



CHARTBOOK ON HEALTHCARE FOR VETERANS



NATIONAL HEALTHCARE QUALITY AND DISPARITIES REPORT



U.S. Department
of Veterans Affairs

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National Healthcare Quality and Disparities Report Chartbook on Healthcare for Veterans

Agency for Healthcare Research and Quality
5600 Fishers Lane
Rockville, MD 20857
www.ahrq.gov

AHRQ Publication No. 21-0003
November 2020



VA



U.S. Department
of Veterans Affairs

ACKNOWLEDGMENTS

The National Healthcare Quality and Disparities Report (NHQDR) is the product of collaboration among agencies across the U.S. Department of Health and Human Services (HHS). Many individuals guided and contributed to this effort. Without their magnanimous support, this chartbook C not have been possible. We also appreciate the collaboration of the Veterans Health Administration, Department of Veterans Affairs. Specifically, we thank:

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EXECUTIVE SUMMARY

This chartbook provides information regarding disparities in access to and quality of healthcare received by Veterans. Data on disparities are presented:

- Contrast 1: Between Veterans and non-Veterans.
- Contrast 2: Between all Veterans, regardless of provider and payer of healthcare, with different characteristics (e.g., age, gender).
- Contrast 3: Between Veterans Health Administration (VHA) users with different characteristics (e.g., age, gender).

Note: Data in this chartbook are from the 2014-2017 Medical Expenditure Panel Survey (MEPS), 2015-2018 National Health Interview Survey (NHIS), 2015 Survey of Healthcare Experience of Patients (SHEP), and fiscal year 2009-2016 VHA administrative data.

Executive Summary: Contrast 1 Key Findings

- **Contrast 1:** Assessing disparities in access to and quality of care for Veterans vs. non-Veterans.
 - Veterans reported better care for 22% of measures, which often related to vaccinations and health screening.
 - Veterans reported similar care for 67% of measures.
 - Veterans reported worse care for 11% of measures, which often were for access to care or related to inappropriate medications for older adults.

Notes:

- Results are cross-sectional (for a static point in time). Trends over time were conducted for a limited number of measures where sufficient data were available.
- These findings are based on 2014-2017 MEPS and 2015-2018 NHIS data.

Executive Summary: Contrast 2 Key Findings

- **Contrast 2:** Assessing disparities in access to and quality of care for Veterans with different characteristics.
 - Disparities occurred most often across **age** and **disability status**.
 - Compared with younger Veterans, **middle-aged** Veterans had better care for 30% of measures, similar care for 65% of measures, and worse care for 5% of measures.
 - Compared with younger Veterans, **older** Veterans had better care for 50% of measures, similar care for 31% of measures, and worse care for 19% of measures.

- Compared with Veterans with no activity limitations, Veterans with **activity limitations** had better care for 13% of measures, similar care for 48% of measures, and worse care for 39% of measures.
- Fewer disparities occurred across the following groups:
 - ◆ **Gender:** female vs. male
 - ◆ **Race/ethnicity:** Hispanic vs. non-Hispanic White and non-Hispanic Black vs. non-Hispanic White
 - ◆ **Location:** rural vs. urban
 - ◆ **Education:** high school degree or less education vs. at least some college education
 - ◆ **Income:** below poverty line (poor) income vs. middle/high income and just above (near) poverty income vs. middle/high income
 - ◆ **Insurance:** public insurance vs. private insurance

Notes:

- Results are cross-sectional (for a static point in time). Trends over time were conducted for a limited number of measures where sufficient data were available.
- These findings are based on 2014-2017 MEPS and 2015-2018 NHIS data.

Executive Summary: Contrast 3 Key Findings

- **Contrast 3:** Assessing disparities in access to and quality of care for VHA users with different characteristics.
 - Disparities in access to and quality of care occurred most often across **age** and **gender** categories.
 - Compared with younger VHA users, **middle-aged** VHA users had better care for 64% of measures and similar care for 36% of measures.
 - Compared with younger VHA users, **older** VHA users had better care for 79% of measures, similar care for 14% of measures, and worse care for 7% of measures.
 - Compared with male VHA users, **females** had better care for 4% of measures, similar care for 57% of measures, and worse care for 39% of measures.
 - In access to care, disparities occurred frequently across racial/ethnic categories.
 - Compared with non-Hispanic White VHA users, VHA users of racial and ethnic minority groups had better access to care for 3% of measures, similar access to care for 58% of measures, and worse access to care for 39% of measures.
 - Fewer disparities occurred across education, less than a high school degree vs. bachelor's degree, high school degree vs. bachelor's degree, and some college education vs. bachelor's degree.

Notes:

- Results are cross-sectional (for a static point in time). Trends over time were not available for this contrast.
- These findings are based on 2015 SHEP data.

Disparities in mortality rates occurred most often across age, gender, and racial/ethnic categories:

- Compared with younger VHA users, middle-aged VHA users had, as expected, higher mortality rates for 80% of measures and lower rates for 20% of measures.
- Compared with younger VHA users, older VHA users had, as expected, higher mortality rates for 60% of measures and lower rates for 40% of measures.
- Compared with male VHA users, females had higher mortality rates for 20% of measures and lower rates for 80% of measures.
- Compared with non-Hispanic White VHA users, VHA users of racial and ethnic minority groups had higher mortality rates for 21% of measures, similar rates for 43% of measures, and lower rates for 36% of measures.
- Fewer disparities occurred across rural vs. urban location.

Notes:

- Results are cross-sectional (for a static point in time). Trends over time were not available for this contrast.
- These findings are based on fiscal year 2009-2016 VHA administrative data.

CHARTBOOK SECTIONS

- Background on National Healthcare Quality and Disparities Report (NHQDR)
- Introduction to Chartbook on Healthcare for Veterans
- Veterans Health Administration (VHA)
- Methodology
- Veteran Population
- Quality Measures
 - **Contrast 1:** Disparities Between Veterans and Non-Veterans
 - **Contrast 2:** Disparities Within the Veteran Population
 - **Contrast 3:** Disparities Within VHA Users
- Resources and References
- Appendix

BACKGROUND ON NATIONAL HEALTHCARE QUALITY AND DISPARITIES REPORT

The *National Healthcare Quality and Disparities Report* (NHQDR) is an annual report to Congress mandated in the Healthcare Research and Quality Act of 1999 (P.L. 106-129). The report provides a comprehensive overview of:

- Quality of healthcare received by the general U.S. population.
- Disparities in care experienced by different racial and socioeconomic groups.

In addition, the report assesses the performance of the U.S. healthcare system and identifies areas of strength and weakness along three main axes:

- Access to healthcare
- Quality of healthcare
- NHQDR priorities

The NHQDR is based on more than 250 measures of access, quality, and disparities covering a broad array of healthcare services and settings and health conditions. It includes data from 2000 through 2018. The report is produced with the help of an Interagency Work Group led by the Agency for Healthcare Research and Quality (AHRQ) and submitted on behalf of the Secretary of the Department of Health and Human Services (HHS). To access the most recent National Healthcare Quality and Disparities Report, including methodologies and measure lists, go to <https://www.ahrq.gov/research/findings/nhqrdr/index.html>.

The NHQDR assesses **access** to and **quality** of healthcare. Quality is organized by NHQDR priority area.

NHQDR Priority	Description
Patient Safety	Making care safer by reducing harm caused in the delivery of care
Person-Centered Care	Ensuring that each person and family is engaged as partners in their care
Care Coordination	Promoting effective communication and coordination of care
Effective Treatment	Promoting the most effective prevention and treatment practices for the leading causes of mortality, starting with cardiovascular disease
Healthy Living	Working with communities to promote wide use of best practices to enable healthy living
Affordable Care	Making quality care more affordable for individuals, families, employers, and governments by developing and spreading new healthcare delivery models

INTRODUCTION TO CHARTBOOK ON HEALTHCARE FOR VETERANS

National Healthcare Quality and Disparities Report Chartbooks

The NHQDR is supported by a series of related chartbooks that:

- Cover various topics, such as access to care, healthcare priority areas, and priority populations.
- Are posted online at <https://www.ahrq.gov/research/findings/nhqdr/chartbooks/index.html>.

The Chartbook on Healthcare for Veterans:

- Uses NHQDR methodology for assessing disparities.
- Uses NHQDR and non-NHQDR measures to present novel comparisons between Veterans and non-Veterans and within Veteran populations.

Background on Chartbook

- Veterans are individuals who have served in the armed forces: Army, Marine Corps, Navy, Air Force, or Coast Guard.
- Veterans differ from non-Veterans.
- Veterans are more likely to be older, White, and male.
- Veterans are more likely to have a disability, as well as certain physical and mental health conditions.
- Some Veterans receive healthcare through VHA.
- VHA users differ from Veterans who do not use VHA.
- Evidence suggests that disparities in healthcare access and quality exist between Veterans and non-Veterans, within the Veteran population, and within the VHA patient population.

Note: Information regarding VHA, its structure, and eligibility is provided in the “Veterans Health Administration” section below. Comparisons of non-Veterans, all Veterans, and VHA users are provided in the “Veteran population” section below.

Office of Health Equity

- The VHA Office of Health Equity (OHE) was created in 2012 to promote the advancement of health equity and reduction of health disparities among Veterans.
- **Health equity** is the attainment of the highest level of health for all people.

- **Health disparities** are health differences closely linked with social or economic disadvantage.

Health Equity Action Plan

- The Health Equity Action Plan (HEAP) is produced by OHE in conjunction with the Health Equity Coalition (HEC) to outline how to accomplish OHE's vision.
- The HEC is a committee that works collaboratively with executive VHA and VA members and external organizations with expertise in health equity.
- The HEAP is organized around five aims to match the goals of the **National Partnership for Action to End Health Disparities** National Stakeholder Strategy, the HHS-led federal strategy for eliminating disparities. The aims are:
 - Awareness.
 - Leadership.
 - Health system and life experience.
 - Cultural and linguistic competency.
 - Data, research, and evaluation.

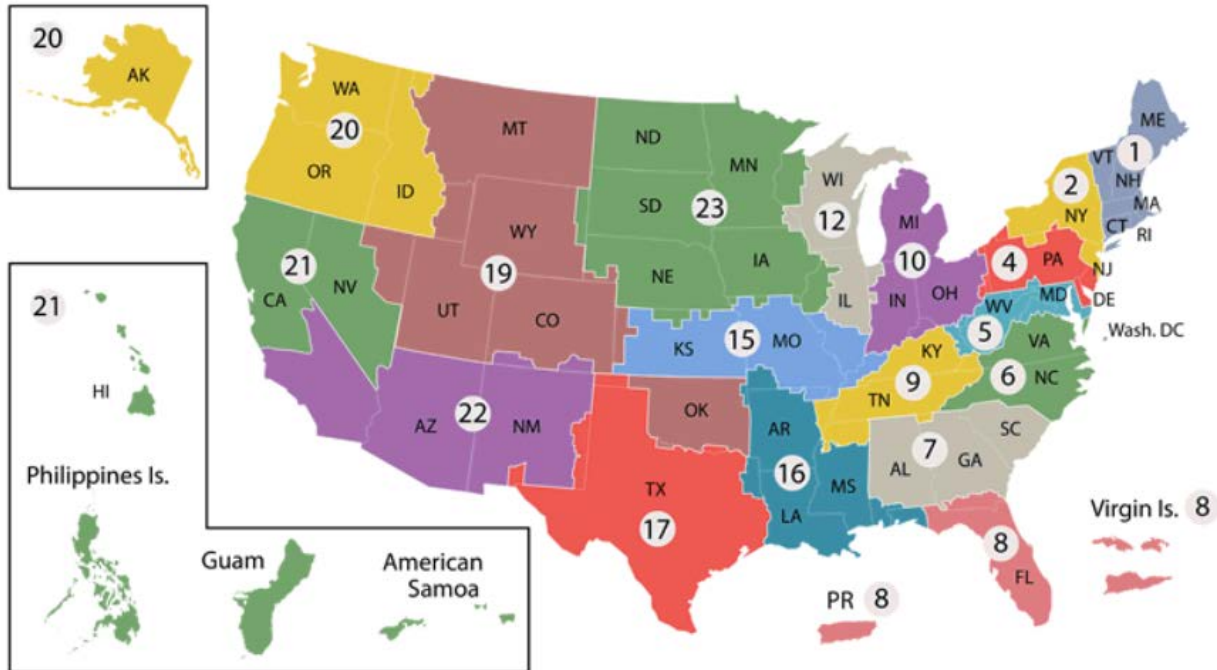
Chartbook on Healthcare for Veterans

- The Chartbook on Healthcare for Veterans aligns with the HEAP's awareness, data, research, and evaluation activities:
 - Increase **awareness** of health disparities, their impact, and actions needed to improve health outcomes.
 - Improve **data** availability and coordination, utilization, and diffusion of **research and evaluation** outcomes.
- It is a collaboration between the AHRQ NHQDR team, the VHA OHE, and the Interagency Work Group.

VETERANS HEALTH ADMINISTRATION

- VHA is the largest integrated healthcare system in the United States.
- VHA is organized into 18 geographically based Veterans Integrated Service Networks (VISNs).

Map of VISNs



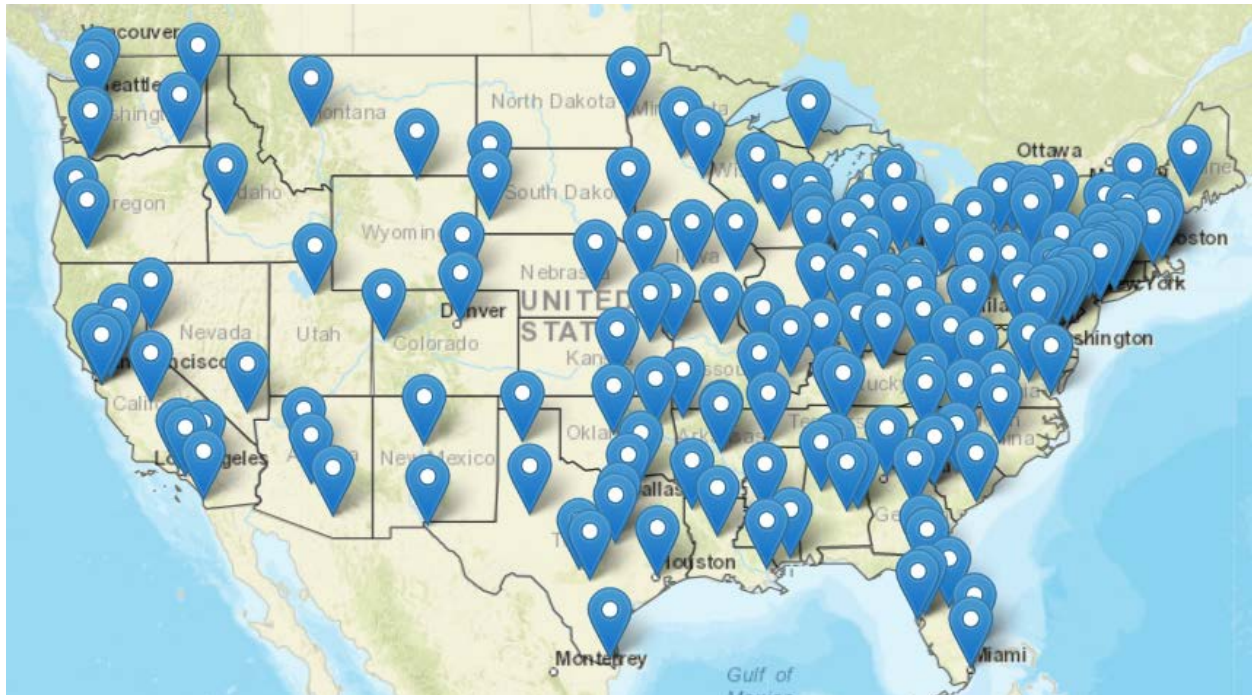
Source: Department of Veterans Affairs, 2020.

Note: The map is available at <https://www.va.gov/directory/guide/map.asp>. VISNs are numbered 1, 2, 4-10, 12, 15-17, and 19-23.

VHA Medical Centers and Clinics

- The VHA healthcare system is composed of:
 - 170 VA Medical Centers (VAMCs).
 - 1,074 community-based outpatient clinics (CBOCs).

Map of VAMCs



Source: American Enterprise Institute, VA Mission Act Access Map, 2019.

Note: The map is available at <https://www.aei.org/multimedia/va-mission-act-access-map/>. VAMCs are larger facilities that provide a wide range of inpatient and outpatient services. VAMCs range in size from no staffed beds to nearly 1,000 staffed beds. CBOCs are smaller and typically focused on primary care and may provide limited specialty care services.

