Trends in Demographic Data Collection and Use in Healthcare

A Field Guide for Improving Care for Veterans

This field guide is part of a series focused on demographic data collection and use within healthcare systems. Increasingly, health systems are collecting race, ethnicity and language (REAL) demographics not only to fulfill various data collection requirements, but also to use the data to improve access, services, care quality and research.

This series considers current trends in the collection of various demographic data points beyond the categories of REAL. Using insights from organizations that are successfully expanding their efforts to better understand specific patient populations, this field guide explores the best practices of expanded demographic data collection and its potential benefits for population health management and value-based payment arrangements.

A Field Guide for Improving Care for Veterans

Healthcare staff and providers are often encouraged to treat all patients equally, regardless of their gender, race, ethnicity, sexual orientation status and other social identifiers. However, trends in demographic data collection and use are revealing that unique patient populations have unique needs. A one-size-fits-all approach to healthcare leaves vulnerable patient groups overlooked and underserved. This part of the series focuses on the collection and use of veteran status while highlighting Lehigh Valley Health Network (LVHN) and Warrior Centric Health (WCH), two organizations committed to providing better care and services to those who have served our country.
Hazard of the Job

There are currently about 1.3 million active-duty military personnel in the U.S. and in 2016, 15 percent were deployed overseas. With our armed forces engaged in ongoing war, military service has become an increasingly hazardous occupation. For many veterans the wounds of war linger after they return to civilian life. Unfortunately, they face an ongoing battle for their health and sometimes struggle to get the care they deserve.

Leaders at LVHN in Allentown, Pennsylvania, have always cared deeply for their veteran community, but over the past 10 years they became more aware of the effect military service has on military families. Alexander Alex, acting director of LVHN’s Veteran Health Program, noted, “We were observing an increasing number of military men and women returning from multiple overseas deployments with significantly higher numbers of service-acquired health conditions and increased exposures to trauma.”

For female veterans especially, PTSD may be associated with experiences of military sexual trauma (MST) because 25 percent of female veterans seeking healthcare from the Veterans Health Administration (VHA) report having experienced MST.

Veteran Statistics

- Currently 18.6 million veterans in the U.S.
- 91% of veterans are male
- Female veterans are more racially and ethnically diverse than male veterans
- 23.2% of veterans are minorities, which is predicted to increase to 32.8% by 2037
- Over 7 million veterans are from the Gulf War Era and over 6.5 million from the Vietnam Era
- 4,000,000 veterans have a service-connected disability
- 11% of homeless adults are veterans, 45% of them are African American or Hispanic veterans and about 40,000 veterans are homeless every night
- Suicide risk is 22% higher for veterans and about 20 veterans commit suicide everyday

Hazards associated with military service are not only linked to deployment, but also the rigorous and dangerous exercises members of the military endure as part of their training. They include:

- Traumatic brain injuries (TBI)
- Post-Traumatic Stress Disorder (PTSD) and other behavioral health issues
- Limb amputations or disfigurement
- Musculoskeletal issues

Exposure to chemicals, radiation, biological weapons, smoke, dust, noise and vibration
Veteran Health Disparities

Research from the VHA has documented veteran disparities within the VHA system. Some of the most prominent veteran health disparities include:

- Veterans experience mental health issues, substance use disorders, PTSD and traumatic brain injuries (TBIs) at disproportionate rates compared to non-veterans.⁸
- The leading categories of conditions veterans are diagnosed with include: endocrine or metabolic, nutritional, cardiovascular, musculoskeletal, sense organ and gastrointestinal.
- 79 percent of Gulf War and Gulf War Era veterans report one of the following conditions in rank order: Gulf War illness, hypertension, functional dyspepsia, dermatitis, irritable bowel syndrome, migraine, gastritis, chronic fatigue syndrome, asthma, neuralgia, chronic obstructive pulmonary disease, tachycardia, coronary health disease, fibromyalgia and seizures.¹⁰
- Male veterans ages 45 to 64 are significantly more likely than non-veterans to suffer from two or more chronic health conditions, including diabetes, hypertension, heart disease, cancer, stroke, chronic bronchitis, emphysema, asthma and kidney disease.¹⁰,¹¹
- Veterans experience a higher prevalence of pain and more severe pain than non-veterans.¹²

