocational Nurse in California.

The Navy's Independent Duty Corpsmen are highly trained individuals with clinical and management skills that enable them to work with indirect supervision providing care and administering programs, departments or clinics. Their skills are rarely known or appreciated in the civilian sector although they could make significant contributions to civilian health care.

Although this report identifies and details many differences between military and civilian health care workforce occupations and models, history has provided us with examples of the possible positive intersection of the two worlds. The evolution of the physician assistant profession is one such example of how civilian medical personnel built upon what the military had accomplished with navy corpsmen to further train them to become physician assistants. The military in turn looked to the new civilian profession of physician assistants, created its own PA programs, and subsequently recognized PAs as commissioned officers. See Appendix A for a description of this evolution and interconnectedness between civilian and military sectors.

#### **IV. Potential Barriers**

Despite the numerous potential opportunities for individuals separating from the military and for educators and employers recruiting health care students and employees, many differences exist between the military and civilian health care sectors that may have an impact on career transitions for individuals moving from one to the other. Some of these differences could be perceived as barriers or hurdles, particularly for former military personnel seeking to work in the civilian health care workforce. For purposes of analysis, a list of potential barriers, organized by categories, is provided below.

**A. Education, Certification and Regulation** – Several differences exist between the military and civilian sectors regarding how health care workers are educated, trained, certified and regulated. These differences can sometimes make it all but impossible for an individual to make a smooth transition from the military to a comparable civilian

position. However, given the proper leadership, these policy decisions could be more easily amended than other differences explored below.

- 1) *Military training not always recognized for licensure requirements*  
In many instances, civilian health education programs and state professional boards' licensing criteria do not always give full credit for the health care provider education, training and experience one may have received in the military.
- 2) *Incomplete overlap of skill sets*  
Because of the state-based authority to set health care professions' scopes of practice, the practice acts vary tremendously from state to state for some professions. The US military is exempt from this system and has developed its own occupations and training programs based on need. This results in occupations and skill sets that do not match up exactly.
- 3) *Supervisory opportunities limited for civilian allied health roles*  
For a variety of reasons, the military is often able to offer its health care personnel greater levels of authority and opportunities to supervise and train other health care workers than the civilian sector. This reality can make it difficult for some transitions as the individual moving from the military to civilian job perceives a loss of authority and responsibility.
- 4) *State-based vs. national accreditation and certification*  
While many state practice acts do vary for specific professions, many states and the military have moved to rely on accreditation of educational programs and certification of individuals by national entities. Some states, including California, remain outliers in this evolution. Because California professional boards often require programs and individuals meet the state's own specific requirements, programs and individuals that have submitted to national accreditation or certification may not be recognized as qualified to educate students or be licensed to practice, respectively.

**B. Health system organization and financing** - Infrastructural differences between the military and civilian sectors may also have an impact on the ease an individual experiences seeking to move from one to the other. While these are no less real than the potential barriers listed above, these systemic differences are very difficult to change.

- 5) *Single employer and payer vs. multiple-insurer-funded medicine*  
Health care workers in the US military may enjoy some elements of a less-complex infrastructure compared to the civilian health care system. All enlisted and commissioned military personnel work for the same employer, which provides workers with the knowledge that their files, with any and all coursework, positions, promotions, certifications, and evaluations, can follow them as they move through their career ladders. At the same time, these workers' employer – the military – can rely on the knowledge that the workers' files are complete and may enable supervisors to extend the workers' authority and scope of practice on a case-by-case basis based on the individual's file. In addition to being a single

employer, the military also is a single payer of all its employees' salaries and all health care costs. This differs considerably from the civilian sector which has numerous employers who do not share employee files and which has numerous insurance programs and plans. Individuals in one or the other sector may appreciate the benefits of that system and find it difficult to shift to the infrastructure of the other.

6) *Concern over malpractice lawsuits*

One of the major concerns of health care workers in the civilian sector is the ever-present threat of legal action for malpractice. In contrast, military health personnel cannot be sued by other military personnel for medical malpractice, although they are liable for and can be sued by dependents of military personnel.

7) *Priorities for military and civilian health care not aligned*

Military health care priorities include ensuring that all personnel are in sufficiently good health to be deployed and to carry out their duties and caring for those wounded in conflict. On the other hand the priorities of the civilian sector are more focused on attending to individual acute and chronic care problems. These distinctions again might make it difficult for an individual to move easily from one sector to the other.

**C. Practice culture** – Still less tangible, more difficult to describe and highly unlikely to change are differences between the practice cultures in the military compared to civilian environments. These include differences in workforce culture, occupational hierarchy, and patient population characteristics. Such core and unchanging distinctions may preclude some former military personnel from ever feeling comfortable in a civilian health care setting.

## V. Summary

Individuals with military training or experience in health care may be well-positioned to meet civilian health care needs upon their separation from service. Most of the military training is nationally accredited and/or of documented high quality, and a serviceperson retiring from military duty may still want to work for many years in the civilian sector. However, current rules and regulations may present unnecessary challenges to the former military serviceperson seeking civilian work. To facilitate smooth transitions between military and civilian work, civilian policy makers and educators might want to explore better alignment of accreditation, certification and licensure standards.

As noted throughout this analysis and detailed in the chart below, the military also offers interesting models for identifying the health care needs of a given population and developing corresponding training courses and occupational titles to meet those needs in a high quality and effective manner. These models, which by nature and design, differ from the civilian, professions-based models, may offer promising approaches for non-military health care training and delivery.

**VI. Chart: Select Military Occupations, by key education and practice characteristics<sup>11</sup>**

The chart on the following pages provides summary descriptions of characteristics of the selected military occupations. Attention is focused on providing an overview of the education, training and scope of practice of the military occupation; a short description of the most comparable civilian occupations; and information about career transitions, both within the military as well as between the military and civilian workforce sectors.

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<sup>11</sup> The authors would like to acknowledge SFC Patrick Luley, Health Care Recruiter for the US Army for his invaluable assistance during the data-gathering phase of this project. The views expressed in this document are those of the authors and do not necessarily reflect those of project contributors.

**Army Dental Specialist (68E)**

Job Description: “To assist the Dental Corps officer in the prevention, examination, and treatment of the diseases of teeth and oral region.”<sup>12</sup> “The dental specialist assists the dental officer in prevention, examination, and treatment of diseases of teeth and oral region, or assists with the management of dental treatment facilities.”<sup>13</sup> In 2000, over 1600 dental specialists were practicing in the Army.<sup>14 15</sup>

<b>Military Education and Training</b> <sup>16,17,18,19</sup>	<b>Military Scope of Practice</b> <sup>20</sup>	<b>Transitions</b> <sup>21</sup>	<b>Comparable civilian</b>
<p>To enter the Army with the MOS of 68E Dental Specialist, soldiers must meet the following requirements:</p> <p>Attained minimum scores on the Armed Services Vocational Aptitude Battery (ASVAB) tests.</p>	<p>Soldiers with the 68E MOS work under the supervision of a Dental Corps Officer, and work along side Army civilian dental assistants and dental hygienists.</p> <p>None of the procedures</p>	<p>Career advancement in the Army:</p> <p>68E Dental Specialists can complete additional training to obtain one of two dental Additional Skill Identifiers</p>	<p>According to the Army’s Credentialing Opportunities On-line website, there are several civilian occupations comparable to the 68E Dental Specialist. These include Dental Assistant, Dental Hygienist, and Dental Laboratory</p>

<sup>12</sup> MEDCOM Reg 40-50: Career Management Field 91 Clinical Baseline Competencies for Enlisted Medical Personnel Performing Direct Patient Care at the Military Treatment Facility

<sup>13</sup> DA PAM 611-21: Military Occupational Classification and Structure (“MOS SmartBook”)

<sup>14</sup> Levy, D.G., Thie, H.J., Robbert, A.A., Naftel, S., Cannon, C., Ehrenberg, R.G., et al. (2001). Characterizing the Future Defense Workforce. Rand Corporation.