VHA Eligibility and Benefits

- Veterans are assigned to priority group 1 through 8 based on:
 - Service history and military discharge status.
 - Service-connected disability rating and diagnoses.
 - Income level.
 - Medicaid eligibility.
 - Other benefits received.
- Benefits and copayments are based on priority.
- Not all Veterans are eligible for VHA benefits.
- VHA serves roughly half of the U.S. Veteran population.

VHA Benefits

- VHA provides:
 - Inpatient, outpatient, and specialty care.
 - Prescription and over-the-counter medications.

- Durable medical equipment.
 - Long-term care.
 - Home-based care.
 - Telehealth.
- Benefits include:
 - No copayments for treatment related to a service-connected disability.
 - Low copayments for other healthcare.
 - Transportation reimbursement.

VHA-Funded Community Care

- VHA also funds healthcare from non-VHA providers in the community when VHA cannot provide the care needed.
- Healthcare provided through community providers must be preauthorized and funds are based on eligibility requirements and Veterans' needs.
- Care includes:
 - Inpatient and outpatient care.
 - Emergency and urgent care.
 - Home-health and hospice care.
 - Vaccinations.

Community Care - MISSION Act

- The Maintaining Internal Systems and Strengthening Integrated Outside Networks (MISSION) Act was passed in 2018 and establishes the Veterans Community Care Program.
- Some Veterans are eligible for care in the community:
 - If a service is not available at any VA medical facility.
 - If a Veteran lives in a U.S. state or territory without a full-service VA medical facility.
 - If a Veteran qualifies under the “grandfather” provision related to distance eligibility under the Veterans Choice Program.
 - If VA cannot furnish care within certain drive time or appointment wait time access standards.
 - If it is in the best medical interest of the Veteran to receive community care based on defined factors.
 - If a VA medical service line is not providing care in a manner that complies with VA's standards for quality based on specific conditions.

Veterans Served by VHA

- Statistics for fiscal year 2017 include the following:
 - Half of the Veterans in the United States were enrolled in VHA (9 million of about 18 million Veterans).
 - Six million Veterans received VHA services.
 - The VHA budget was \$68 billion.

CHARTBOOK METHODOLOGY

Comparison Populations and Contrasts

- Analyses included three populations: Veterans, non-Veterans, and Veterans who use VHA services.
- Analyses were organized into three types of comparison (i.e., contrasts).

Contrast	Population	Comparison
#1	Veterans and non-Veterans	Assessed disparities by comparing Veterans with non-Veterans, standardizing by age and gender
#2	All Veterans	Assessed disparities across characteristics such as age, gender, race, ethnicity, urban/rural location, education, income, disabilities/limitations, physical health status, and mental health status
#3	Veterans who use VHA services (i.e., VHA users)	Assessed disparities across characteristics such as age, gender, race, ethnicity, urban/rural location, socioeconomic status, period of service, service-connected disability, physical health status, and mental health status

Data Sources

National Surveys

- Used for Contrasts 1 and 2.
- National Health Interview Survey (NHIS)
 - National in-person interview survey providing detailed information about health status, access to care, and receipt of services.
 - Self-reported data.
- Medicare Expenditure Panel Survey (MEPS)
 - Set of national panel surveys of individuals and providers collecting and reporting comprehensive information about access, use, quality, and cost of healthcare.
 - MEPS panels derived from NHIS sampling frames.
 - Self-reported data.

VHA Data

- Used for Contrast 3.
- Survey of Healthcare Experience of Patients (SHEP)
 - Customer experience survey used to evaluate and improve the experience of care among users of VHA facilities.
 - Self-reported data.
- VHA administrative mortality data
 - Data collected for administrative purposes.

Data Sources by Dimension, Priority Area, and Contrast

Data sources varied by NHQDR dimension, NHQDR priority area, and contrast.

NHQDR Dimension	NHQDR Priority Area	Data Sources for Contrasts 1 & 2	Data Sources for Contrast 3
Access	N/A	MEPS NHIS	SHEP
Quality	Patient Safety	MEPS	N/A
Quality	Person-Centered Care	MEPS	SHEP
Quality	Care Coordination	MEPS	SHEP
Quality	Effective Treatment	MEPS NHIS	SHEP
Quality	Healthy Living	MEPS NHIS	N/A
Quality	Mortality	N/A	VHA Administrative

Note: There were insufficient data for Affordable Care measures, so they are not included.

Characteristics and Measure Summary

- Background analyses of demographics, location, and other characteristics are based on 2017 data, where possible.
- The chartbook includes 65 healthcare quality, access, and mortality measures.
 - Access and quality measures reflect care provided in 2014-2018.
 - ♦ NHIS measures are from pooled 2015-2018 data.
 - ♦ Most MEPS measures are from pooled 2014-2017 data.
 - ♦ SHEP measures are from 2015 data.
 - Mortality measures are based on first visit in fiscal year 2009 and followup through 2016.

- One MEPS measure, Adults who had a doctor’s office or clinic visit in the last 12 months and needed care, tests, or treatment who sometimes or never found it easy to get the care, tests, or treatment, is from pooled 2014-2016 data.

Data Preparation

- Metrics were aligned so that a higher rate is “better” (i.e., higher rate implies a healthier status).
- Reference groups were determined.
- Measures were categorized by NHQDR dimension, NHQDR priority area, and contrast.

Variable	Reference Group
Veteran Status	Non-Veterans
Age	Younger age (i.e., 18-44 or 20-49 years)
Gender	Male
Race/Ethnicity	White, non-Hispanic
Income	Middle or high income
Education	College education
Insurance	Any private insurance
Activity Limitations	No activity limitation

Number of Measures by Dimension, Priority Area, and Contrast

The number of measures varied by NHQDR dimension, NHQDR priority area, and contrast.

NHQDR Dimension	NHQDR Priority Area	Measures for Contrasts 1 & 2	Measures for Contrast 3	Total Measures
Access	N/A	11	6	17
Quality	Patient Safety	1	0	1
Quality	Person-Centered Care	9	9	18
Quality	Care Coordination	1	11	12
Quality	Effective Treatment	1	2	3
Quality	Healthy Living	9	0	9
Quality	Mortality	0	5	5
Total	N/A	32	33	65

Note: There were insufficient data for Affordable Care measures, so they are not included.

Analysis Summary

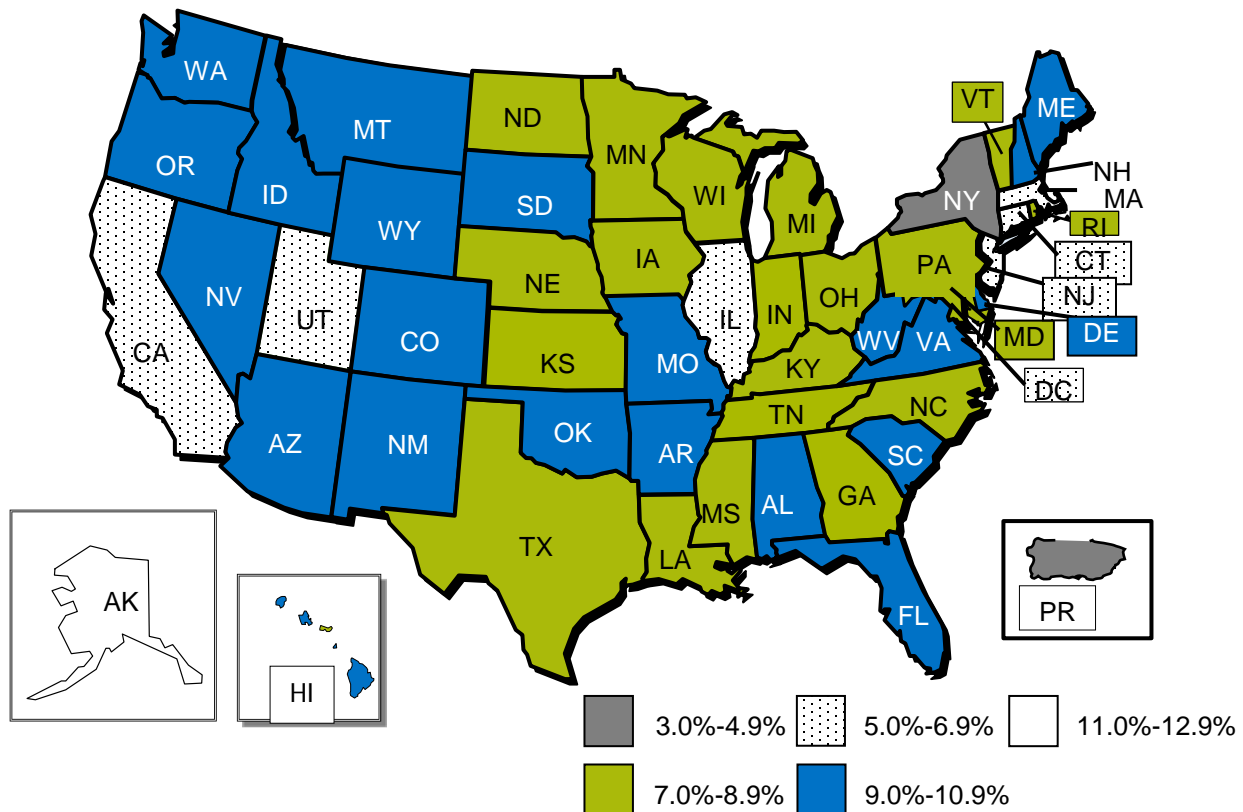
- Measure values for Veterans were compared using age and gender strata, age-adjusted gender strata, or age-gender adjusted values.
- Comparisons were made between priority and reference groups.
- Meaningful differences between two groups were determined based on two criteria:
 - Absolute difference was statistically significant with $p < 0.05$ on a two-tailed test.
 - The relative difference was at least 10%, where relative difference is defined as the difference between priority group and reference group, divided by reference group value.

Limitations

- Not all characteristics (e.g., education, disability status) were available from all data sources, so comparisons were limited.
- Due to small numbers of Veterans in the survey sample, particularly female Veterans, few trend analyses were feasible.
 - Estimates with fewer than 30 individuals per group or a relative standard error more than 30% were excluded (or suppressed).
- Most measures were derived from survey data and may reflect response biases, including:
 - Nonresponse bias - individuals with poorer health may be less likely to respond to the survey.
 - Social desirability bias - individuals who do respond may provide responses they believe are more socially desirable than the truth.
- Only aggregate data were provided, so multivariate analyses were not performed for this chartbook.

OVERVIEW OF VHA PATIENT, VETERAN, AND NON-VETERAN POPULATIONS AND CHARACTERISTICS

Veteran Population by State



Source: U.S. Census Bureau, 2017 American Community Survey 5-Year Estimates.

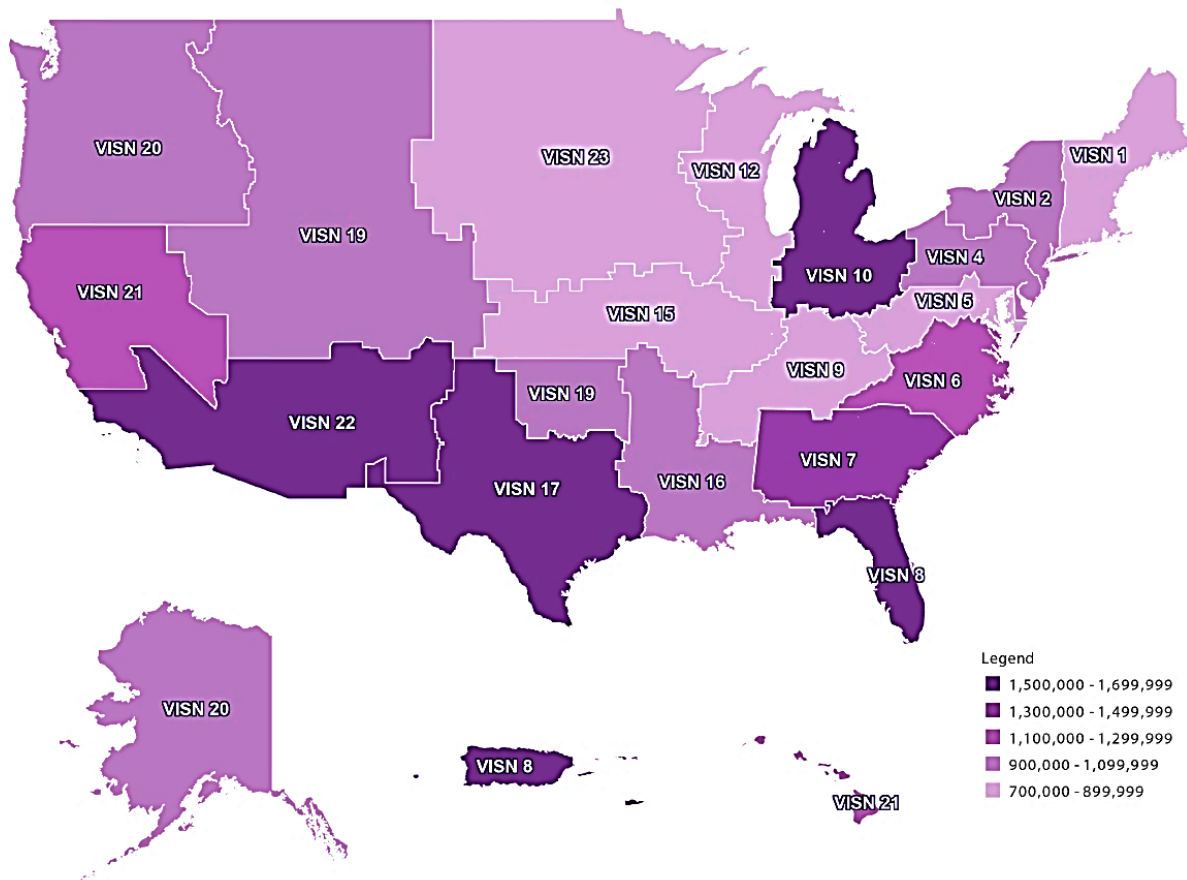
- **Importance:** The percentage and number of Veterans varies by state. New York has the lowest percentage of Veterans relative to the state’s population and Alaska has the highest percentage.

- **Data:** State and number of Veterans per state (percentage of Veterans):

- | | | |
|--|-----------------------------------|---------------------------------|
| • Puerto Rico
83,641 (3.1%) | • Massachusetts
325,299 (6.0%) | • Louisiana
254,920 (7.2%) |
| • New York
757,900 (4.9%) | • Utah 125,074
(6.0%) | • Texas 1,482,871
(7.4%) |
| • District of
Columbia 27,695
(5.0%) | • Illinois 614,725
(6.2%) | • Michigan 581,527
(7.5%) |
| • New Jersey
351,542 (5.1%) | • Connecticut
180,111 (6.4%) | • Minnesota
319,438 (7.6%) |
| • California
1,661,433 (5.6%) | • Rhode Island
59,535 (7.1%) | • Mississippi
172,587 (7.7%) |

- Wisconsin
350,330 (7.8%)
- Indiana 397,715
(7.9%)
- Pennsylvania
803,420 (8.0%)
- Vermont 40,145
(8.0%)
- Iowa 193,451
(8.1%)
- Kentucky 279,153
(8.2%)
- Maryland
380,555 (8.2%)
- North Dakota
47,228 (8.3%)
- Georgia 646,350
(8.4%)
- Ohio 752,153
(8.4%)
- Kansas 185,292
(8.6%)
- Nebraska 122,311
(8.6%)
- North Carolina
670,326 (8.7%)
- Tennessee
441,554 (8.7%)
- Florida 1,454,632
(9.0%)
- Alabama 341,642
(9.1%)
- Arkansas 206,796
(9.1%)
- Colorado 376,336
(9.1%)
- Delaware 66,854
(9.1%)
- Missouri 424,605
(9.1%)
- Oregon 291,153
(9.2%)
- Arizona 486,760
(9.4%)
- New Hampshire
100,474 (9.4%)
- South Dakota
60,330 (9.4%)
- Idaho 115,437
(9.5%)
- Nevada 210,461
(9.5%)
- New Mexico
150,650 (9.5%)
- Oklahoma
276,948 (9.5%)
- West Virginia
138,508 (9.5%)
- South Carolina
367,921 (9.8%)
- Washington
541,122 (9.8%)
- Hawaii 106,630
(9.9%)
- Maine 110,362
(10.3%)
- Wyoming 46,540
(10.5%)
- Montana 84,878
(10.6%)
- Virginia 688,536
(10.8%)
- Alaska 67,004
(12.5%)