Veterans are also more likely than non-veterans to report work limitations.⁹ Veteran healthcare access, care quality and outcomes are further complicated by other factors such as race, ethnicity, age, gender and geographic location. According to a systematic review of racial and ethnic disparities by the U.S. Department of Veterans Affairs, disparities appear to exist in all clinical arenas. However, a higher military rank and longer service seems to be associated with better health, independent of race, education and income.¹⁵

Veteran-centered Healthcare

By responding to what they were observing, LVHN took a proactive approach to better understand and care for their veteran patient population. They turned to WCH, an organization that provides healthcare facilities with veteran population data, statistics and tools to help them measure, coordinate and deliver high-quality care to veterans. Ron Steptoe, CEO of WCH and a West Point graduate, pointed out, “At the beginning of their military service, veterans are one of the healthiest groups in America, but they come out the other side disproportionately impacted by a range of conditions and at younger ages compared to the general population.”

Population health management starts with getting to know the community that the health organization serves. In 2011, LVHN helped launch a coalition and with WCH’s assistance, they began analyzing their service area. They learned that veterans represent seven percent of the population LVHN covers. After LVHN began asking patients about their veteran status in 2013, they learned that veterans represent 10 percent of LVHN’s patient population and generate thirteen percent of their revenue. Other hospital executives may be surprised to learn, as LVHN did, that veterans represent such a significant portion of their patient base.

To engage the veteran patient population in a more meaningful and equitable way, healthcare professionals must get to know veterans better. As an example, WCH helped LVHN develop a toolkit focused on establishing veteran-centric care and on-going education for LVHN staff.

Aside from health disparities, experiences related to military culture and reintegration impact what and when veterans seek treatment for and how they interact with providers. Evelyn Lewis, MD, is the Chief Medical Officer of WCH. She served in the Navy for 25 years as a family physician and now designs and develops cultural and clinical education solutions for healthcare providers and healthcare facilities. Lewis often tells providers and hospital staff, “To treat me the same, you may have to treat me differently.” Factors that providers should take into consideration when treating veterans include sensitivity to military culture such as selfless service, loyalty, honor and devotion to duty.
Identifying the Gaps

Raising awareness of veterans and their health needs also means identifying the gaps in care they are experiencing and recognizing some myths about the VHA.

- There is an educational gap in clinical care especially related to PTSD, TBI and new health conditions such as Gulf War Illness and Iraq-Afghanistan War Lung Injury.
- Despite public perception, only about 30 percent of veterans receive some healthcare from the VHA.
- Over 90 percent of veterans ages 25 to 64 have health insurance including private health insurance, Medicaid, Medicare or other government-sponsored health plans or military plans.
- Only 57 percent of hospitals ask patients if they have served in the military and only 10 percent actually use the data to identify care gaps.

Veterans are an underserved patient population with unique health and healthcare needs. As Steptoe stated, “Their illnesses and injuries often go undiagnosed, underdiagnosed and misdiagnosed in both public and private healthcare facilities.”

Best Practices for Collecting Veteran Status

Knowing a patient’s veteran status can help provide them with high quality care tailored to their needs. Of course, patients are under no obligation to report their veteran status and can decline to answer questions about their military service. In their work with health systems, WCH has identified the following four best practices to help increase an organization’s chances for successful data collection:

- At registration, ask all adult patients if they have served on active duty in the U.S. Armed Forces, the U.S. National Guard or the U.S. Reserves. Possible responses include yes, no, don’t know, refuse to answer or unable to answer. Those who answer no, especially those in the age range of 18 to 36, may join the military later and should be asked again at future visits.
- To optimize patient experience, provide frontline staff with scripts and tools for asking the question and answering any questions that may arise. For example, staff should be prepared to explain to patients why they are asking about their veteran status.
- To identify gaps in care across the healthcare organization, standardize questions and responses about veteran status at all service sites to facilitate consistent data analysis.
- Conduct focus groups, surveys and engagement councils to field test questions and ask veterans and their families for more information about their service experience. This will help organizations and providers get to know veterans better.

Partnering with WCH, healthcare organizations like LVHN have been able to identify healthcare disparities and gaps in delivery specific to their veteran community. This is done by analyzing veteran population and health data from national, state, county and regional levels.