<sup>15</sup> More current data can be requested from the Defense Manpower Data Center. Data pertinent to this discussion would include: total number of military personnel in selected positions, the number of personnel who list California as their Home of Record, the number of separating or retiring military personnel who list California as their Home of Record, and any combination of the previous filters. Government agencies can request this information directly from the DMDC. Others may be required to make a Freedom of Information Act request to obtain the data.

<sup>16</sup> MEDCOM Reg 40-50: Career Management Field 91 Clinical Baseline Competencies for Enlisted Medical Personnel Performing Direct Patient Care at the Military Treatment Facility

<sup>17</sup> DA PAM 611-21: Military Occupational Classification and Structure (“MOS SmartBook”)

<sup>18</sup> [http://appd.amedd.army.mil/Enl\\_pg/Enlisted%20WebPages/91E\\_Course\\_Summary.htm](http://appd.amedd.army.mil/Enl_pg/Enlisted%20WebPages/91E_Course_Summary.htm)

<sup>19</sup> STP 8-91E15-SM-TG: Soldier’s Manual and Trainer’s Guide: MOS 91E Dental Specialist, February 2003

<sup>20</sup> MEDCOM Reg 40-50: Career Management Field 91 Clinical Baseline Competencies for Enlisted Medical Personnel Performing Direct Patient Care at the Military Treatment Facility

<sup>21</sup> Ibid.



<b>Military Education and Training</b> <sup>16,17,18,19</sup>	<b>Military Scope of Practice</b> <sup>20</sup>	<b>Transitions</b> <sup>21</sup>	<b>Comparable civilian</b>
<p>(91 in aptitude area ST on tests administered on and after 1 July 2004.)</p> <p>Formal training in the military (Active Duty MOS 68E course or Reserve training through AMEDDC&amp;S) or meet Army Civilian Acquired Skills Program (ACASP) criteria.</p> <p>Military training includes a nine-week Basic Combat Training course and a seven-week, three-day 68E10 Dental Specialist Course. The Dental Specialist course is not a nationally accredited program. However, upon completion of training and with two years of experience “graduates are eligible to take [the] National Board Examination administered by</p>	<p>performed by 68E Dental Specialists require direct supervision.</p> <p>Procedures performed by 68E Dental Specialists that require indirect supervision include maintaining equipment in working condition and in appropriate stock amounts, scheduling appointments and maintaining records, cleaning and preparing dental clinic for dental procedures, assisting the dentist in patient care procedures in the clinic and operating room, performing four-handed dentistry chair side techniques, preparing and/or mixing restorative and impression material, operation of radiographic equipment, providing oral health instruction,</p>	<p>(ASIs) (N5 and X2). With the N5 Dental Laboratory Specialty and with five years of experience soldiers are eligible to take the National Association of Dental Laboratories (NADL) national Board for Certification examination to become a Certified Dental Technician (CDT). With the X2 Preventive Dentistry Specialty, soldiers perform a subset of the tasks performed by CA registered dental hygienists. Training for the X2 Preventive Dentistry Specialty lasts 12 weeks. This training is not nationally accredited and no certificate or credential is granted subsequent to the X2 training.</p> <p>With time in service and</p>	<p>Specialist.<sup>26</sup></p> <p>There are six categories of dental auxiliary positions that are regulated by the Dental Board of California. These include Dental Assistant, Registered Dental Assistant, Registered Dental Assistant Extended Functions, Registered Dental Hygienist, Registered Dental Hygienist Extended Functions, and Registered Dental Hygienist Alternative Practice. All, except for Dental Assistants, are required to be registered with the state.<sup>27</sup></p> <p>All California dental auxiliary registrants are subject to licensure by examination. California does not recognize national certifications as a substitute for the state licensing</p>

<sup>22</sup> <http://www.comda.ca.gov/lawsregs/dutytable3-20-06.doc>

<sup>23</sup> DA PAM 611-21: Military Occupational Classification and Structure (“MOS SmartBook”)

<sup>24</sup> AR 600-8-19: Enlisted Promotions and Reductions

<sup>25</sup> AR 601-210: Active and Reserve Components Enlistment Program

<sup>26</sup> <https://www.cool.army.mil/68e.htm>

<sup>27</sup> <http://www.comda.ca.gov/>

<sup>28</sup> <http://www.comda.ca.gov/lawsregs/dutytable3-20-06.doc>

<sup>29</sup> Cal. Bus. & Prof. Code §§1740-1777

<b>Military Education and Training</b> <sup>16,17,18,19</sup>	<b>Military Scope of Practice</b> <sup>20</sup>	<b>Transitions</b> <sup>21</sup>	<b>Comparable civilian</b>
<p>Dental Assistants National Board (DANB) leading to designation as a certified dental assistant (CDA) and/or” with 1 year experience “are eligible to take the American Medical Technology (AMT) certifying board leading to the designation as a registered dental assistant (RDA).”</p> <p>There are no continuing education requirements for the 68E Dental Specialist in the Army. However, many dental course offerings are available to Dental Specialists. In addition, with additional training 68E Dental Specialists can obtain Additional Skill Identifiers (ASI). These include N5 Dental Laboratory Specialty and X2 Preventive Dentistry Specialty.</p>	<p>measuring patient vital signs, assisting in medical emergency management, and assisting in patient evacuation in nuclear, biological, and chemical contamination.</p> <p>Additional duties and procedures follow the acquisition of an Additional Skill Identifier (ASI).</p> <p>As soldiers advance in rank, skill level, and pay grade they will hone their technical skills and then move into more supervisory and administrative roles.</p>	<p>accumulation of promotion points, soldiers with an MOS of 68E with or without an ASI can move up in rank and assume supervisory positions. These supervisory positions are typically of soldiers of lower rank within the same MOS and/or ASI. Clinical supervision is provided by Dental Corps officers or Army civilian or contract dentists. Authority over dental services falls to Dental Corps officers.</p> <p>Transitioning from the Army to Civilian work<sup>22</sup>:</p> <p>Soldiers with the 68E Dental Specialist MOS can readily transition into dental assistant positions once they enter the civilian work force. Those with the N5 Dental Laboratory Specialty may be able to move into dental lab positions. Those with the X2 Preventive Dentistry Specialty are not fully qualified to work as dental hygienists in</p>	<p>exam and educational requirements. Dental Hygienists licensed to practice in other states may be able to qualify for licensure by credential.</p> <p>The scope of practice for each of the six auxiliary roles is discretely defined.<sup>28</sup></p> <p>In addition, California regulations concerning some procedures require registrants to complete a board-approved course in that particular technique. The course may have been part of a registrant’s training if he/she attended a board-approved training program in California.<sup>29</sup></p> <p>No specific exemptions or accommodations are made for individuals with military service experience. They are subject to the same requirements as all other applicants.</p> <p>Included among duties performed under general/ indirect supervision in the Army by those with the</p>

<b>Military Education and Training</b> <sup>16,17,18,19</sup>	<b>Military Scope of Practice</b> <sup>20</sup>	<b>Transitions</b> <sup>21</sup>	<b>Comparable civilian</b>
		<p>California. Work as a dental assistant will not fully utilize their capacity to perform all the tasks they were trained and qualified to perform while in the Army.</p> <p>Moving from civilian life to the Army<sup>23,24,25</sup>:</p> <p>For civilians entering the Army as 68E10, they can be exempt from the 68E10 Dental Specialist Course if they have completed a minimum 6-month course for dental assistants and have either 2½ years experience in chair side assistance or hold a certificate, diploma, or degree awarded for a 2 year or longer course in dental hygiene. In addition, they must present a letter from their employer verifying work experience and competency and demonstrate proficiency under the direction of a dental corps officer or NCO qualified in MOS 68E.</p> <p>For civilians entering the Army</p>	<p>68EX2 Preventive Dentistry Specialty ASI are several that fall only within the scope of practice for Registered Dental Hygienists in California, or which require direct supervision if performed by a Registered Dental Assistant.</p> <p>In addition, in most civilian dental practices in California, dental assistants and dental hygienists are employed by independent dentists. Opportunities for dental auxiliaries to take on supervisory roles as utilized in the Army or to advance in their career are limited.</p>

<b>Military Education and Training</b> <sup>16,17,18,19</sup>	<b>Military Scope of Practice</b> <sup>20</sup>	<b>Transitions</b> <sup>21</sup>	<b>Comparable civilian</b>
		as 68E1N5 (Dental Laboratory Specialty) and to be exempt from the N5 Dental Laboratory 30-week training course, they must have completed an American Dental Association Accredited Dental Laboratory Technician Program, be a Certified Dental Technician (CDT), and have three years total combined experience and education as a dental laboratory technician.	