Veteran Population – by VISN



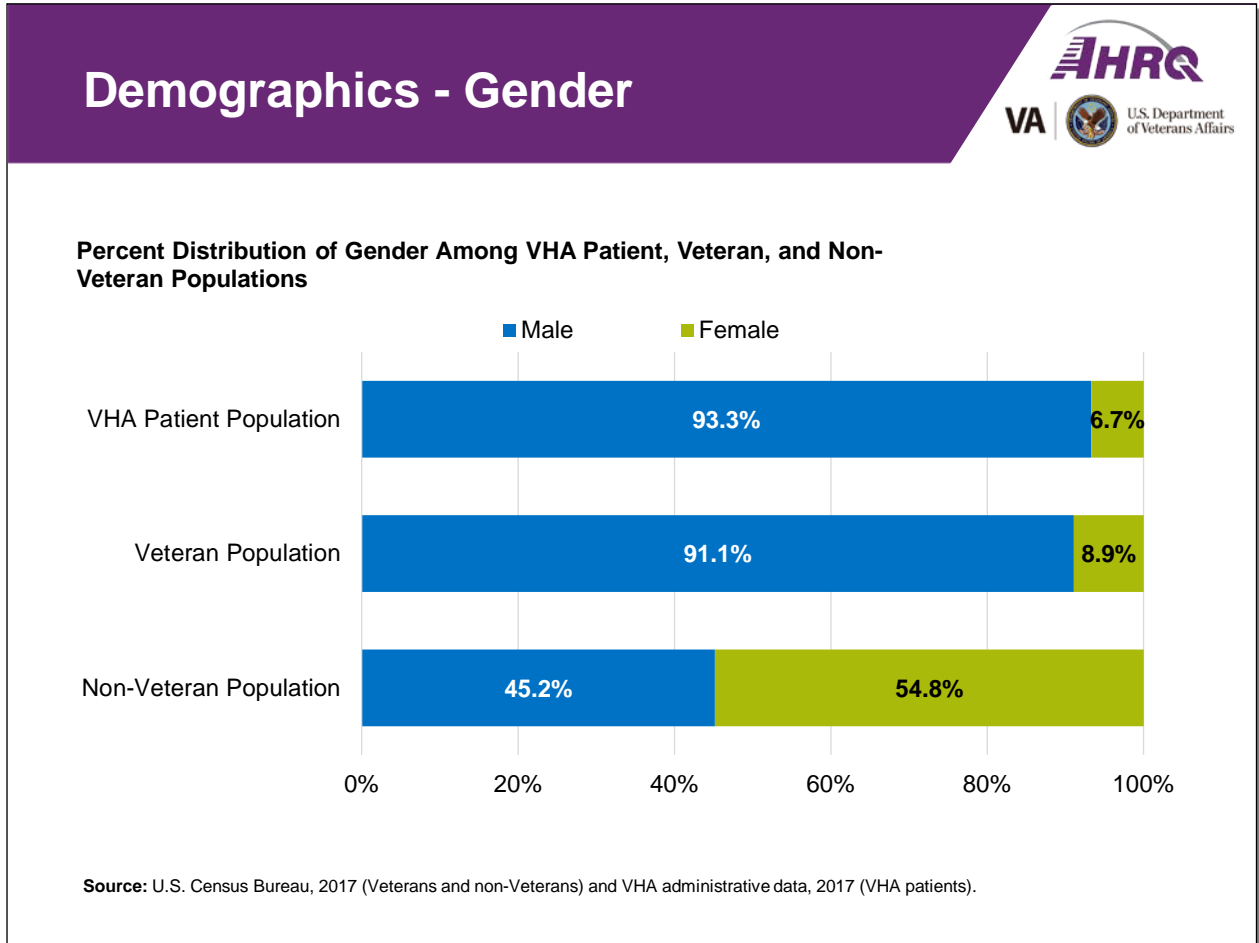
Source: Department of Veterans Affairs, 2016 Veteran Population Model data.

- **Importance:** The number of Veterans within each VISN varies. The Veteran population is lowest in VISN 15 and highest in VISN 10.
- **Data:** VISN, name, and population
 - 1 VA New England Healthcare System 833,407
 - 2 NY/NJ VA Health Care Network 1,014,031
 - 4 VA Healthcare - VISN 4 1,025,705
 - 5 VA Capitol Health Care Network 785,107
 - 6 VA Mid-Atlantic Health Care Network 1,243,752
 - 7 VA Southeast Network 1,356,446
 - 8 VA Sunshine Healthcare Network 1,513,361
 - 9 VA Mid South Healthcare Network 816,898
 - 10 VA Healthcare System 1,630,604
 - 12 VA Great Lakes Health Care System 880,288
 - 15 VA Heartland Network 752,934
 - 16 South Central VA Health Care Network 917,434
 - 17 VA Heart of Texas Health Care Network 1,568,097

- 19 Rocky Mountain Network 996,509
- 20 Northwest Network 1,038,985
- 21 Sierra Pacific Network 1,118,873
- 22 Desert Pacific Healthcare Network 1,639,110
- 23 VA Midwest Health Care Network 867,259

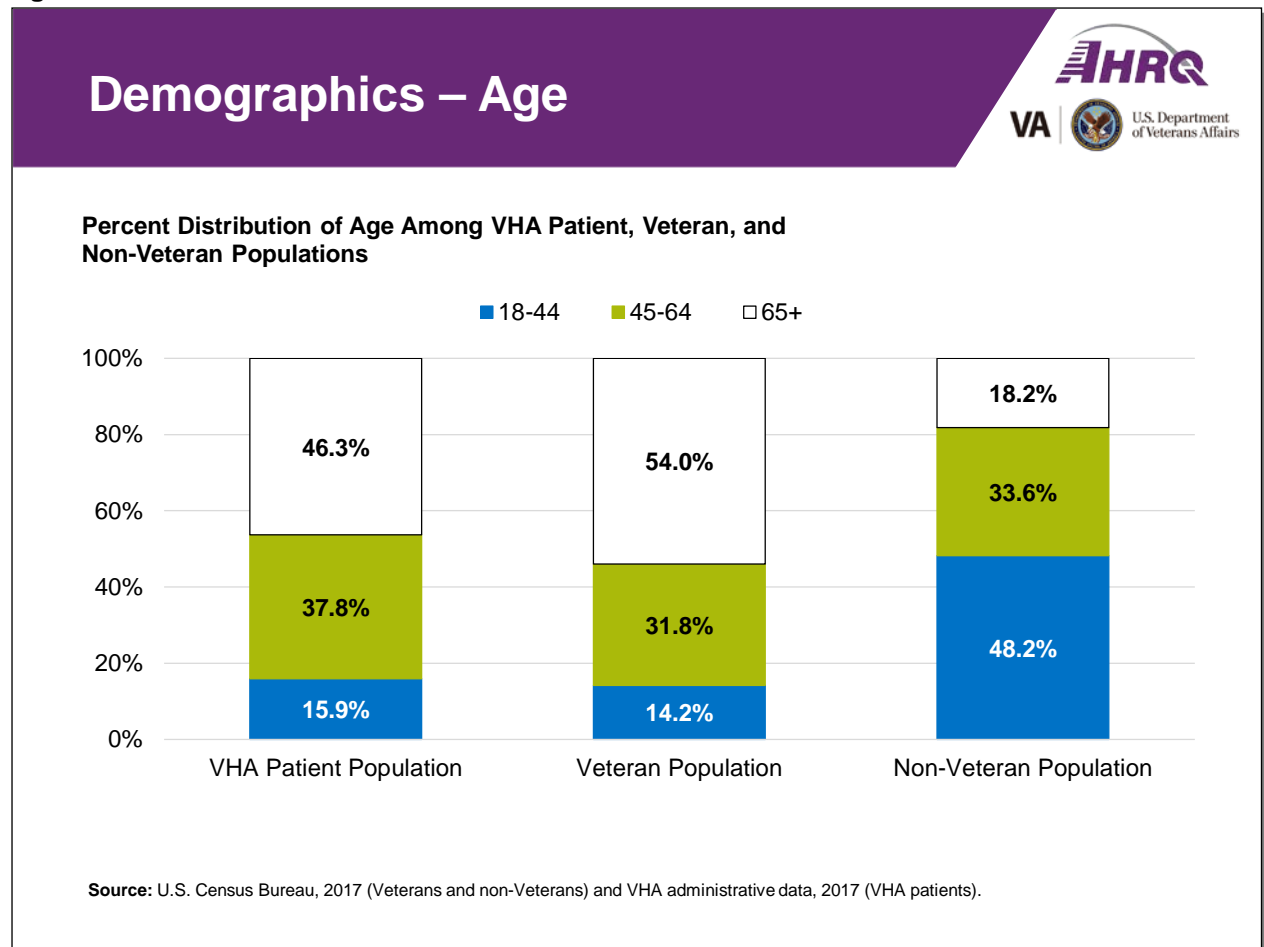
Demographics

Gender



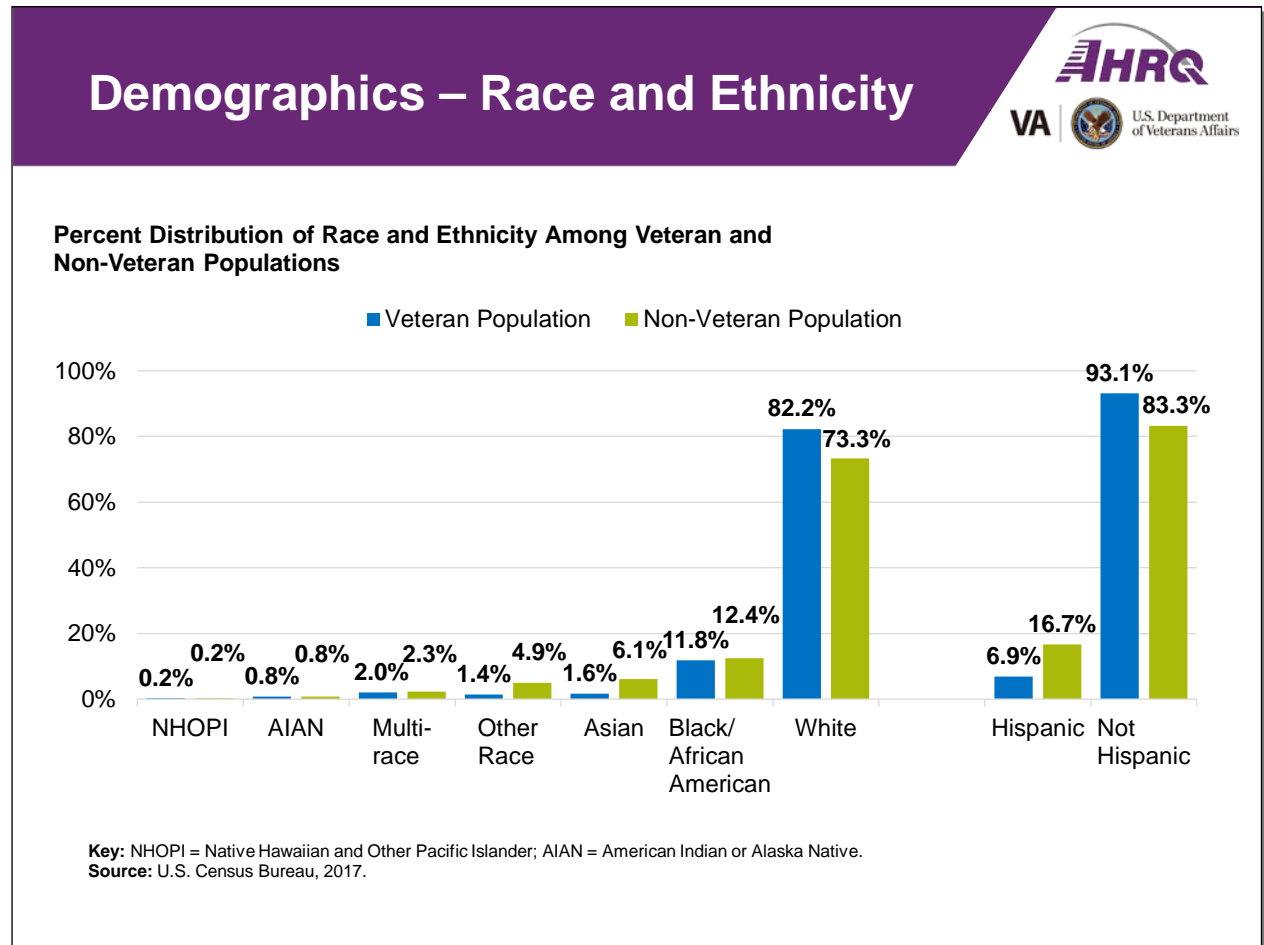
- **Importance:** In terms of **gender**, the VHA patient population is fairly consistent with the general Veteran population (6.7% vs. 8.9% women). Both the VHA patient and Veteran populations have a lower percentage of women than the non-Veteran population (54.8% women).

Age



- Importance:** In terms of **age**, the VHA patient population is fairly consistent with the general Veteran population (15.9% vs.14.2% ages 18-44, 37.8% vs. 31.8% ages 45-64, and 46.3% vs. 54.0% age 65+). However, the VHA and Veteran populations have a lower percentage of younger individuals and higher percentage of older individuals than the non-Veteran population (48.2% ages 18-44, 33.6% ages 45-64, and 18.2% age 65+).

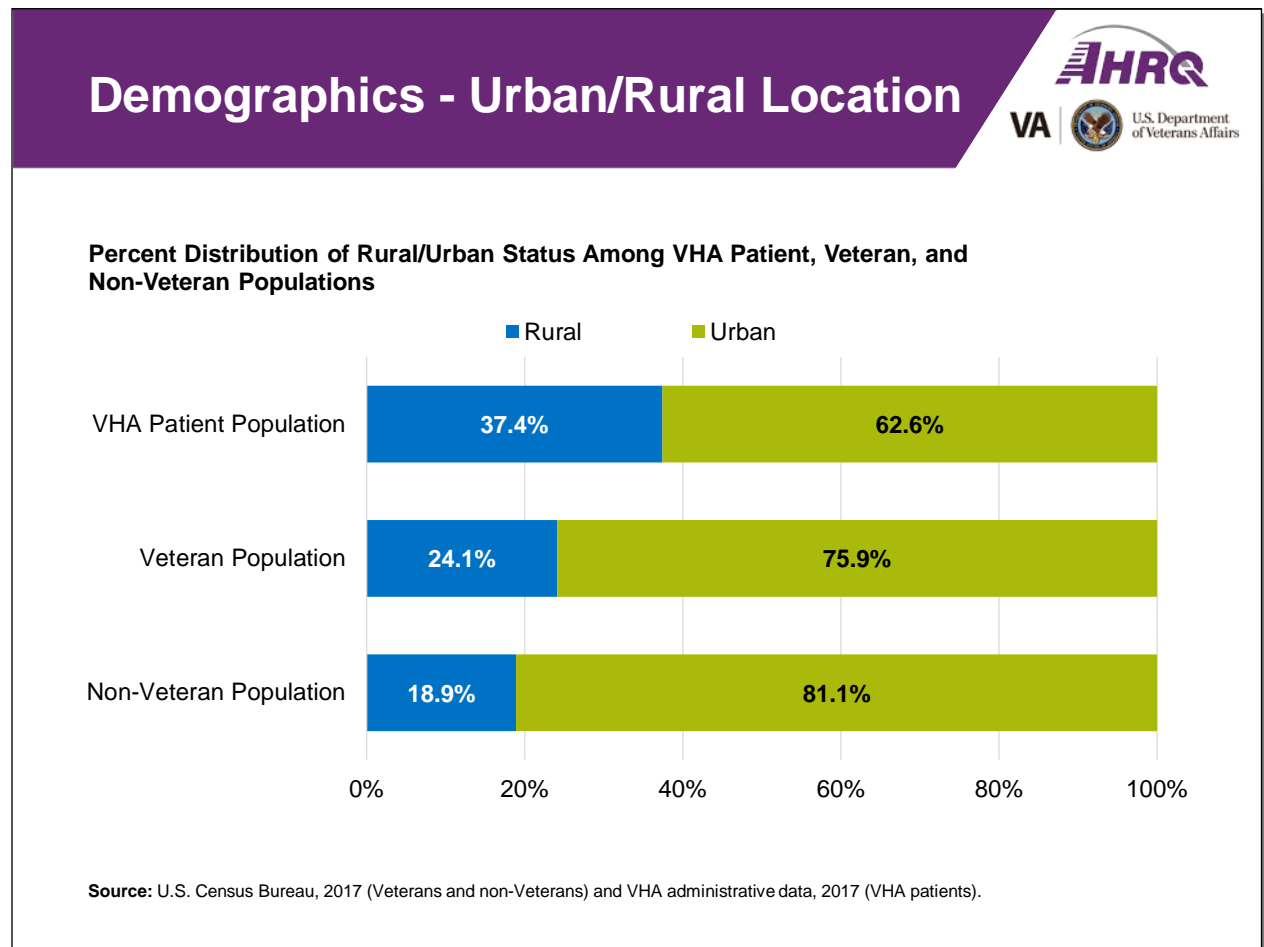
Race and Ethnicity



• **Importance:**

- In terms of **race**, the Veteran population has a lower percentage of minority individuals and higher percentage of White individuals than the non-Veteran population (e.g., 1.6% vs. 6.1% Asian, 11.8% vs. 12.4% Black, 82.2% vs. 73.3% White).
- In terms of **ethnicity**, the Veteran population has a lower percentage of Hispanic individuals than the non-Veteran population (6.9% vs. 16.7% Hispanic).