Lehigh Valley Health Network’s Journey

Hospitals within LVHN are members of the prestigious Council of Teaching Hospitals and have a partnership with the University of South Florida (USF) to provide medical education. Two capstone research projects were conducted at USF-Lehigh Valley Campus using the veteran status data LVHN collected. An inpatient and outpatient study revealed:

- When compared to non-veteran patients, veterans had higher admission rates for complications of musculoskeletal disorders, cardiovascular disease, chronic obstructive pulmonary disease and renal disease.
- Veterans were more likely to be readmitted than non-veteran patients.
- Age stratification showed earlier development of musculoskeletal, pulmonary and cardiovascular disorders in veterans compared to the non-veteran patient population.
- Veterans had higher diagnosis rates for disorders of the circulatory system, neoplastic diseases, genitourinary and central nervous system. These differences remained once the data was stratified by gender.

In 2011, when LVHN embarked on their journey towards providing better care for veterans, their goals were to provide the best possible access, early intervention, care and outcomes to military and veteran families—and to provide these services at reduced cost. Veterans are in a challenging position because they often must cross between government and community-based health systems. Working with local and regional VHA leadership, LVHN
helps veterans navigate these systems. Alex explained, “Our collaboration with the VHA representatives recognizes that managing and navigating complex medical systems can be a daunting task for veterans. Together we are taking measured steps to own the space between us to make navigation as seamless as possible.”

In November 2017, LVHN opened the Dick and Peggy Fleming Military and Veteran Resource/Information Center (MAVRIC), a place where veterans receive targeted case management and assistance with VHA enrollment and eligibility, healthcare access and system navigation. These services are supplemented by wrap-around services such as peer support groups and other therapies.

One success story stands out. Staff recognized a veteran patient who was in despair, losing hope of a better life because he was suffering, but ineligible for VHA care. He was getting ready to be discharged, but was homeless and experiencing major neurological issues. The LVHN veteran health officer reached out to this veteran and learned where and when the veteran had been deployed. He followed up by cross-referencing the information and discovered that the veteran’s deployment dates coincided with a certain vaccination that was given and known to cause neurological problems. Staff were then able to assist the veteran in filing a claim with the VHA.

Potential Benefits of Using Veteran Status Data

The overarching goal of collecting veteran status is to use the data to better understand and serve the veteran patient population. One point that WCH emphasizes is the importance of making veteran status accessible to providers at the point of patient care, so they can integrate it into their assessments. Also, LVHN has a data analytics platform that allows them to integrate insurer claims and clinical data from the electronic health record (EHR) to create risk registries that stratify their patient populations, allowing them to identity high-risk patients who need interventions. Consider these recommendations for using veteran status to optimize care:

- Add an icon in the EHR, such as an American flag, to appear on veteran patient records so providers are notified of the patient’s veteran status.
- Train providers to ask more detailed, follow-up questions about the patient’s veteran status including military affiliation, deployment dates and other sociodemographic questions specific to potential military experiences and exposures.
- Provide staff with clinical education on the cultural and environmental exposures unique to military service so they are prepared to act on the information collected from veterans.
- Analyze inpatient and outpatient data to identify veteran disparities in health, care and outcomes using age stratification to reveal earlier development of conditions compared to non-veterans.

In the future, LVHN plans to identify the top ten diagnoses for their veteran patient population and then target those respective service lines for WCH education and training. Staff in orthopaedics, cardiology, pain management, pulmonology and behavioral health are likely participants.

The MAVRIC Program at LVHN is available at no cost to veterans and their families and has become an important access point. Elements of LVHN’s strategic partnership with the VHA led to them becoming an official preferred purchase care provider. This agreement also allowed LVHN to negotiate with the VHA a Medicare reimbursement rate 15 percent higher than they previously had, so that LVHN’s veteran-centric healthcare program helps pay for itself. Investments from Lehigh’s philanthropic community have also helped with funding, so the program is becoming revenue-generating. Leaders at LVHN are confident that over time, their veteran-centered interventions and services will reduce admissions and improve healthcare outcomes.

Endnotes

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Warrior Centric Health helps healthcare organizations care for veterans by providing them with tools to identify, attract and treat veterans and their families. In partnership with best practice organizations, they have developed the first and only Veteran Population Standard of Care and the only accredited, veteran-focused CME/CE program. Learn more at: www.warriorcentrichealth.com

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