**Army Radiology Specialist (68P)**

Job Description: “To perform medical radiography and imaging procedures and related patient care duties.”<sup>30</sup> In 2000, an estimated 1000 radiology specialists were practicing in the Army.<sup>31</sup>

<b>Military Education and Training</b> <sup>32,33,34,35</sup>	<b>Military Scope of Practice</b> <sup>36,37</sup>	<b>Transitions</b> <sup>38,39</sup>	<b>Comparable Civilian</b>
<p>Academic requirement: 1 year of algebra, with a “C” average or higher.</p> <p>68P10 Radiology Specialist candidates must first complete a 9-week Basic Combat Training Course, followed by a 46-week course. Phase 1 is 24 weeks. Phase 2 is 22 weeks. The course is accredited by the Joint Review Committee on Education in Radiologic Technology.</p>	<p>Radiology Specialists performing the following procedures must be directly supervised:</p> <ol style="list-style-type: none"> <li>1. Perform diagnostic radiology on patients.</li> <li>2. Prepare patient for procedures.</li> <li>3. Select and operate radiography equipment.</li> <li>4. Evaluate radiographs or images for technical quality and proper identification.</li> <li>5. Process image through digital</li> </ol>	<p>Career advancement in the Army: With time in service and accumulation of promotion points, soldiers with the 68P MOS can advance in rank and take on formal leadership roles. Radiology Specialists of a higher rank supervise and train other lower-ranked radiology specialists. Clinical supervision of all radiology specialists is provided by a medical officer.</p> <p>A radiology specialist who has served for at least a year is eligible to train for the</p>	<p>According to the Army’s Credentialing Opportunities Online website, civilian equivalents to the 68P MOS are radiologic technologists and technicians.<sup>43</sup></p> <p>In California radiologic technologists are required to be licensed.<sup>44</sup></p>

<sup>30</sup> MEDCOM Reg 40-50: Career Management Field 91 Clinical Baseline Competencies for Enlisted Medical Personnel Performing Direct Patient Care at the Military Treatment Facility

<sup>31</sup> Levy, D.G., Thie, H.J., Robbert, A.A., Naftel, S., Cannon, C., Ehrenberg, R.G., et al. (2001). Characterizing the Future Defense Workforce. Rand Corporation.

<sup>32</sup> MEDCOM Reg 40-50: Career Management Field 91 Clinical Baseline Competencies for Enlisted Medical Personnel Performing Direct Patient Care at the Military Treatment Facility

<sup>33</sup> DA PAM 611-21: Military Occupational Classification and Structure (“MOS SmartBook”)

<sup>34</sup> [http://appd.amedd.army.mil/Enl\\_pg/Enlisted%20WebPages/91P\\_Course\\_Summary.htm](http://appd.amedd.army.mil/Enl_pg/Enlisted%20WebPages/91P_Course_Summary.htm)

<sup>35</sup> STP 8-91P15-SM-TG: Soldier’s Manual and Trainer’s Guide: MOS 91P Radiology Specialist, February 2003

<sup>36</sup> MEDCOM Reg 40-50: Career Management Field 91 Clinical Baseline Competencies for Enlisted Medical Personnel Performing Direct Patient Care at the Military Treatment Facility

<sup>37</sup> DA PAM 611-21: Military Occupational Classification and Structure (“MOS SmartBook”)

<sup>38</sup> MEDCOM Reg 40-50: Career Management Field 91 Clinical Baseline Competencies for Enlisted Medical Personnel Performing Direct Patient Care at the Military Treatment Facility

<sup>39</sup> DA PAM 611-21: Military Occupational Classification and Structure (“MOS SmartBook”)

<b>Military Education and Training</b> <sup>32,33,34,35</sup>	<b>Military Scope of Practice</b> <sup>36,37</sup>	<b>Transitions</b> <sup>38,39</sup>	<b>Comparable Civilian</b>
<p>Those who have worked as a 68P for at least a year may take the training course to earn an Additional Skill Identifier (ASI): M5 Nuclear Medicine Specialist. M5s perform nuclear medicine imaging procedures at fixed military treatment facilities (MTFs).</p>	<p>radiology.</p> <p>Radiology Specialists performing the following procedures must be indirectly supervised:</p> <ol style="list-style-type: none"> <li>1. Assume responsibility for assigned area and report equipment malfunction.</li> <li>2. Gather equipment to perform radiographic procedures.</li> <li>3. Control inventory and supplies for assigned area.</li> </ol>	<p>M5 Nuclear Medicine Specialist ASI.</p> <p>Transitioning from the Army to Civilian work:</p> <p>Departing radiology specialists who have been certified by the American Registry of Radiologic Technologists (ARRT) are eligible to become Certified Radiologic Technologists in California.<sup>40</sup> Since those who go through the Army’s radiology specialist training program are eligible for but not required to take the ARRT exam, it is incumbent upon soldiers to take the exam if they want to be employable in the field in California. Those who have obtained the M5 Nuclear Medicine Specialist ASI and wish to use those skills are subject to other regulations.</p> <p>Moving from Civilian life to the Army<sup>41,42</sup></p> <p>Those who maintain registry with the ARRT or who have a radiologic technology credential from a state credentialing agency may be eligible to</p>	

<sup>40</sup> Cal. Code of Regs, Title 17, §§30440-30455, Health and Safety Code §§106955-107111.

<sup>41</sup> AR 600-8-19: Enlisted Promotions and Reductions

<sup>42</sup> AR 601-210: Active and Reserve Components Enlistment Program

<sup>43</sup> <https://www.cool.army.mil/68p.htm>

<sup>44</sup> Health and Safety Code §106965

US Military and California Health Personnel: Select Comparisons

<b>Military Education and Training</b> <sup>32,33,34,35</sup>	<b>Military Scope of Practice</b> <sup>36,37</sup>	<b>Transitions</b> <sup>38,39</sup>	<b>Comparable Civilian</b>
		enter the Army as a radiology specialist at an advanced pay grade and rank. Such individuals do not have to go through the radiology specialist training program and must demonstrate proficiency under the supervision of a radiologist or a non-commissioned officer qualified as a 68P.	

**Army Pharmacy Specialist (68Q)**

Job Description: To prepare, control and issue pharmaceuticals to maintain health and aid in the diagnosis, treatment and prevention of disease.<sup>45</sup>  
 In 2000, over 600 pharmacy specialists were practicing in the Army.<sup>46</sup>

<b>Military Education and Training</b> <sup>47,48,49,50</sup>	<b>Military Scope of Practice</b> <sup>51,52</sup>	<b>Transitions</b> <sup>53,54</sup>	<b>Comparable Civilian</b>
Academic requirements: High school diploma or GED equivalency. Successful completion of algebra and chemistry, with a grade of “C” or higher.  68Q10 Pharmacy Specialist candidates must first complete a 9-	Initial entry Pharmacy Specialists performing the following procedures must be directly supervised: 1. Review prescriptions for the full range of pharmaceuticals and patient ages. Obtain the	Career advancement in the Army:  With time in service and accumulation of promotion points, soldiers with the 68Q MOS can advance in rank and take on formal leadership roles. Pharmacy Specialists of a higher rank supervise and train other lower-ranked pharmacy	According to the Army’s Credentialing Opportunities On-line website, pharmacy technicians and nuclear pharmacy technicians are civilian equivalents to the 68Q pharmacy specialist. <sup>59</sup>