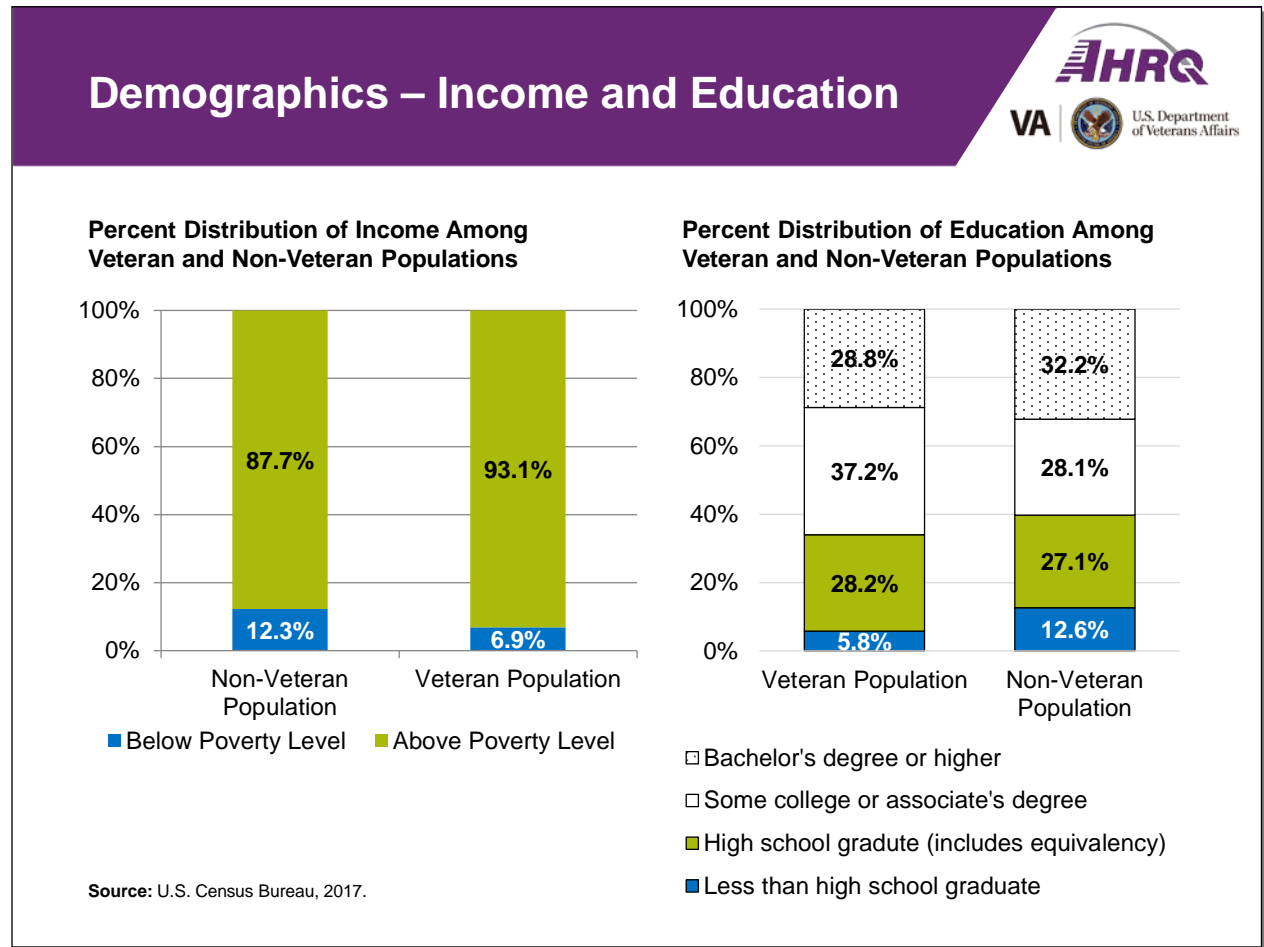
Urban/Rural Location



- Importance:** In terms of **urban/rural location**, the VHA patient population has a higher percentage of Veterans living in rural areas compared with the general Veteran population (37.4% vs. 24.1% rural). Both the VHA patient and Veteran populations have a higher percentage of individuals living in rural areas than the non-Veteran population (18.9% rural).

Note: Census and VHA administrative data use slightly different urban/rural definitions. Census defines rural at the county level. VHA uses the census tract.

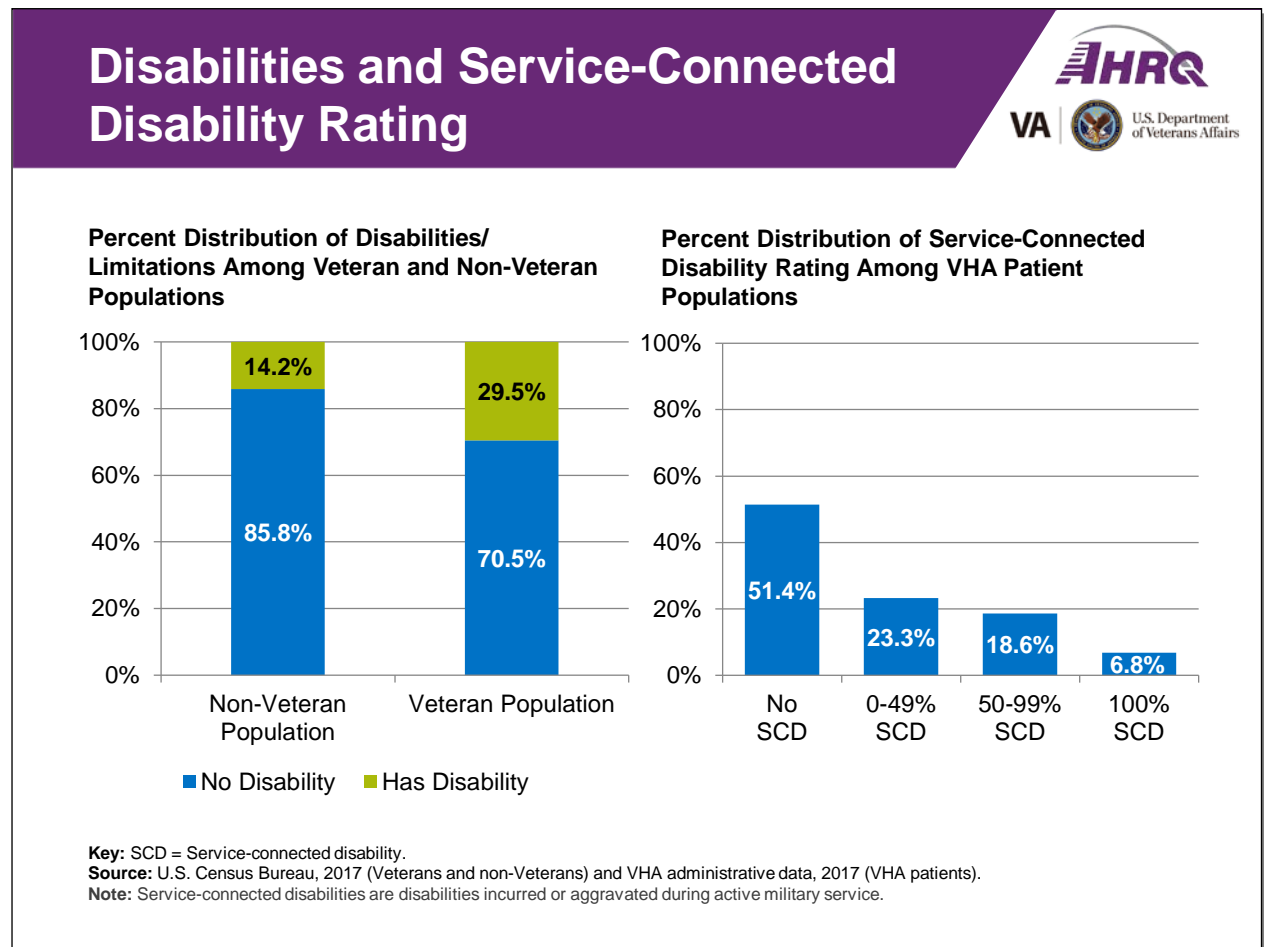
Income and Education



• **Importance:**

- In terms of **income**, the Veteran population has a lower percentage of individuals below the poverty line than the non-Veteran population (6.9% vs. 12.3% below the poverty line).
- In terms of **education**, the Veteran population has a lower percentage of individuals with a high school diploma or less education than the non-Veteran population (34.0% vs. 39.7% with a high school diploma or less).

Disabilities

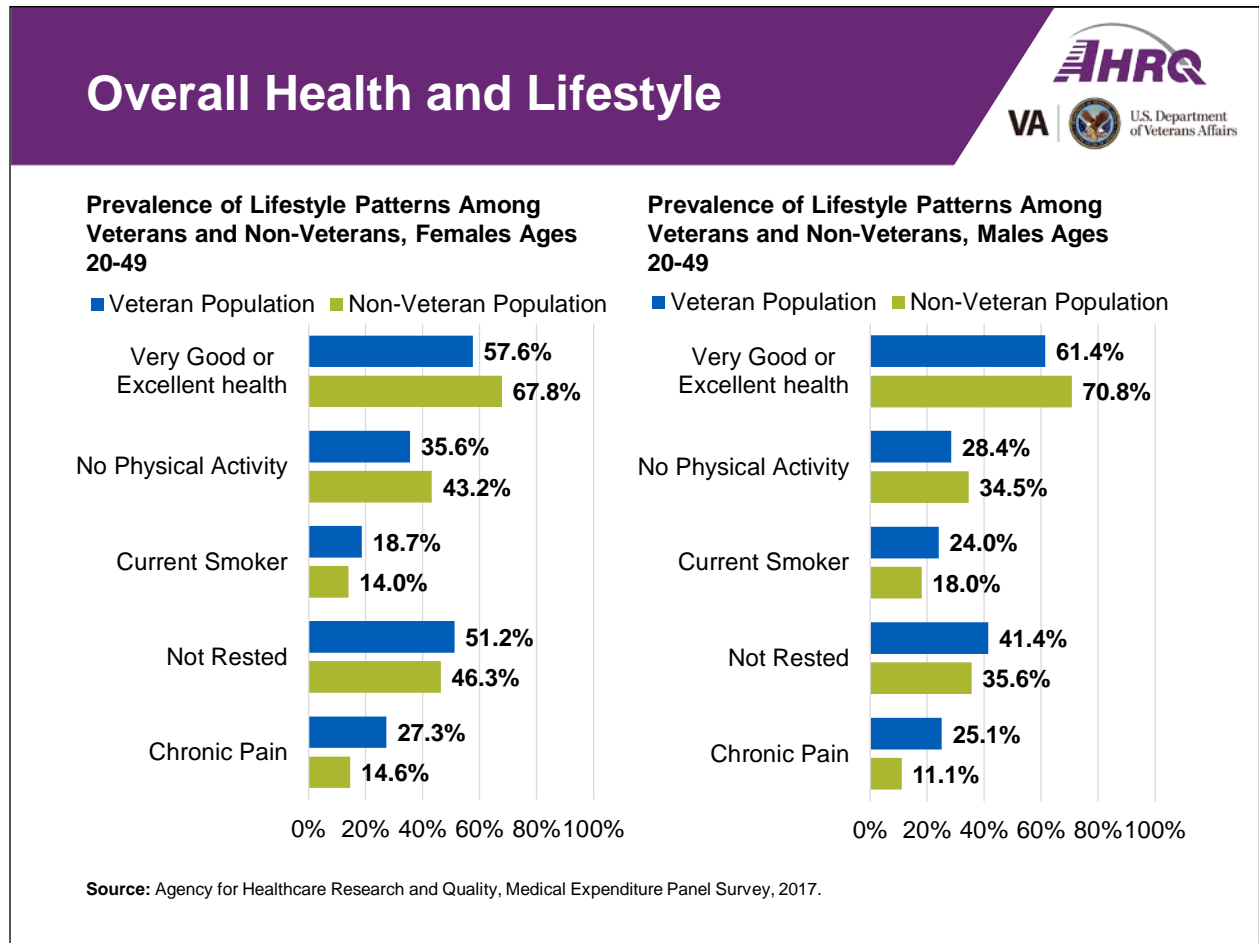


• **Importance:**

- In terms of **disability**, the Veteran population has a higher percentage of individuals with a disability than the non-Veteran population (29.5% vs. 14.2% with a disability).
- In terms of **service-connected disability**, within the VHA patient population, 51.4% of Veterans have no service-connected disability, 23.3% have a service-connected disability rating of 0 to 49%, 18.6% have a service-connected disability rating of 50-99%, and 6.8% have a service-connected disability rating of 100%.