<sup>45</sup> MEDCOM Reg 40-50: Career Management Field 91 Clinical Baseline Competencies for Enlisted Medical Personnel Performing Direct Patient Care at the Military Treatment Facility  
<sup>46</sup> Levy, D.G., Thie, H.J., Robbert, A.A., Naftel, S., Cannon, C., Ehrenberg, R.G., et al. (2001). Characterizing the Future Defense Workforce. Rand Corporation.  
<sup>47</sup> MEDCOM Reg 40-50: Career Management Field 91 Clinical Baseline Competencies for Enlisted Medical Personnel Performing Direct Patient Care at the Military Treatment Facility  
<sup>48</sup> DA PAM 611-21: Military Occupational Classification and Structure (“MOS SmartBook”)  
<sup>49</sup> [http://appd.amedd.army.mil/Enl\\_pg/Enlisted%20WebPages/91Q\\_Course\\_Summary.htm](http://appd.amedd.army.mil/Enl_pg/Enlisted%20WebPages/91Q_Course_Summary.htm)  
<sup>50</sup> STP 8-91Q15-SM-TG: Soldier’s Manual and Trainer’s Guide: MOS 91Q Pharmacy Specialist, April 2003  
<sup>51</sup> MEDCOM Reg 40-50: Career Management Field 91 Clinical Baseline Competencies for Enlisted Medical Personnel Performing Direct Patient Care at the Military Treatment Facility  
<sup>52</sup> DA PAM 611-21: Military Occupational Classification and Structure (“MOS SmartBook”)  
<sup>53</sup> MEDCOM Reg 40-50: Career Management Field 91 Clinical Baseline Competencies for Enlisted Medical Personnel Performing Direct Patient Care at the Military Treatment Facility  
<sup>54</sup> DA PAM 611-21: Military Occupational Classification and Structure (“MOS SmartBook”)  
<sup>55</sup> Cal. Bus. & Prof. Code §4202, Cal. Code of Regs. §1793.6.  
<sup>56</sup> DA PAM 611-21: Military Occupational Classification and Structure (“MOS SmartBook”)  
<sup>57</sup> AR 600-8-19: Enlisted Promotions and Reductions  
<sup>58</sup> AR 601-210: Active and Reserve Components Enlistment Program  
<sup>59</sup> <https://www.cool.army.mil/68q.htm>



<b>Military Education and Training</b> <sup>47,48,49,50</sup>	<b>Military Scope of Practice</b> <sup>51,52</sup>	<b>Transitions</b> <sup>53,54</sup>	<b>Comparable Civilian</b>
<p>week Basic Combat Training Course, followed by a 19-week Pharmacy Specialist course, accredited by the American Society of Health System Pharmacists.</p> <p>The curriculum includes pharmacy laws and regulations, drug types and uses, and protocols on mixing and dispensing drugs. The course may be waived if the candidate is already employed as a pharmacy technician in a state that requires registration, licensure or certification.</p>	<p>pharmaceutical and prepare the label.</p> <ol style="list-style-type: none"> <li>2. Interpret and fill individual orders to include controlled substances. Input orders into the hospital computer system to ensure no overlapping orders. Select type of medication, dosage form, strength, and dosage of medications.</li> <li>3. Screen individual prescriptions for compliance with Federal laws, Army regulations, and DOD policies.</li> <li>4. Interpret orders and prepare intravenous additives and other sterile product preparations. Use aseptic technique to prepare sterile products and intravenous solutions.</li> </ol> <p>Pharmacy Specialists performing the following</p>	<p>specialists. Clinical supervision of all pharmacy specialists is provided by a licensed pharmacist, physician or dentist.</p> <p>There are no health care related ASIs associated with the 68Q MOS.</p> <p>At the completion of a competency assessment program a pharmacy specialist will be assigned to perform advanced procedures that go beyond entry level routine tasks</p> <p>Pharmacy specialists with experience and training may be assigned to work independently in cases where they fill prescriptions from a limited list of drugs for active duty soldiers only. Oversight responsibility for these independent pharmacy specialists falls on the military treatment facility’s licensed pharmacist or other MTF commander’s designee.</p> <p>Transitioning from the Army to Civilian work<sup>55</sup>:</p>	<p>In California, pharmacy technicians perform non-discretionary, repetitive tasks related to the processing of a prescription in a pharmacy, under the direct supervision of a pharmacist.<sup>60</sup></p> <p>In California, pharmacy technicians must be licensed by the California Board of Pharmacy. “No person shall act as a pharmacy technician without first being licensed by the board as a pharmacy technician.”<sup>61</sup></p> <p>No continuing education is required for renewal of a California pharmacy technician license.</p> <p>In addition, California law states that a pharmacist can supervise no more than two</p>

<sup>60</sup> Cal. Bus. & Prof. Code §4115, Cal. Code of Regs. §1793.

<sup>61</sup> Cal. Bus. & Prof. Code §4115

<sup>62</sup> Cal. Bus. & Prof. Code §4115, Cal. Code of Regs. §1793.7

<sup>63</sup> MEDCOM Reg 40-50: Career Management Field 91 Clinical Baseline Competencies for Enlisted Medical Personnel Performing Direct Patient Care at the Military Treatment Facility

<b>Military Education and Training</b> <sup>47,48,49,50</sup>	<b>Military Scope of Practice</b> <sup>51,52</sup>	<b>Transitions</b> <sup>53,54</sup>	<b>Comparable Civilian</b>
	<p>procedures must be indirectly supervised:</p> <ol style="list-style-type: none"> <li>1. Inventory, requisition, receive, and verify quantity, quality, potency date, and storage of pharmaceutical items, including controlled substances, expired and recalled medications.</li> <li>2. Screen and fill bulk orders for all drugs.</li> <li>3. Calculate work units.</li> <li>4. Prepare and maintain the quality control register.</li> <li>5. Perform specific compounding when needed for all substances for which formula cards or specific instructions are available.</li> </ol> <p>Upon completion of a competency assessment program, Pharmacy Specialists may perform the following procedures with minimal supervision, in accordance with local policies and guidelines:</p> <ol style="list-style-type: none"> <li>1. Conduct ward and clinic inspections.</li> <li>2. Review profile for allergies, drug-drug or drug-food interactions, and duplicate</li> </ol>	<p>Training provided by any branch of the United States Armed Services meets the educational requirement for a pharmacy technician permit in the state of California. While having certification from the national Pharmacy Technician Certification Board is an acceptable qualifying method for obtaining a California pharmacy technician license, it is not a requirement.</p> <p>Those departing the Army as pharmacy specialists have opportunities to work as pharmacy technicians and as pharmacy technician supervisors. Departing pharmacy specialists may find that civilian jobs do not encompass the full range of duties for which they were responsible while in the Army.</p> <p>Those pharmacy specialists who worked independently at a troop medical clinic pharmacy will find that roles serving civilians are more restricted and require closer supervision by a licensed pharmacist. To further advance in a career in the field of pharmacy, these individuals would likely need to become a pharmacist, which requires the completion of at least 2 years of undergraduate work and four years at an accredited pharmacy school to receive a</p>	<p>pharmacy technicians at any one time, except at designated government run pharmacies.<sup>62</sup></p> <p>Nationally, several States have implemented requirements for national certification for registration with their respective State Boards of Pharmacy.<sup>63</sup></p> <p>The graduates of the 19-week Pharmacy Specialist training course are eligible to take the National Pharmacy Technician Certification examination.</p> <p>20 continuing education hours every 2 years are required to maintain the Pharmacy Technician National Certification.</p>

<b>Military Education and Training</b> <sup>47,48,49,50</sup>	<b>Military Scope of Practice</b> <sup>51,52</sup>	<b>Transitions</b> <sup>53,54</sup>	<b>Comparable Civilian</b>
	<p>orders. Coordinate with prescriber or pharmacist to clarify issues or problems with dosing, interactions or instructions.</p> <ol style="list-style-type: none"> <li>3. Prepare full range of sterile products and perform pharmaceutical calculations for a wide variety of preparations.</li> <li>4. Prepare medication orders for hazardous drugs. Knowledge of safe handling, preparation and storage of these drugs.</li> <li>5. Perform final review of bulk drug orders and controlled drug orders for medication use areas.</li> <li>6. Perform final review of replenishment orders for emergency medication carts and inpatient unit dose medication carts.</li> <li>7. Perform final check on refilled prescriptions and new prescriptions that have been screened and verified by a pharmacist.</li> </ol>	<p>doctorate of pharmacy (Pharm.D.).</p> <p>Moving from Civilian life to the Army<sup>56, 57,58:</sup></p> <p>Under the Army Civilian Acquired Skills Program (ACASP), individuals who worked as pharmacy technicians may be eligible to enter the Army at an advanced pay grade and rating. Upon entrance to the Army, they will have to demonstrate proficiency to a licensed pharmacist or non-commissioned officer (NCO) qualified as a 68Q Pharmacy Specialist.</p>	

**Army Health Care Specialist (68W)**

Job Description: To safely provide patient assessment, teaching, emergency care, and nursing care within the MTF. As a foundation, the Health Care Specialist will maintain skills of a National Registry of Emergency Medical Technicians (NREMT)-certified emergency medical technician-basic (EMT-B), to include Basic Life Support (BLS), and will complete local MTF competency-based orientation and training with age-specific instruction, requiring annual skills verification. (MEDCOM Reg 40-50) In 2000, an estimated 17,000 health care specialists were practicing in the Army.<sup>64</sup>

<b>Military Education and Training</b> <sup>65, 66,67,68</sup>	<b>Military Scope of Practice</b> <sup>69,70</sup>	<b>Transitions</b> <sup>71,72</sup>	<b>Comparable civilian</b>
<p>To enter the Army with the MOS of 68W Health Care Specialist, soldiers must meet the following requirements:</p> <p>Have a high school diploma or GED equivalency.</p>	<p>Soldiers with the 68W MOS work under the supervision of licensed health care personnel, privileged providers or senior soldiers in their same MOS and/or specific Additional Skill Identifier (ASI).</p> <p>Under direct supervision and by</p>	<p>Army to Civilian:</p> <p>Because soldiers with the 68W MOS are required to obtain and maintain registration with NREMT as an EMT-B, they can work in civilian jobs that have this registration as a requirement.</p>	<p>According to the Army’s Credentialing Opportunities On-line website, there are no direct civilian equivalents to the 68W Health Care Specialist. However, skills acquired in the Army can be used in a career as an EMT or Paramedic.<sup>74</sup></p>

<sup>64</sup> Levy, D.G., Thie, H.J., Robbert, A.A., Naftel, S., Cannon, C., Ehrenberg, R.G., et al. (2001). Characterizing the Future Defense Workforce. Rand Corporation.

<sup>65</sup> MEDCOM Reg 40-50: Career Management Field 91 Clinical Baseline Competencies for Enlisted Medical Personnel Performing Direct Patient Care at the Military Treatment Facility

<sup>66</sup> DA PAM 611-21: Military Occupational Classification and Structure (“MOS SmartBook”)

<sup>67</sup> [http://appd.amedd.army.mil/Enl\\_pg/Enlisted%20WebPages/91W\\_Course\\_Summary.htm](http://appd.amedd.army.mil/Enl_pg/Enlisted%20WebPages/91W_Course_Summary.htm)

<sup>68</sup> STP 8-91W15-SM-TG: Soldier’s Manual and Trainer’s Guide: MOS 91W Health Care Specialist, October 2001

<sup>69</sup> MEDCOM Reg 40-50: Career Management Field 91 Clinical Baseline Competencies for Enlisted Medical Personnel Performing Direct Patient Care at the Military Treatment Facility

<sup>70</sup> DA PAM 611-21: Military Occupational Classification and Structure (“MOS SmartBook”)

<sup>71</sup> MEDCOM Reg 40-50: Career Management Field 91 Clinical Baseline Competencies for Enlisted Medical Personnel Performing Direct Patient Care at the Military Treatment Facility

<sup>72</sup> DA PAM 611-21: Military Occupational Classification and Structure (“MOS SmartBook”)

<sup>73</sup> Ibid.

<sup>74</sup> <https://www.cool.army.mil/68w.htm>

<p>Attained minimum scores on the Armed Services Vocational Aptitude Battery (ASVAB) tests. (101 in aptitude area ST and 107 in aptitude area GT on tests administered on and after 1 July 2004)</p> <p>Military training includes a 9-week Basic Combat Training Course and a 16-week Health Care Specialist Course. The Health Care Specialist Course is accredited by the National Registry of Emergency Medical Technicians (NREMT) and trainees in the course are eligible to take the EMT-B certification examination administered by NREMT. 68W Health Care Specialists are required to obtain and maintain their EMT-B certification. All soldiers with the 68W MOS are also trained in Basic Life Support (BLS).</p> <p>In addition to the EMT-B training, the Health Care Specialist Course covers procedures and tasks specific to</p>	<p>either provider order or medical care protocol (Algorithm-Directed Troop Medical Care, ADTMC), 68W Health Care Specialists can administer, record, and evaluate patient response to a select number of medications for an adult patient population.</p> <p>Health Care Specialists can assist in the performance of invasive procedures if they have completed orientation and training at their Military Treatment Facility (MTF) for the specified procedures and have completed annual skills verification.</p> <p>Additional duties performed under direct supervision include administering and recording immunization shots for adults, assisting in emergency childbirth, proper airway management, oral and nasogastric suctioning, inserting and monitoring nasogastric tube, gastric lavage, and applying splints. With orientation, training, and annual skills verification and under direct supervision, they can perform</p>	<p>Skills acquired in addition to the EMT-B may not be recognized by civilian organizations and may fall within but not fully encompass the scopes of practice of licensed occupations that require additional training and certifications.</p> <p>Career advancement in the Army:</p> <p>68W Health Care Specialists can complete additional training to obtain one of several Additional Skills Identifiers (ASIs). Soldiers may be eligible for additional certifications after they complete training for many of the ASIs associated with the 68W MOS.</p> <p>With time in service and accumulation of promotion points, soldiers with an MOS of 68W with or without an ASI can move up in rank and assume supervisory positions. These supervisory positions are typically of soldiers of lower rank within the same MOS and/or ASI. Clinical supervision is provided by officers or Army civilians who are licensed</p>	<p>In California, EMT-I (Basic) and EMT-II (Intermediate) must be certified by local EMS agencies. These agencies may have different requirements for certification and may or may not offer reciprocity to EMT certifications from other LEMSAs or states. EMT-Paramedics must be licensed by the State of California Emergency Medical Services Authority (EMSA). National registration is not required to work as an EMT in California.<sup>75</sup></p>
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<sup>75</sup> www.emsa.ca.gov

<p>the military provision of health care that exceed that included in EMT-B training.</p> <p>Soldiers with MOS 68W are required to maintain their EMT-B certification and so must complete continuing education hours as dictated by the NREMT.</p> <p>Several Additional Skill Identifiers (ASI) are associated with the 68W MOS. These ASI can be obtained with additional training and have their own requirements for credentialing and continuing education. A description of a wide selection of them is located in Appendix B.</p>	<p>simple suturing, and removal of skin warts on extremities using liquid nitrogen.</p> <p>Under indirect supervision, 68W Health Care Specialists can perform patient screening, can deliver specified interventions and are responsible for promoting patient safety in the course of providing care. Patient screening may include general physical screening, protocol-based screening of lifestyle factors, basic patient history, obtaining and interpreting temperature, heart rate, respiratory rate, pulse oximetry, blood pressure, assessing basic visual acuity and gross hearing function, and monitoring patient input and output.</p> <p>Interventions may include initiation, monitoring, and discontinuation of intravenous infusion or saline lock, control of bleeding with tourniquets, pressure bandages, pressure points, and splints, initial management of fractures, initiation of spinal precautions, initial treatment of environmental injury, use and interpretation of fingerstick blood glucose monitoring, initial management of seizures, use of and</p>	<p>health care personnel and/or privileged providers.</p> <p>Opportunities for additional education, such as attending physician assistant school, are also available for qualified candidates. Soldiers must apply for and be accepted into training programs and may be required to extend their time in service.</p> <p>Moving from civilian life to the Army:<sup>73</sup></p> <p>If a civilian entering the Army holds a current certification from NREMT (any of EMT-Basic, EMT-Intermediate, or EMT-Paramedic) and current American Heart Association (AHA) certification for Basic Life Support (BLS) for Healthcare Providers, they can be accelerated 6 weeks in the Health Care Specialist Course. Only the national registration is recognized; state EMT licenses or certifications are not considered.</p>	
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US Military and California Health Personnel: Select Comparisons