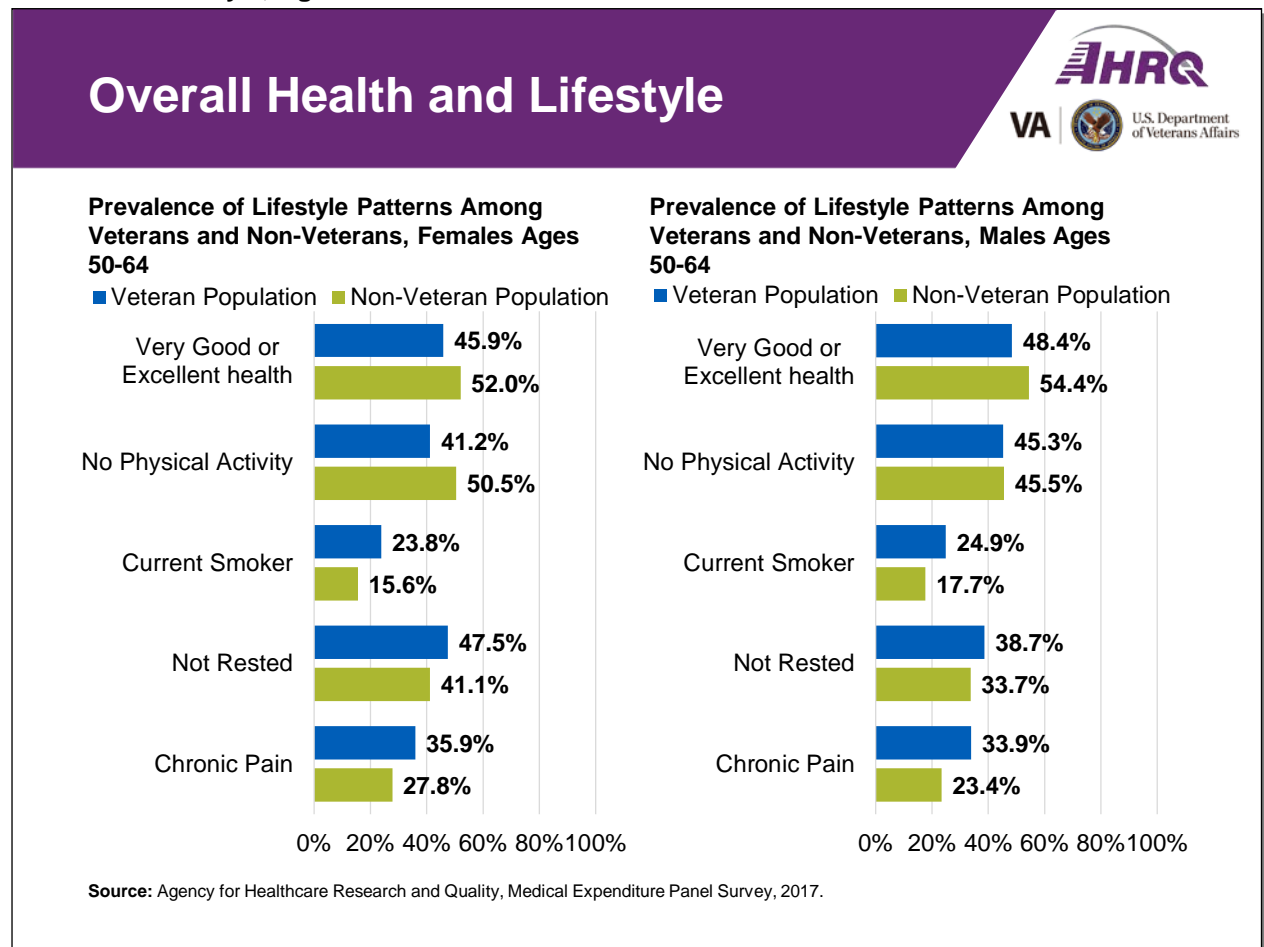
Health and Lifestyle

Health and Lifestyle, Ages 20-49



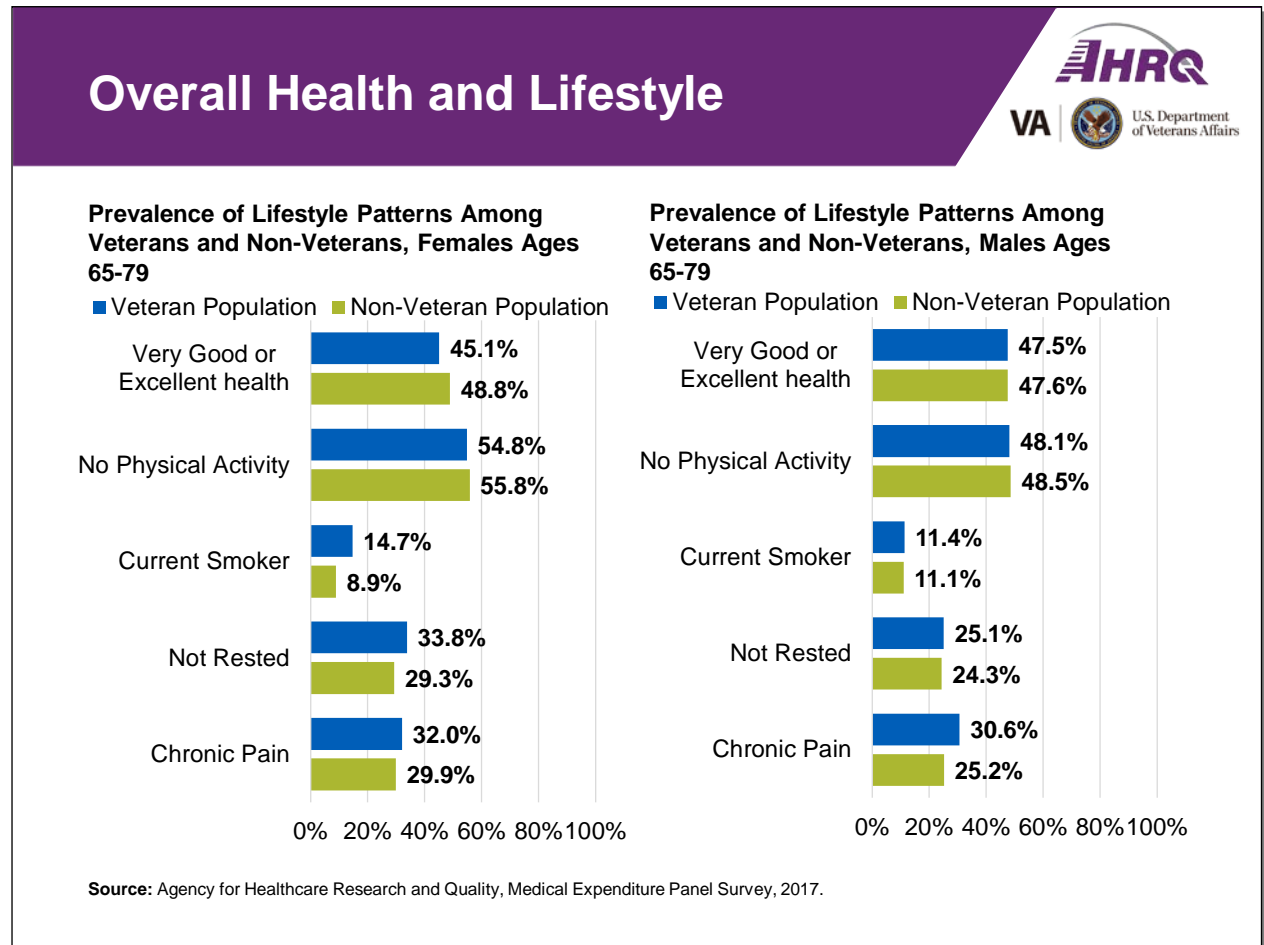
- Importance:** In terms of **overall health and lifestyle patterns**, female and male Veterans ages 20-49 have lower rates of very good or excellent health and no physical activity and higher rates of current smoking, not rested, and chronic pain, compared with non-Veterans ages 20-49.

Health and Lifestyle, Ages 50-64



- Importance:** In terms of **overall health and lifestyle patterns**, female and male Veterans ages 50-64 have lower rates of very good or excellent health and no physical activity and higher rates of current smoking, not rested, and chronic pain, compared with non-Veterans ages 50-64.

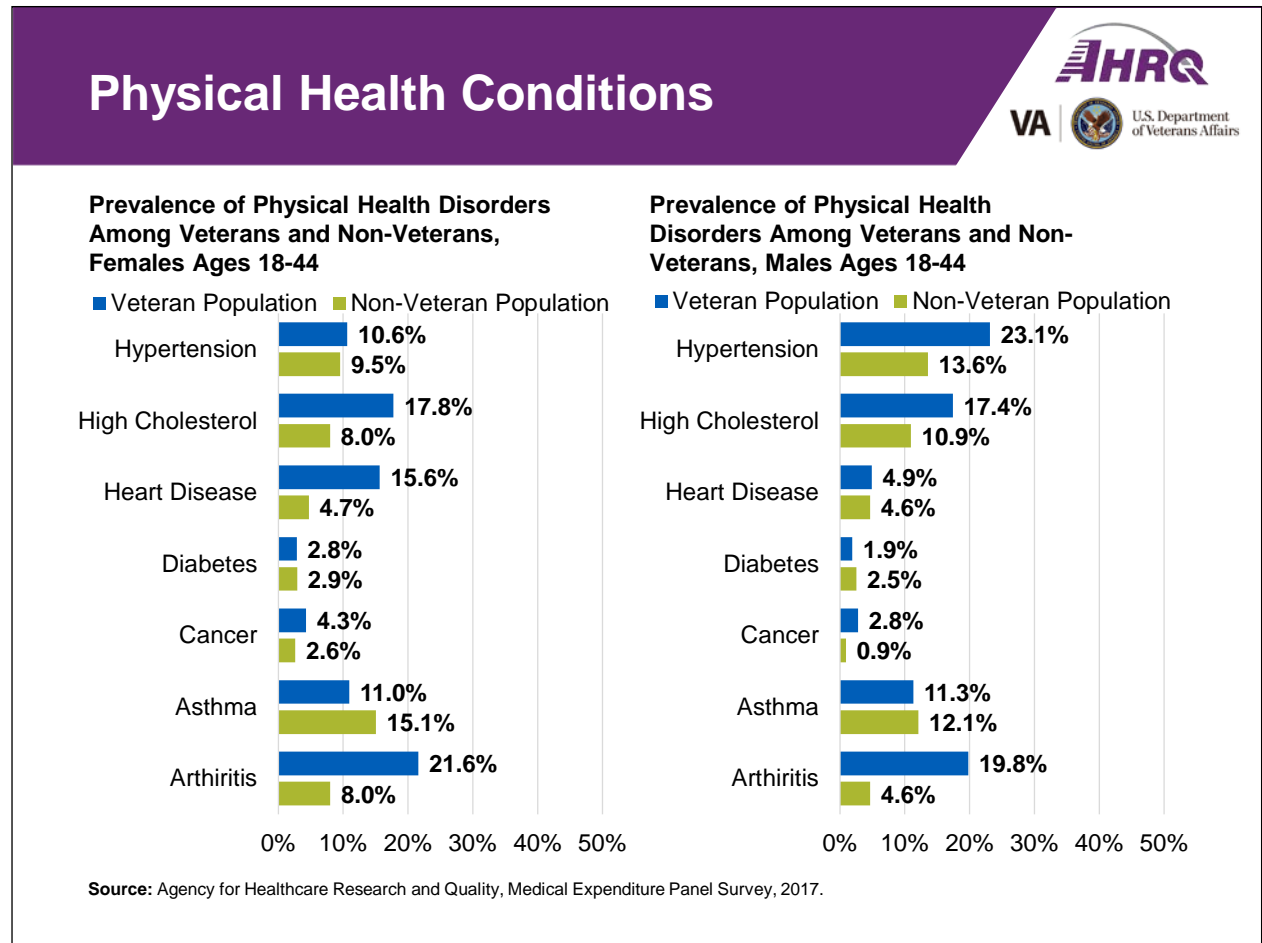
Health and Lifestyle, Ages 65



- Importance:** In terms of **overall health and lifestyle patterns**, female and male Veterans ages 65-79 have lower rates of very good or excellent health and no physical activity and higher rates of current smoking, not rested, and chronic pain, compared with non-Veterans ages 65-79.

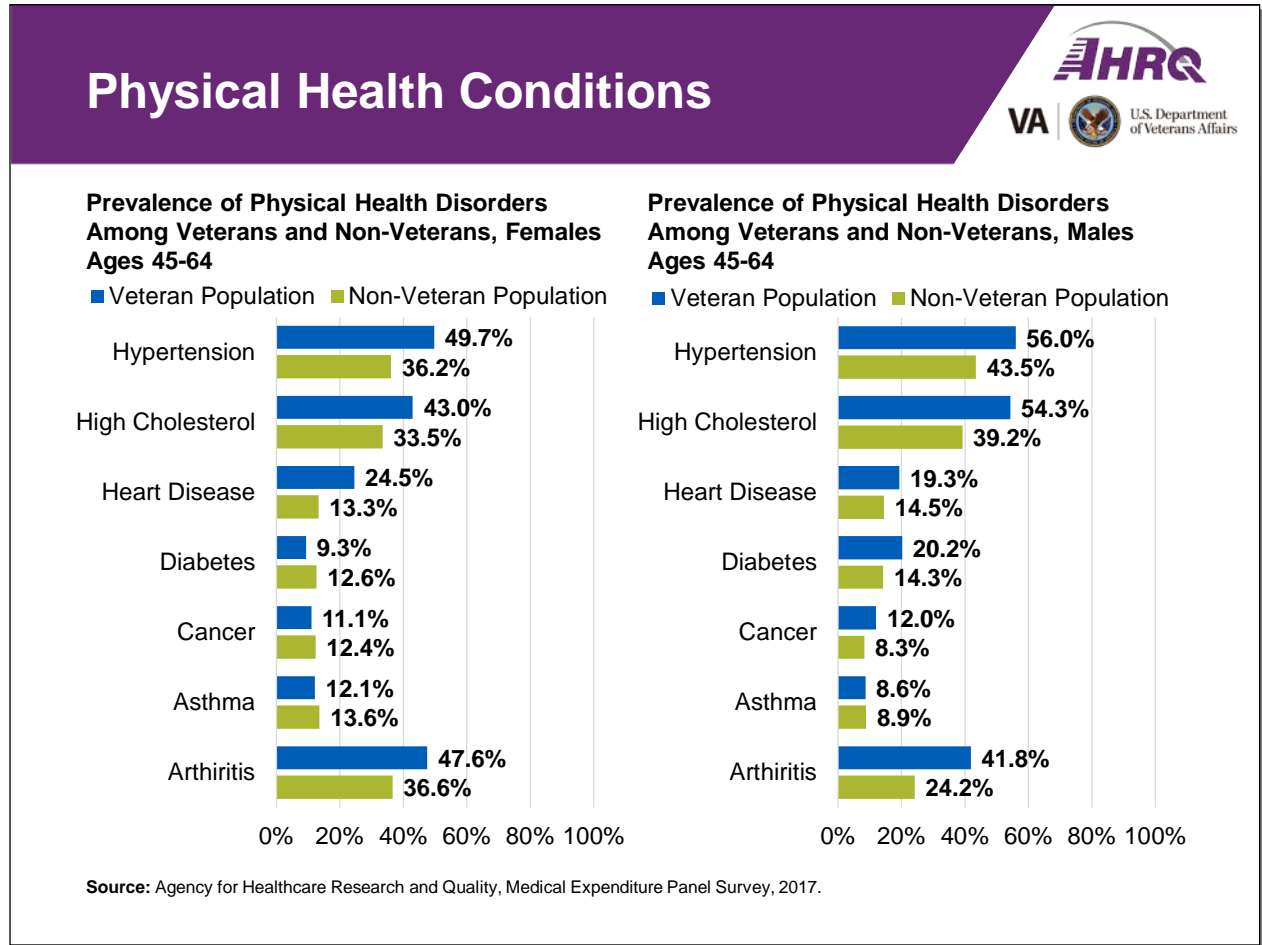
Physical Health Conditions

Physical Health Conditions, Ages 18-44



- Importance:** In terms of **physical health conditions**, female and male Veterans ages 18-44 have higher rates of hypertension, high cholesterol, heart disease, cancer, and arthritis and lower rates of diabetes and asthma, compared with non-Veterans ages 18-44.

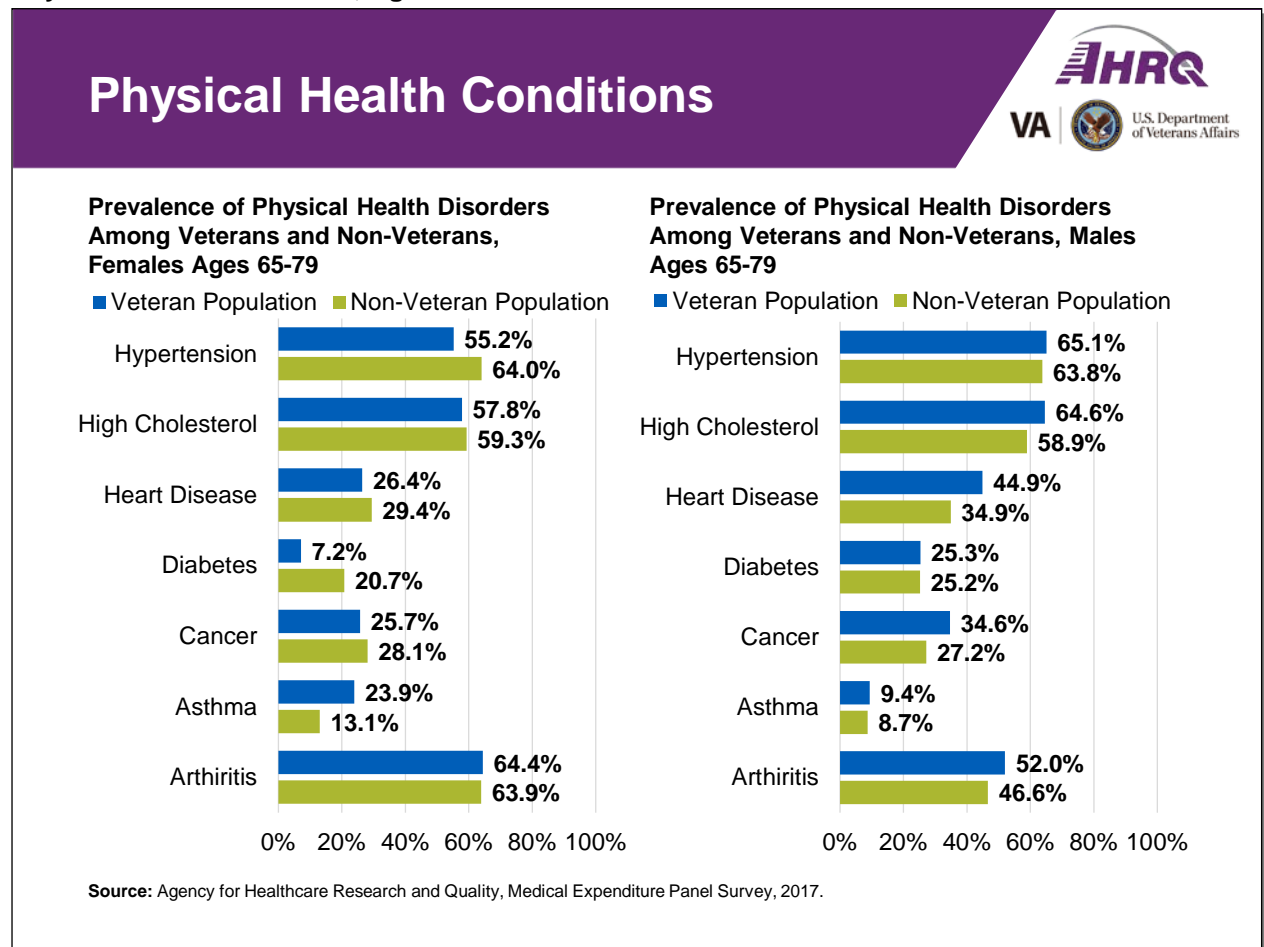
Physical Health Conditions, Ages 45-64



- **Importance:** In terms of **physical health conditions:**

- Female Veterans ages 45-64 have higher rates of hypertension, high cholesterol, heart disease, and arthritis and lower rates of diabetes, cancer, and asthma, compared with female non-Veterans ages 45-64.
- Male Veterans ages 45-64 have higher rates of hypertension, high cholesterol, heart disease, diabetes, cancer, and arthritis and lower rates of asthma, compared with male non-Veterans ages 45-64.