	<p>monitoring supplemental oxygen as needed, eye and ear irrigation, obtaining patient laboratory specimens, wound care using sterile technique, patient transport, and performance of 12-lead echocardiogram.</p> <p>Additional duties and procedures follow the acquisition of an ASI (Additional Skill Identifier).</p> <p>As soldiers advance in rank, skill level, and pay grade they will hone their technical skills and then move into more supervisory and administrative roles.</p>		
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### Navy Independent Duty Corpsman (IDC)

**Job Description:** “IDCs are Hospital Corpsmen in pay grades E-5 through E-9 who have successfully completed IDC “C” School and have been awarded an NEC [Navy Enlisted Classification]. An IDC is a health care provider who, when certified, may provide primary care for active duty service members under indirect supervision. IDCs perform their clinical, administrative, and logistical duties as the SMDR [Senior Medical Department Representative] for the submarine force, USMC [United States Marine Corps] reconnaissance corpsman, the surface force, and for deep sea diving. IDCs may be assigned to fixed MTFs [Military Treatment Facilities] and to units of the operational forces.”<sup>76</sup> In 2000, an estimated 1400 independent duty corpsmen were practicing in the Navy.<sup>77</sup>

Military Education and Training <sup>78</sup>	Military Scope of Practice <sup>79</sup>	Transitions <sup>80</sup>	Comparable civilian
<p>Sailors with Navy Enlisted Classification (NEC) codes HM-8404 Field Medical Service Technician and HM-8707 Field Dental Technician who have served at least six years in the Navy and have been in pay grade E-5 or E-6 may be granted admittance to IDC “C” school at the Naval School of Health Sciences.</p> <p>The IDC training course consists of 250 training days and 2000 contact</p>	<p>Independent Duty Corpsmen work under the supervision of licensed physicians, though once certified, they can practice independently as a Senior Medical Department Representative at their place of duty. Each IDC is assigned a Physician Supervisor, who is medico-legally responsible for the care provided by the IDC.</p> <p>At the completion of IDC training, corpsmen must undergo an evaluation period for certification</p>	<p>Career advancement in the Navy:</p> <p>IDCs are the most senior medical enlisted personnel. They may supervise other hospital corpsmen (HM) and have broad responsibilities wherever they are assigned. Opportunities to move into higher management positions as an IDC exist, and they can serve as program managers or assistant program managers in the IDC supervisory program. In addition, IDCs are eligible to serve</p>	<p>There are no direct civilian equivalents to the Navy Independent Duty Corpsman.</p> <p>While much of the work performed independently of other health care providers by IDCs can be compared to that of a physician assistant and encompasses nursing skills, an IDC who wants to work as a nurse or physician assistant in California is required to complete a defined set of college</p>

<sup>76</sup> OPNAVINST 6400.1C/ MCO 6400.1, August, 15, 2007

<sup>77</sup> Levy, D.G., Thie, H.J., Robbert, A.A., Naftel, S., Cannon, C., Ehrenberg, R.G., et al. (2001). Characterizing the Future Defense Workforce. Rand Corporation.

<sup>78</sup> OPNAVINST 6400.1C/ MCO 6400.1, August, 15, 2007

<sup>79</sup> Ibid.

<sup>80</sup> Ibid.



<b>Military Education and Training<sup>78</sup></b>	<b>Military Scope of Practice<sup>79</sup></b>	<b>Transitions<sup>80</sup></b>	<b>Comparable civilian</b>
<p>hours.</p> <p>Areas of instruction include patient assessment, emergency medical procedures, internal medicine, orthopedics, surgery, psychiatry, urology, ophthalmology, dermatology, ob/gyn, dental, ear, eyes, nose, and throat, occupational health and preventive medicine, chemical, biological, and radiation procedures, medical and surgical procedures, and laboratory procedures. In addition trainees receive instruction in medical administration, logistics, and pest control. Also, deep sea diving medicine to those whose job assignments will require it.</p> <p>Training consists of both didactic and practical skills application. Clinical rotations allow trainees to apply their skills with actual patients.</p> <p>At the completion of training,</p>	<p>with their Physician Supervisor. During this time they must work under direct supervision until the time they are deemed competent to work independently and become certified IDCs. Upon certification, IDCs work under indirect supervision, often as the primary medical caregiver on an isolated vessel or field assignment. Indirect supervision consists of retrospective review of work as documented in patient records.</p> <p>IDCs, when deployed independently are responsible for all medical, nursing, dental, pharmacy, public health, medical logistics, and sanitation needs at their duty station.</p> <p>Also, depending on the NEC, IDCs are required to obtain and maintain certifications in the following areas: Advanced Cardiac Life Support (ACLS),</p>	<p>in leadership positions such as Command Master Chief and Directorate Master Chief which are removed from direct patient contact.</p> <p>Navy to Civilian:</p> <p>Opportunities to work in civilian clinical settings at least somewhat comparable to their experience are primarily dependent on an IDC taking steps to complete a degree as a nurse or physician assistant. California does not have a means to directly utilize IDCs in the health care workforce.</p> <p>Moving from civilian life to the Navy:</p> <p>Civilians can not enter the Navy directly as an IDC. They must complete several years of service in the Navy and complete the IDC training school. Civilians who are nurses or physician assistants can</p>	<p>coursework in the respective field prior to eligibility for licensure.<sup>81,82</sup></p> <p>For those who wish to emphasize their management skills in civilian life instead of clinical skills, more opportunities may be available that do not require additional schooling. However, IDCs will need to clearly explain what their background is to possible employers, as their roles in the Navy are not widely known in the civilian sector. Clinic management and other health care management jobs not requiring a nursing or medical degree may be appropriate options for IDCs.</p>

<sup>81</sup> <http://www.rn.ca.gov/online/online.htm>

<sup>82</sup> <http://www.pac.ca.gov/>

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<b>Military Education and Training<sup>78</sup></b>	<b>Military Scope of Practice<sup>79</sup></b>	<b>Transitions<sup>80</sup></b>	<b>Comparable civilian</b>
sailors will be awarded one of the following IDC NEC codes: HM-8402 Submarine Force IDC, HM-8403 Special Operations IDC, HM-8425 Surface Force IDC, or HM-8494 Deep Sea Diving IDC.	Basic Life Support (BLS), Basic Life Support Instructor (BLS-INST), Pre-Hospital Trauma Life Support (PHTLS), Tactical Casualty Combat Care (TCCC-P), Emergency Medical Technician – Paramedic (EMT-P) (Special Operations Forces Medical Skills Sustainment Program SOFMSSP), Pest Control, and Food Sanitation.	enter the Navy directly in one of those roles and are ineligible to join at the enlisted level in a health care role.	

## Appendix A

### Evolution of Physician Assistant Profession

The evolution of the physician assistant (PA) profession offers an interesting example of how military and civilian elements of our health care workforce might intersect. PAs can trace their precedents to several historical events, including the training and use of many types of assistants to physicians in various countries and military services. From Britain's "loblolly" (who assisted medical officers) to France's "*officiers de sante*", and from China's barefoot doctors to the US Army's medic, the need for individuals with high quality medical training that is not as extensive as that of a fully trained medical doctor has been identified and filled with care providers under various names.

A combination of factors in the mid-1960s set the stage for the birth of the modern professional physician assistant in the US. Based on an apparent shortage of primary care physicians, interest developed around the possibility of providing limited additional training to individuals who already had some health care education and background. Initial attempts to start and accredit a masters' program for nurses were unsuccessful. In 1964, Dr. Eugene Stead proposed that military-trained medics might be good candidates for his pilot project to further train individuals with some health care background. The goal was to prepare them to assist physicians by being able to provide significant levels of primary care.<sup>83</sup>

The physician assistant profession became established in this country relatively quickly despite modest workforce growth in the beginning. Four ex-Navy hospital corpsmen began Dr. Stead's program in 1965. Three PAs graduated from that first US program, at Duke University Medical Center, in 1967. By 1968, one year later, the American Academy of Physician's Assistants (AAPA) had been incorporated and Duke University had hosted the first of four national conferences on physician assistants. During these first few years, a handful of other PA educational programs were started around the country. By 1970, Kaiser would be the first HMO to employ a PA and the AMA House of Delegates had passed a resolution recognizing physician's assistants. In 1973, the National Board of Medical Examiners administered its first certifying examination to 880 candidates (10% of whom were not prepared as PAs but as nurses).<sup>84</sup> Medical doctors' leadership in, and organized medicine's support of the PA profession were likely key to its early success.

Within a decade of the first three individuals graduating from a PA program, the Rural Health Clinic Services Act (PL95-210, 1977) authorized Medicare reimbursement of PA and NP services in rural clinics. A few years later, a 1981 report noted that PAs based in an HMO can provide 70% of care traditionally performed by primary care physicians

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<sup>83</sup> Physician Assistant History Center. Timeline. Accessed 9/13/07 at <http://www.pahx.org/timeline.html>.

<sup>84</sup> Ibid.

at 50% of the cost.<sup>85</sup> In 1987, additional Medicare coverage of PA services in rural and underserved areas was approved by Congress.<sup>86</sup>

The numbers of practicing PAs grew steadily throughout the 1990s. The AAPA reported 26,400 PAs in 1993; 28,500 in 1997; 45,000 in 2002;<sup>87</sup> and over 70,000 individuals eligible to practice as PAs in 2006.<sup>88</sup> By 2001, over 4000 PAs were taking the Physician Assistant National Certification Examination annually. State recognition of physician assistants' practice authority also spread steadily; by 1993, PAs were actively practicing in 50 states, territories and the District of Columbia. By 1997, PAs had prescribing authority in 40 states, DC and Guam.<sup>89</sup> Although programs vary somewhat and states maintain licensing authority over PAs, education and certification is largely standardized. The Accreditation Review Commission on Education for the Physician Assistant (ARC-PA) accredits the 130+ programs in the US and the National Commission of Certification of Physician Assistants (NCCPA), which administers the Physician Assistant National Certification Examination (PANCE) is the only certifying entity for PAs in the country.

From the start, PAs have always worked under the supervision of physicians. This distinguishes them from other non-physician clinicians, such as nurse-practitioners, who have long sought independent practice status. This position has a significant impact on many aspects of PAs' scope of practice, compensation, liability and malpractice insurance. For example, in 2006, 97.6% of PAs reported that their professional liability insurance was covered at 95-100% by their employer.<sup>90</sup>

### **Role of the military in evolution**

Shortly after Dr. Stead's pilot program at Duke University was announced, a 1965 Reader's Digest article provoked a "flood" of inquiries from ex-military corpsmen interested in becoming PAs.<sup>91</sup> People trained in the military were well suited to go through the PA education program; as corpsmen, medics or health care specialists, these former military personnel had substantial medical and health care training.

Even today, although the prerequisites for PA programs vary from school to school, most require or give strong preference to candidates with prior health care training. A 2007 article noted that the typical PA student enrolled in the 2005-2006 academic year had 29 months of prior health care experience.<sup>92</sup> To accrue sufficient hours or months of health care experience, many PA students are former nurses, EMTs and paramedics –

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<sup>85</sup> Physician Assistant History Center. Timeline. Accessed 9/13/07 at <http://www.pahx.org/timeline.html>. referencing Record, 1981. *Staffing Primary Care in 1990: Physician Replacement and Costs Savings*.

<sup>86</sup> Physician Assistant History Center. Timeline. Accessed 9/13/07 at <http://www.pahx.org/timeline.html>.

<sup>87</sup> Physician Assistant History Center. Timeline. Accessed 9/13/07 at <http://www.pahx.org/timeline.html> referencing American Academy of Physician Assistants.

<sup>88</sup> American Academy of Physician Assistants. <http://www.aapa.org/research/06census-intro.html>.

<sup>89</sup> Physician Assistant History Center. Timeline. Accessed 9/13/07 at <http://www.pahx.org/timeline.html>.

<sup>90</sup> American Academy of Physician Assistants. 2006 AAPA Physician Assistant Census Report. Accessed 9/27/07 at <http://www.aapa.org/research/06census-content.html>.

<sup>91</sup> Physician Assistant History Center. Timeline. Accessed 9/13/07 at <http://www.pahx.org/timeline.html>.

<sup>92</sup> Jones, PE. 2007. Physician Assistant Education in the United States. *Academic Medicine*. 82(9):882-87.

sometimes from the military – seeking new careers. Among civilian PA programs, the percentage of students with some prior military experience has dropped from an initial 100% in 1965<sup>93</sup> to 12% in the mid- to late-1990s, and 8% in 2006.<sup>94</sup> Even at eight percent, however, new PA students in 2006 with some prior military experience numbered over 400.<sup>95</sup>

While the civilian health leaders looked to the military to fill early PA courses, the military in turn looked to the civilian PA training model once it was established. The military quickly recognized the difference between PAs and its corpsmen and medics and the value that PAs might add to the services. PA programs in the Air Force, Navy and Army were initiated in 1971 and 1972.<sup>96</sup> In 1978, the Air Force began appointing PAs as commissioned officers, followed by the Navy in 1991 and the Army in 1992.<sup>97</sup> The independent programs in the services were consolidated into a single interservice PA program in 1996.<sup>98</sup> The military PA program is accredited by ARC-PA and its graduates must pass the PANCE examination to be licensed to practice. A 2004 study found significantly higher pass rates and higher average scores for military-prepared PAs compared to their civilian counterparts. The study's authors point to the strength of the military program, its faculty, the hard work and dedication of the students, and the profile of the military PA student body itself as reasons for the differential.<sup>99</sup>

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<sup>93</sup> Physician Assistant History Center. Timeline. Accessed 9/13/07 at <http://www.pahx.org/timeline.html>.

<sup>94</sup> American Academy of Physician Assistants. New PA Student Information. Accessed 9/26/07 at <http://www.aapa.org/research/#student>.

<sup>95</sup> Ibid.

<sup>96</sup> Cody, J *et al.* Jan. 2004. Performance of Military-Trained Physician Assistants on the Physician Assistant National Certification Examination. *Military Medicine*.

<sup>97</sup> Physician Assistant History Center. Timeline. Accessed 9/13/07 at <http://www.pahx.org/timeline.html>.

<sup>98</sup> Cody, J *et al.* Jan. 2004. Performance of Military-Trained Physician Assistants on the Physician Assistant National Certification Examination. *Military Medicine*.

<sup>99</sup> Ibid.