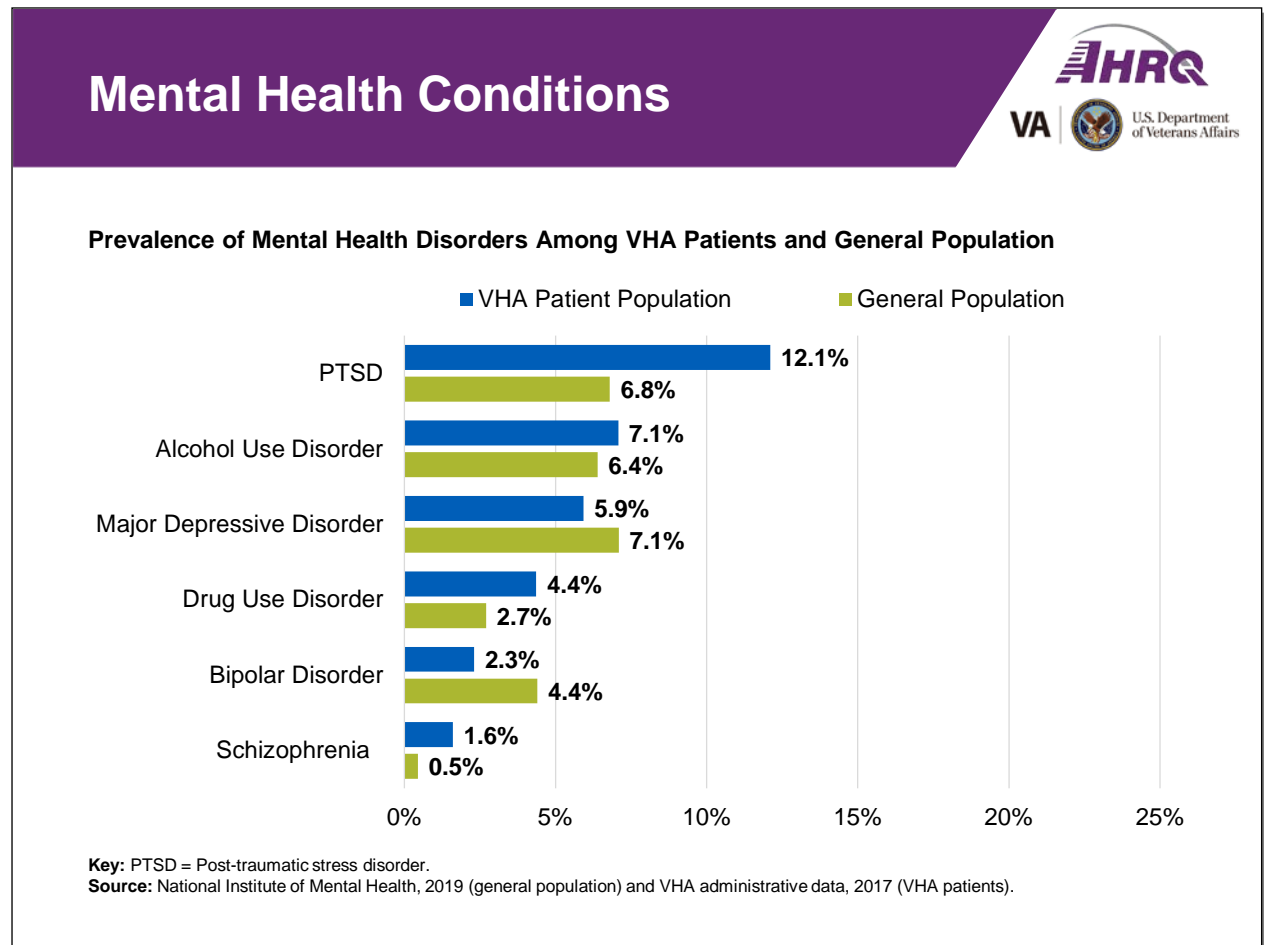
Physical Health Conditions, Ages 65-79



• **Importance:** In terms of **physical health conditions:**

- Female Veterans ages 65-79 have higher rates of asthma and arthritis and lower rates of hypertension, high cholesterol, heart disease, diabetes, and cancer, compared with female non-Veterans ages 65-79.
- Male Veterans ages 65-79 have higher rates of hypertension, high cholesterol, heart disease, diabetes, cancer, asthma, and arthritis, compared with male non-Veterans ages 65-79.

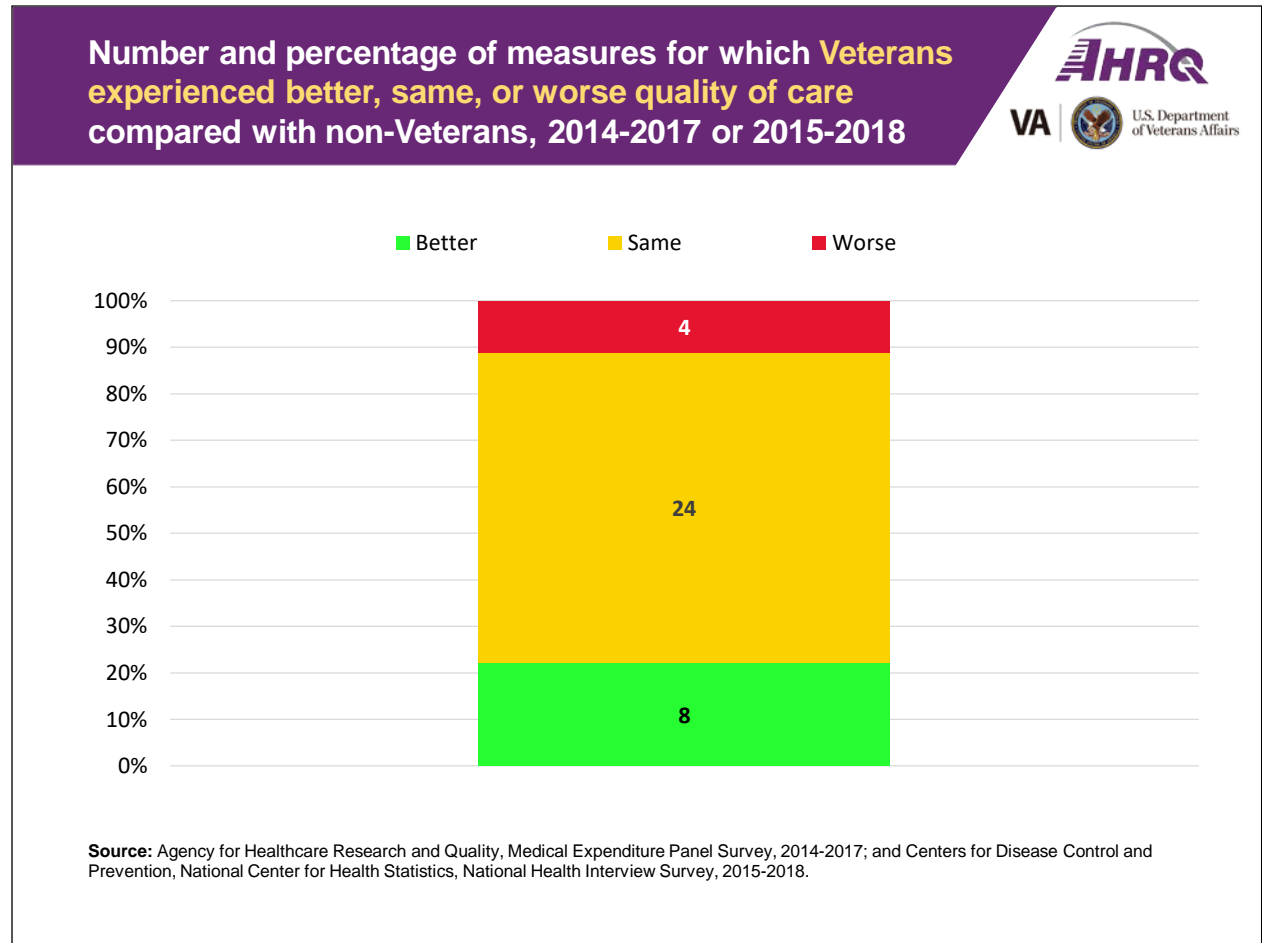
Mental Health Conditions



- Importance:** In terms of **mental health conditions**, the VHA patient population has higher rates of post-traumatic stress disorder (PTSD), alcohol use disorder, drug use disorder, and schizophrenia and lower rates of major depressive disorder and bipolar disorder, compared with the general U.S. population.

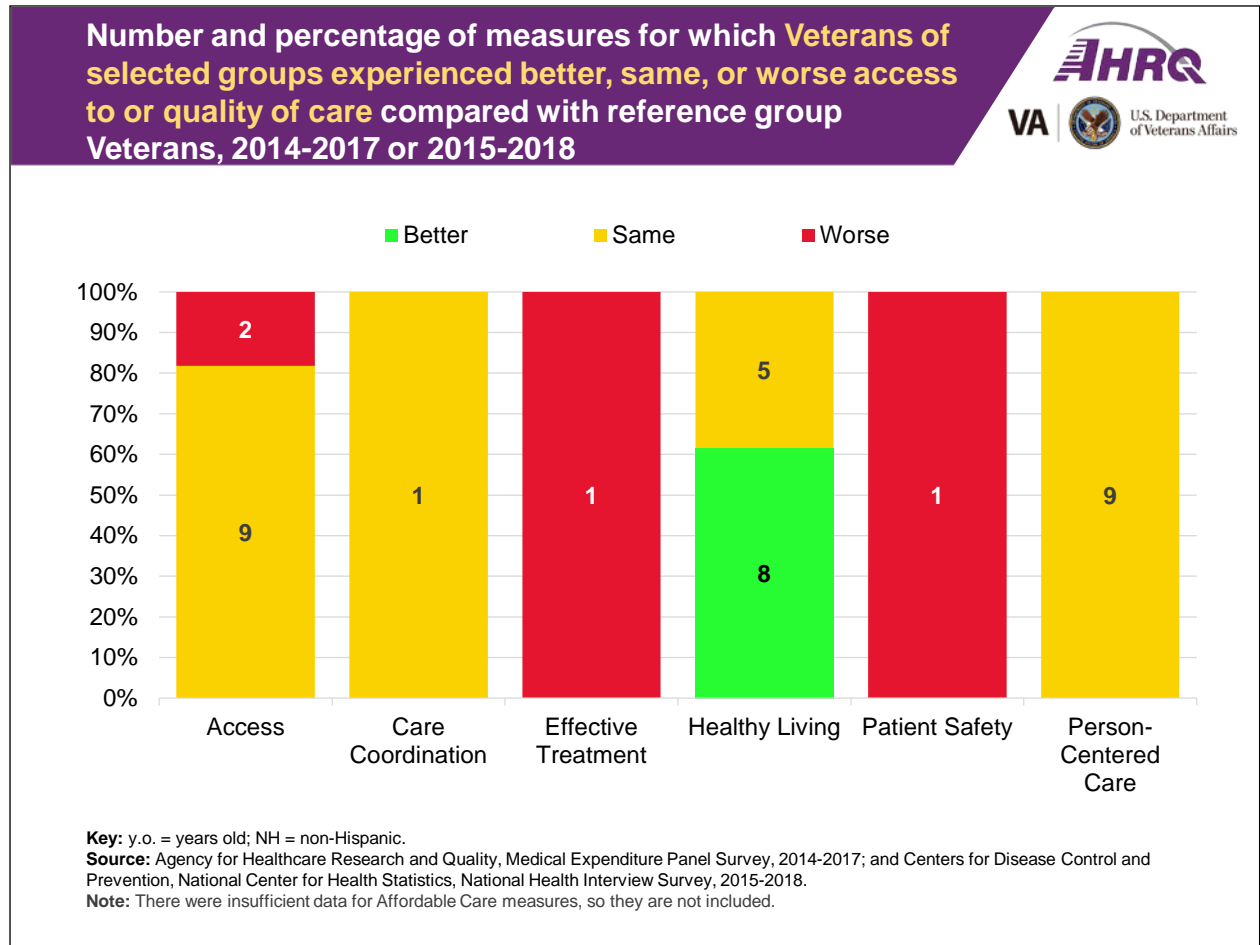
CONTRAST 1 FINDINGS: DISPARITIES BETWEEN VETERANS AND NON-VETERANS

Number of Measures With Differences Between Veterans and Non-Veterans



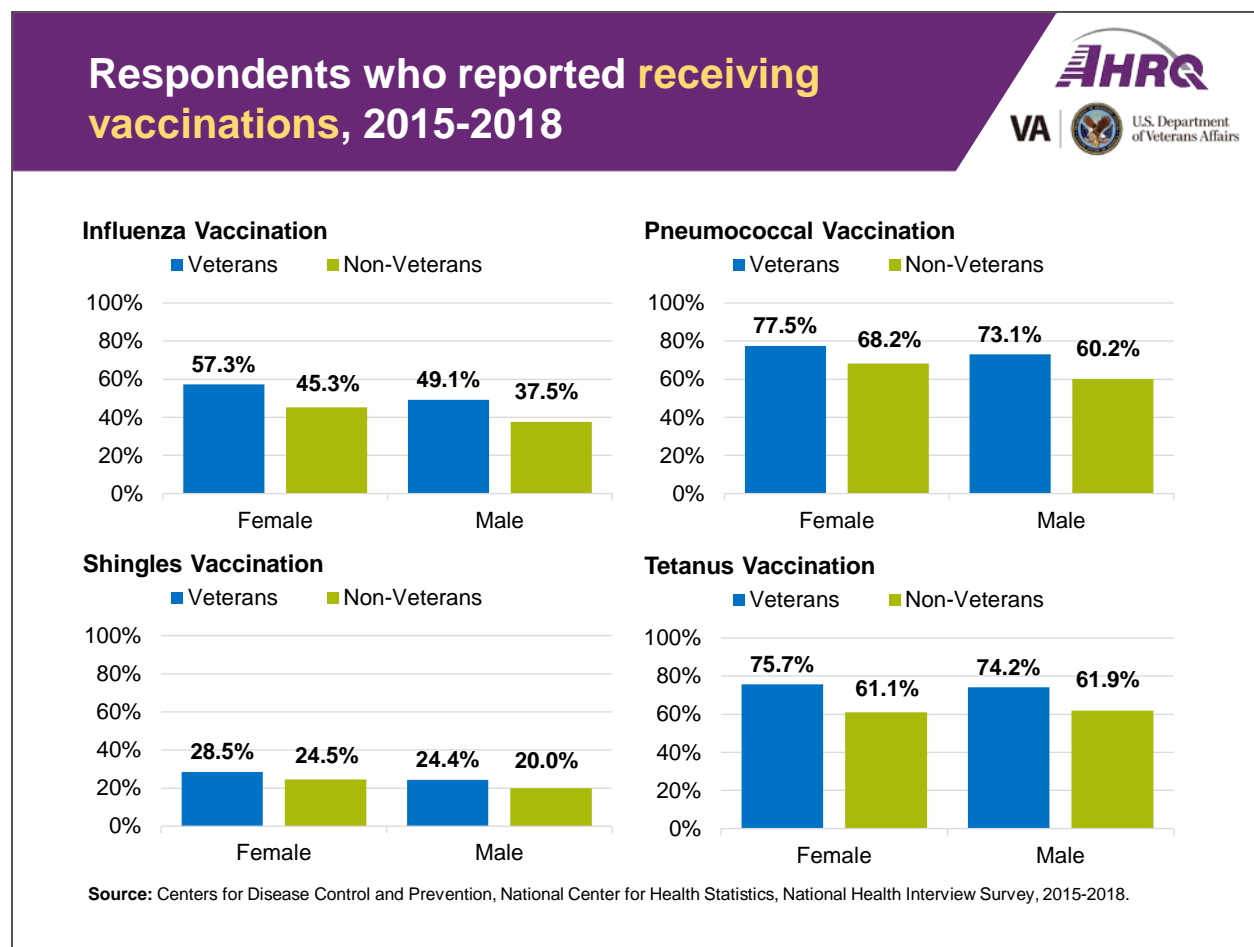
- **Importance:** The goal of quality improvement is to produce better quality of and access to care, and ultimately improved patient outcomes, regardless of Veteran status.
- **Findings:**
 - For the most recent 4-year period of data (2014-2017 or 2015-2018), findings show that some disparities persist.
 - Veterans experienced better care than non-Veterans on 8 measures (22%), similar care on 24 measures (67%), and worse care on 4 measures (11%).