**APPENDIX B**

**Additional Skill Identifiers (ASI) for 68W Health Care Specialist**

<b>Additional Skill Identifier</b>	<b>MEDCOM Reg 40-50 Job Description<sup>100</sup></b>	<b>Comparable CA occupation</b>	<b>Common National Certifications Related to Military Role</b>	<b>Restricted Practice for Comparable Occupations?</b>
68W Health Care Specialist - No ASI	To safely provide patient assessment, teaching, emergency care, and nursing care within the MTF. As a foundation, the Health Care Specialist will maintain skills of a National Registry of Emergency Medical Technicians (NREMT)-certified emergency medical technician-basic (EMT-B), to include Basic Life Support (BLS), and will complete local MTF competency-based orientation and training with age-specific instruction, requiring annual skills verification.	No direct equivalent. However, EMTs use skills developed as MOS 68W.	National Registry of Emergency Medical Technicians (NREMT) – Emergency Medical Technician - Basic	EMT-I (Basic) and EMT-II (Intermediate) must be certified by local EMS agencies. EMT-Paramedics must be licensed by the State of California Emergency Medical Services Authority (EMSA). <sup>101</sup>

<sup>100</sup> MEDCOM Reg 40-50: Career Management Field 91 Clinical Baseline Competencies for Enlisted Medical Personnel Performing Direct Patient Care at the Military Treatment Facility

<sup>101</sup> www.emsa.ca.gov

Additional Skill Identifier	MEDCOM Reg 40-50 Job Description <sup>102</sup>	Comparable CA occupation	Common National Certifications Related to Military Role	Restricted Practice for Comparable Occupations?
M3 Dialysis Specialist	To provide treatments and care for hemodialysis and peritoneal dialysis patients.	No direct equivalent	Board of Nephrology Examiners - Nursing and Technology (BONENT)– Certified Hemodialysis Technician (CHT); Nephrology Nursing Certification Commission – Certified Clinical Hemodialysis Technician (CCHT)	Dialysis technicians must be certified by the California Department of Health Services and hold the title of Certified Hemodialysis Technician (CHT). To be certified to work in CA, must either complete a CA Department of health Services approved training and testing program OR be certified by the Board of Nephrology Examiners, Inc. Nursing and Technology (BONENT). <sup>103</sup>

<sup>102</sup> MEDCOM Reg 40-50: Career Management Field 91 Clinical Baseline Competencies for Enlisted Medical Personnel Performing Direct Patient Care at the Military Treatment Facility

<sup>103</sup> <http://www.dhs.ca.gov/lnc/cert/default.htm>

Additional Skill Identifier	MEDCOM Reg 40-50 Job Description <sup>104</sup>	Comparable CA occupation	Common National Certifications Related to Military Role	Restricted Practice for Comparable Occupations?
M6 Practical Nurse	To provide safe and effective nursing care in both inpatient and outpatient settings; initiate and manage basic medical and nursing treatments for casualties/patients acquiring illness or injury during operational deployments and hospital settings; engage in effective communication; demonstrate leadership skills on the health care team as a provider and coordinator of care; function as first level NCOs; serve as wardmasters at MTFs where they manage personnel supplies and maintain equipment.	Licensed Vocational Nurse (LVN)	None listed.	A Vocational Nursing License from the California Board of Vocational Nursing and Psychiatric Technicians is required to practice in California. <sup>105</sup>

<sup>104</sup> MEDCOM Reg 40-50: Career Management Field 91 Clinical Baseline Competencies for Enlisted Medical Personnel Performing Direct Patient Care at the Military Treatment Facility

<sup>105</sup> <http://www.bvnpt.ca.gov/>



<b>Additional Skill Identifier</b>	<b>MEDCOM Reg 40-50 Job Description<sup>106</sup></b>	<b>Comparable CA occupation</b>	<b>Common National Certifications Related to Military Role</b>	<b>Restricted Practice for Comparable Occupations?</b>
N3 Occupational Therapy Specialty	To provide competent patient evaluation, treatment, documentation, health promotion, and injury prevention in both clinical and field environments under the supervision of a qualified registered occupational therapist.	No direct equivalent. However, EMTs and Occupational Therapist Assistants and Aides use skills developed as MOS 68WN3	National Board for Certification in Occupational Therapy, Inc. – Certified Occupational Therapy Assistant (COTA)	Occupational Therapy Assistants must be licensed to practice in CA, and must work under the supervision of a licensed Occupational Therapist. Occupational Therapy aides do not need to be certified or licensed in CA, though they can only work under the supervision of an Occupational Therapist or Occupational Therapy Assistant. <sup>107</sup>
N9 Physical Therapy Specialty	To perform physical therapy treatment interventions to include the application of therapeutic physical agents, rehabilitation procedures, patient education and injury prevention measures, and limited musculoskeletal evaluations in a safe, ethical manner under the direction and supervision of a licensed physical therapist.	No direct equivalent. However, EMTs and Physical Therapist Assistants and Aides use skills developed as MOS 68WN9.	None listed.	Physical Therapy Assistants must be licensed by the California Physical Therapy Examining Board. Physical Therapy Aides are unlicensed but must work under the direct and immediate supervision of a Physical Therapist. <sup>108</sup>

<sup>106</sup> MEDCOM Reg 40-50: Career Management Field 91 Clinical Baseline Competencies for Enlisted Medical Personnel Performing Direct Patient Care at the Military Treatment Facility

<sup>107</sup> <http://www.bot.ca.gov/>

<sup>108</sup> <http://www.ptb.ca.gov/>

Additional Skill Identifier	MEDCOM Reg 40-50 Job Description <sup>109</sup>	Comparable CA occupation	Common National Certifications Related to Military Role	Restricted Practice for Comparable Occupations?
P1 Orthopedic Specialty	To assist the orthopedic surgeon and physician assistant in casting, splinting, and traction procedures and the operation and maintenance of orthopedic equipment.	No direct equivalent. However, EMTs, Orthotists and Prosthetists use skills developed as MOS 68WP1.	National Board for Certification of Orthopaedic Technologists – Certified Orthopaedic Technologist (OTC)	It is not evident that a CA license is required to perform the duties of an Orthopaedic Technologist in CA.
P2 Ear, Nose, and Throat Specialty	To assist the otolaryngologist and audiologist in examination and treatment procedures and support installation hearing conservation programs as certified hearing conservationists.	No direct equivalent. However, EMTs use skills developed as MOS 68WP2.	Council for Accreditation in Occupational Hearing Conservation – Occupational Hearing Conservationist (OHC)	Audiology aides must be registered with the California Speech-Language Pathology and Audiology Board under a licensed supervisor. <sup>110</sup>
P3 Eye Specialty	To conduct routine diagnostic tests and assist in care and treatment of optometry/ophthalmology patients under the supervision of an optometrist/ophthalmologist.	No direct equivalent. However, EMTs and Medical Assistants use skills developed as MOS 68WP3	Joint Commission on Allied Health Personnel in Ophthalmology – Certified Ophthalmic Assistant (COA)	It is not evident that a CA license is required to perform the duties of an optometry/ ophthalmology assistant in CA.

<sup>109</sup> MEDCOM Reg 40-50: Career Management Field 91 Clinical Baseline Competencies for Enlisted Medical Personnel Performing Direct Patient Care at the Military Treatment Facility

<sup>110</sup> <http://www.slpad.ca.gov/>

<b>Additional Skill Identifier</b>	<b>MEDCOM Reg 40-50 Job Description<sup>111</sup></b>	<b>Comparable CA occupation</b>	<b>Common National Certifications Related to Military Role</b>	<b>Restricted Practice for Comparable Occupations?</b>
Y6 Cardiovascular Specialty	To perform noninvasive and invasive procedures under supervision of a cardiologist for a broad range of patients in a cardiovascular setting, assist physicians in performing diagnostic and therapeutic cardiac procedures, and operate and maintain sophisticated medical equipment.	Similar to Cardiovascular Technologists and Technicians and EMTs.	Cardiovascular Credentialing International – Registered Cardiovascular Invasive Specialist (RCIS)	There are currently no license or certification requirements for electrocardiograph technicians in CA <sup>112</sup> . It is not evident that a CA license is required to perform the duties of a cardiovascular technologist in CA. <sup>113</sup> However, for reimbursement of services by Medicare a credential from Cardiovascular Credentialing International may be required. <sup>114</sup>

<sup>111</sup> MEDCOM Reg 40-50: Career Management Field 91 Clinical Baseline Competencies for Enlisted Medical Personnel Performing Direct Patient Care at the Military Treatment Facility

<sup>112</sup> <http://www.calmis.ca.gov/file/occguide/EKGTech.pdf>

<sup>113</sup> <http://www.calmis.ca.gov/file/HealthCare/HCC-Cardiovascular-Technologists-Technicians.pdf>

<sup>114</sup> <http://www.cci-online.org/medicare reimbursement.html>