Differences Between Veterans and Non-Veterans by Priority Area



- **Importance:** The goal of quality improvement is to produce better quality of and access to care across all dimensions of care, and ultimately improved patient outcomes, regardless of Veteran status.
- **Findings:**
 - Veterans experienced worse **access to care** than non-Veterans on 2 measures (18%) and the same access on 9 measures (82%).
 - Veterans were most likely to experience **better** care than non-Veterans for Healthy Living measures (8 of 13 measures [62%]).
 - Veterans were most likely to experience **worse** care than non-Veterans for Effective Treatment and Patient Safety measures (2 of 2 measures [100%]).

Receipt of Vaccinations



- **Importance:**

- Each year, millions of Americans get sick with influenza. Sometimes it causes mild illness but it can also be serious or even deadly, especially for people over 65, newborn babies, and people with certain chronic illnesses (National Library of Medicine [NLM], 2020). Vaccination can prevent influenza and reduce influenza-related morbidity and mortality (Centers for Disease Control and Prevention [CDC], 2019).
- Pneumococcal disease is caused by bacteria and can result in a range of ailments, from mild ear infection to meningitis, sepsis, and fatal pneumonia (NIAID, 2014). Adults over age 65 and individuals of any age with chronic illness are at increased risk for pneumococcal disease and death. The best way to prevent pneumococcal disease is by getting vaccinated (CDC, 2019).
- Shingles is a painful rash that usually develops on one side of the body, often the face or torso. For some people, long-lasting pain, which can last for months or even years after the rash goes away, is the most common complication of

shingles. The risk of getting shingles increases with age (CDC, 2016) but decreases with vaccination (CDC, 2018).

- Tetanus is an infection caused by tetanus bacteria spores that get into the body through broken skin, usually through injuries from contaminated objects. Tetanus infection can lead to serious health problems, including being unable to open the mouth and having trouble swallowing and breathing (CDC, 2019). Nearly all cases of tetanus are in people who never got a tetanus vaccine, did not receive a complete course of tetanus vaccines, or did not stay up to date on their 10-year booster shots (CDC, 2020).

- **Overall Rate:**

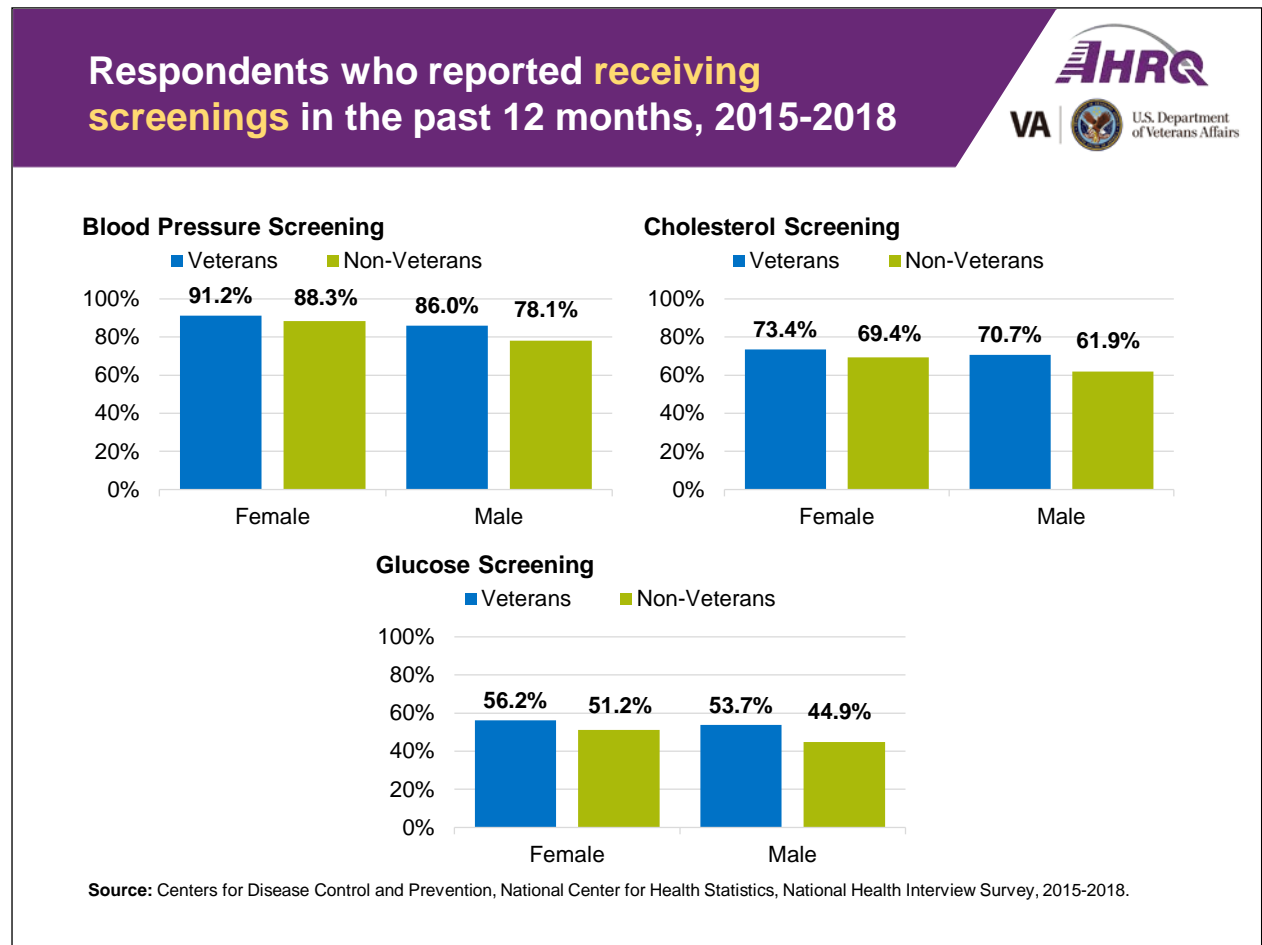
- In 2015-2018,
 - ◆ 50.2% of Veterans and 41.7% of non-Veterans received an influenza vaccination;
 - ◆ 73.4% of Veterans and 65.8% of non-Veterans age 65 years and over received a pneumococcal vaccination;
 - ◆ 24.8% of Veterans and 22.9% of non-Veterans age 50 years and over received a shingles vaccination; and
 - ◆ 74.6% of Veterans and 61.4% of non-Veterans received a tetanus vaccination in the past 10 years (data not shown).

- **Groups With Disparities:** In 2015-2018:

- Female Veterans age 20+ were significantly more likely to receive an influenza vaccination compared with female non-Veterans age 20+ (57.3% vs. 45.3%).
- Male Veterans age 20+ were significantly more likely to receive an influenza vaccination compared with male non-Veterans age 20+ (49.1% vs. 37.5%).
- Female Veterans age 65+ were significantly more likely to receive a pneumococcal vaccination compared with female non-Veterans age 65+ (77.5% vs. 68.2%).
- Male Veterans age 65+ were significantly more likely to receive a pneumococcal vaccination compared with male non-Veterans age 65+ (73.1% vs. 60.2%).
- There were no statistically significant differences between female Veterans age 50+ and female non-Veterans age 50+ in receipt of a shingles vaccination (28.5% vs. 24.5%).
- Male Veterans age 50+ were significantly more likely to receive a shingles vaccination compared with male non-Veterans age 50+ (24.4% vs. 20.0%).

- Female Veterans age 20+ were significantly more likely to receive a tetanus vaccination compared with female non-Veterans age 20+ (75.7% vs. 61.1%).
- Male Veterans age 20+ were significantly more likely to receive a tetanus vaccination compared with male non-Veterans age 20+ (74.2% vs. 61.9%).

Receipt of Screenings

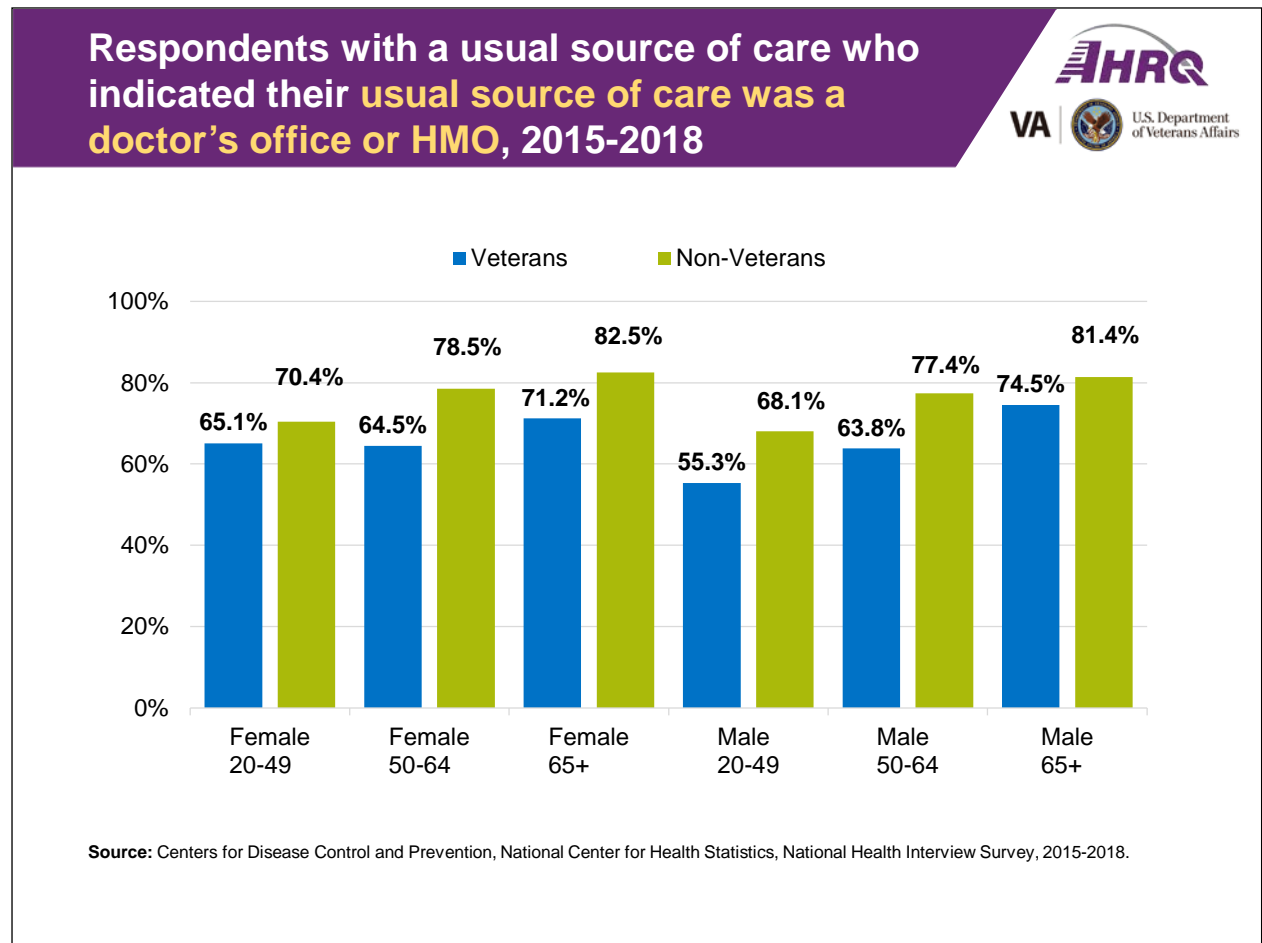


• **Importance:**

- Nearly half of all adults in the United States, or about 103 million people, have high blood pressure (American Heart Association [AHA], 2018). High blood pressure increases the risk for heart disease and stroke, two leading causes of death for Americans (CDC, 2020).
- About 95 million Americans age 20 and over have total cholesterol levels higher than 200 mg/dL and nearly 29 million have total cholesterol levels higher than 240 mg/dL. High cholesterol raises the risk of heart disease, the leading cause of death, and stroke, the fifth leading cause of death (CDC, 2020).

- Glucose screening is used to diagnose prediabetes and type 1, type 2, or gestational diabetes. Diabetes is a chronic health condition in which the body either does not make enough insulin or cannot use the insulin it makes as well as it should. Diabetes is a leading cause of morbidity and mortality in the United States (CDC, 2019, 2020).
- **Overall Rate:** In 2015-2018, 86.9% of Veterans and 83.5% of non-Veterans received a blood pressure screening; 71.3% of Veterans and 65.8% of non-Veterans received a cholesterol screening; and 54.3% of Veterans and 48.1% of non-Veterans received a glucose screening (data not shown).
- **Groups With Disparities:** In 2015-2018, among adults age 20 years and over:
 - There were no statistically significant differences between female Veterans and female non-Veterans in receipt of a blood pressure screening (91.2% vs. 88.3%).
 - Male Veterans were significantly more likely to receive a blood pressure screening compared with male non-Veterans (86.0% vs. 78.1%).
 - There were no statistically significant differences between female Veterans and female non-Veterans in receipt of a cholesterol screening (73.4% vs. 69.4%).
 - Male Veterans were significantly more likely to receive a cholesterol screening compared with male non-Veterans (70.7% vs. 61.9%).
 - There were no statistically significant differences between female Veterans and female non-Veterans in receipt of a glucose screening (56.2% vs. 51.2%).
 - Male Veterans were significantly more likely to receive a glucose screening compared with male non-Veterans (53.7% vs. 44.9%).

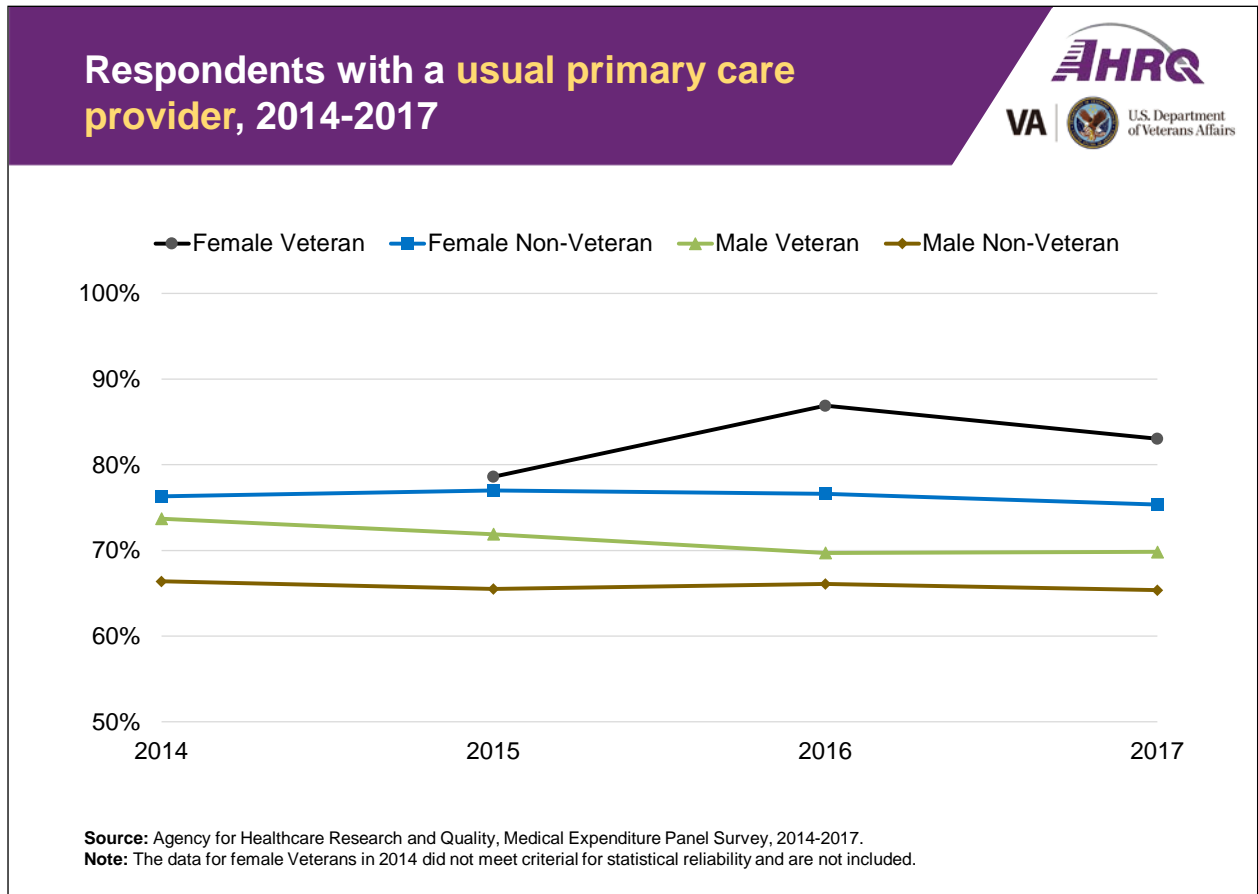
Usual Source of Care



- Importance:** Having a usual source of care can decrease the probability of inpatient admissions and readmissions and decrease expenditures on emergency department visits for physical health, 30-day readmissions, and behavioral health inpatient admissions. It also has a positive effect on several quality measures (Fullerton, et al., 2019). Veterans may consider a Veterans Affairs Medical Center or community-based outpatient clinic (VAMC/CBOC) as a usual source of care.
- Overall Rate:** In 2015-2018, 62.5% of Veterans and 73.8% of non-Veterans with a usual source of care indicated their usual source was a doctor's office or health maintenance organization (HMO) (data not shown).
- Groups With Disparities:** In 2015-2018, among adults age 20 years and over:
 - There were no statistically significant differences between female Veterans ages 20-49 and female non-Veterans ages 20-49 with a usual source of care in the percentage who indicated their usual source was a doctor's office or HMO (65.1% vs. 70.4%).

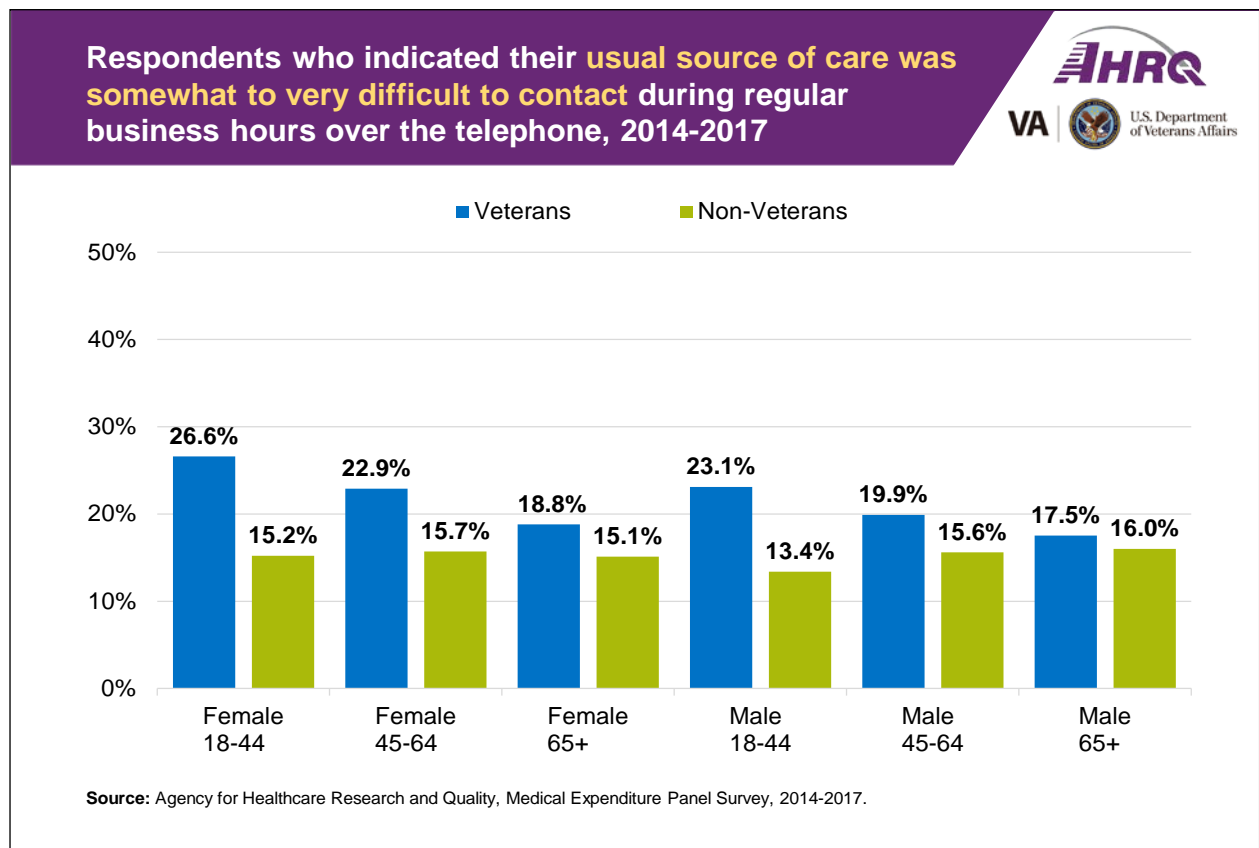
- Female Veterans ages 50-64 with a usual source of care were significantly less likely to indicate their usual source was a doctor’s office or HMO compared with female non-Veterans ages 50-64 with a usual source of care (64.5% vs. 78.5%).
- There were no statistically significant differences between female Veterans age 65+ and female non-Veterans age 65+ with a usual source of care in the percentage who indicated their usual source was a doctor’s office or HMO (71.2% vs. 82.5%).
- Male Veterans ages 20-49 with a usual source of care were significantly less likely to indicate their usual source was a doctor’s office or HMO compared with male non-Veterans ages 20-49 with a usual source of care (55.3% vs. 68.1%).
- Male Veterans ages 50-64 with a usual source of care were significantly less likely to indicate their usual source was a doctor’s office or HMO compared with male non-Veterans ages 50-64 with a usual source of care (63.8% vs. 77.4%).
- There were no statistically significant differences between male Veterans age 65+ and male non-Veterans age 65+ with a usual source of care in the percentage who indicated their usual source was a doctor’s office or HMO (74.5% vs. 81.4%).

Usual Primary Care Provider, Trends by Gender



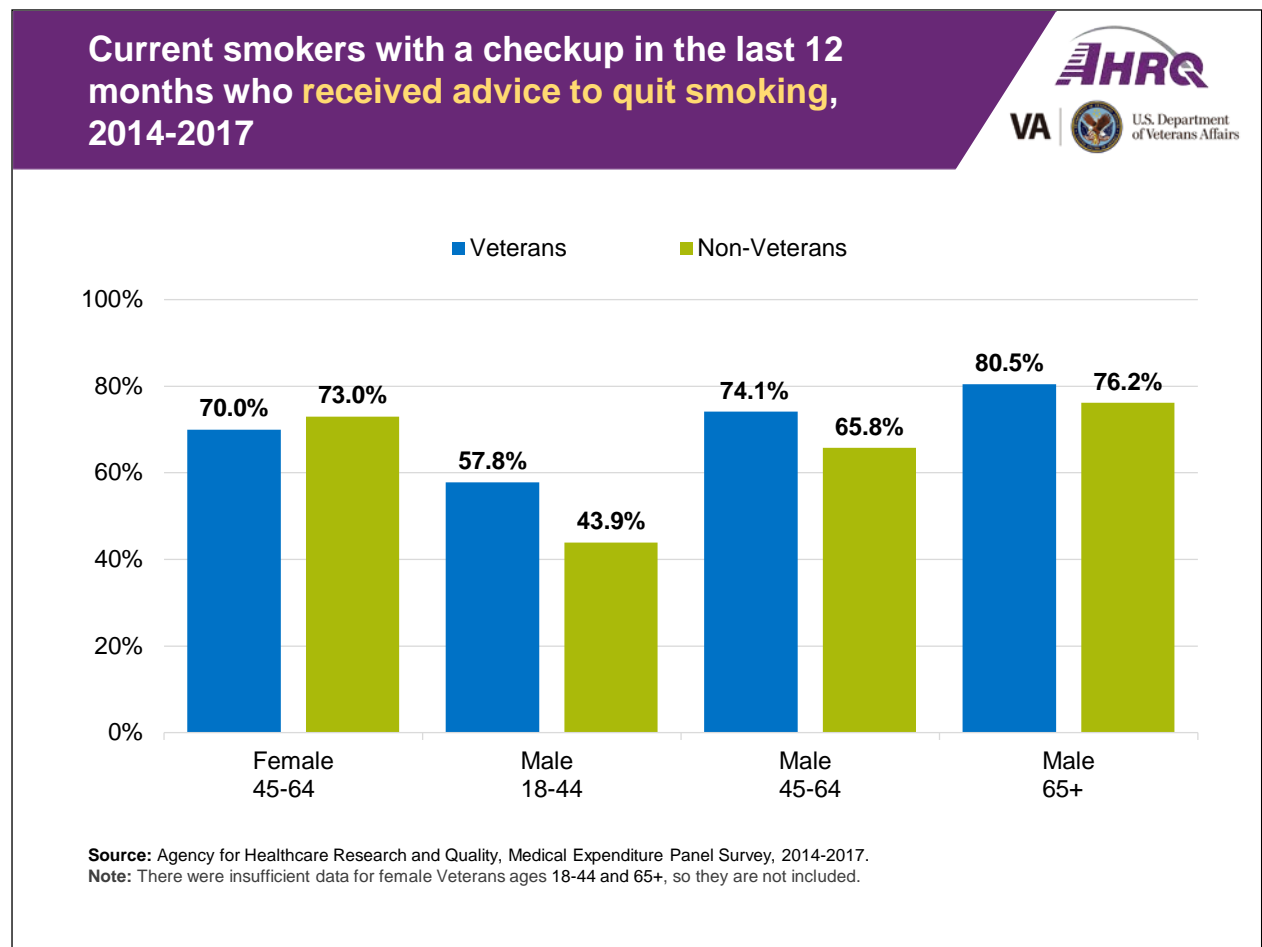
- **Importance:** Having a usual source of care can decrease the probability of inpatient admissions and readmissions and can decrease expenditures on emergency department visits for physical health, 30-day readmissions, and behavioral health inpatient admissions. It also has a positive effect on several quality measures (Fullerton, et al., 2019).
- **Overall Rate:** In 2014-2017, 82.6% of Veterans and 71.0% of non-Veterans had a usual primary care provider (data not shown).
- **Trends:** From 2014-2017, findings show varying trends across female and male Veterans and non-Veterans.
 - The percentage of female Veterans with a usual primary care provider increased from 2015 to 2017 (78.6% to 83.0%).
 - The percentage of female non-Veterans with a usual primary care provider decreased from 2014 to 2017 (76.3% to 75.4%).
 - The percentage of male Veterans with a usual primary care provider decreased from 2014 to 2017 (73.7% to 69.8%).
 - The percentage of male non-Veterans with a usual primary care provider decreased from 2014 to 2017 (66.4% to 65.4%).

Difficulty Contacting Usual Source of Care by Telephone



- **Importance:** Timely delivery of appropriate care can help reduce mortality and morbidity for chronic conditions (Smart and Titus, 2011). Ease of contact is a measure of the healthcare system's capacity to provide care quickly once a need is recognized (Blewett, et al., 2008).
- **Overall Rate:** In 2014-2017, 19.3% of Veterans and 15.1% of non-Veterans indicated their usual source of care was somewhat to very difficult to contact during regular business hours over the phone (data not shown).
- **Groups With Disparities:** In 2014-2017, among adults age 18 years and over:
 - Female Veterans ages 18-44 were significantly more likely to indicate their usual source of care was somewhat to very difficult to contact during regular business hours over the phone compared with female non-Veterans ages 18-44 (26.6% vs. 15.2%).
 - Female Veterans ages 45-64 were significantly more likely to indicate their usual source of care was somewhat to very difficult to contact during regular business hours over the phone compared with female non-Veterans ages 45-64 (22.9% vs. 15.7%).
 - There were no statistically significant differences between female Veterans age 65+ and female non-Veterans age 65+ in the percentage who indicated their usual source of care was somewhat to very difficult to contact during regular business hours over the phone (18.8% vs. 15.1%).
 - Male Veterans ages 18-44 were significantly more likely to indicate their usual source of care was somewhat to very difficult to contact during regular business hours over the phone compared with male non-Veterans ages 18-44 (23.1% vs. 13.4%).
 - Male Veterans ages 45-64 were significantly more likely to indicate their usual source of care was somewhat to very difficult to contact during regular business hours over the phone compared with male non-Veterans ages 45-64 (19.9% vs. 15.6%).
 - There were no statistically significant differences between male Veterans age 65+ and male non-Veterans age 65+ in the percentage who indicated their usual source of care was somewhat to very difficult to contact during regular business hours over the phone (17.5% vs. 16.0%).

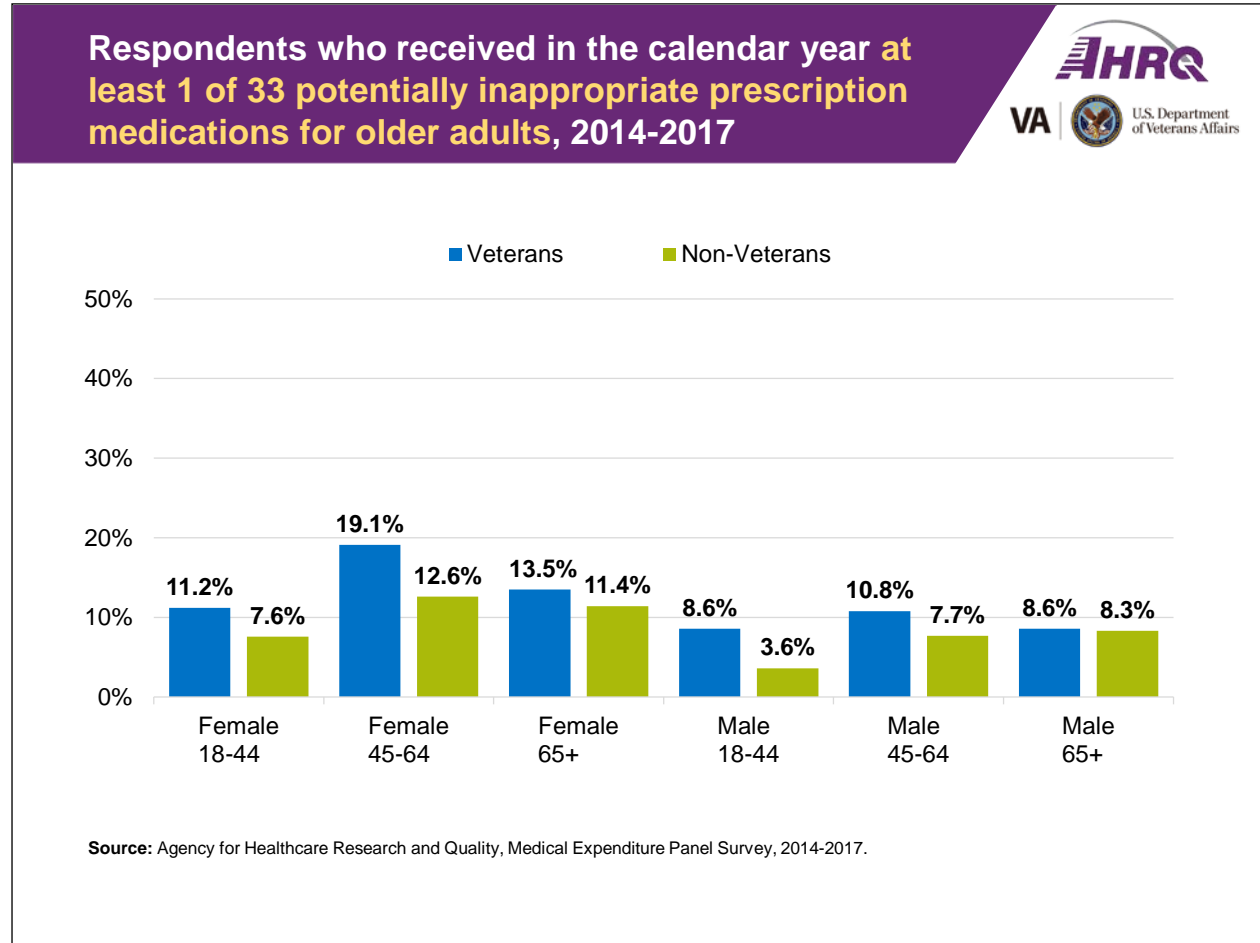
Advice To Quit Smoking



- **Importance:** Quitting smoking greatly reduces the risk of developing smoking-related diseases. Even brief advice to quit (<3 minutes) from a physician improves cessation rates and is highly cost-effective (CDC, 2020).
- **Overall Rate:** In 2014-2017, 73.5% of Veterans who smoked and 63.3% of non-Veterans who smoked received advice to quit smoking (data not shown).
- **Groups With Disparities:** In 2014-2017, among adults age 18 years and over who were current smokers:
 - There were no statistically significant differences between female Veterans ages 45-64 and female non-Veterans ages 45-64 in the percentage who received advice to quit smoking (70.0% vs. 73.0%).
 - Male Veterans ages 18-44 were significantly more likely to receive advice to quit smoking compared with male non-Veterans ages 18-44 (57.8% vs. 43.9%).
 - Male Veterans ages 45-64 were significantly more likely to receive advice to quit smoking compared with male non-Veterans ages 45-64 (74.1% vs. 65.8%).

- There were no statistically significant differences between male Veterans age 65+ and male non-Veterans age 65+ in the percentage who received advice to quit smoking (80.5% vs. 76.2%).

Inappropriate Medications for Older Adults

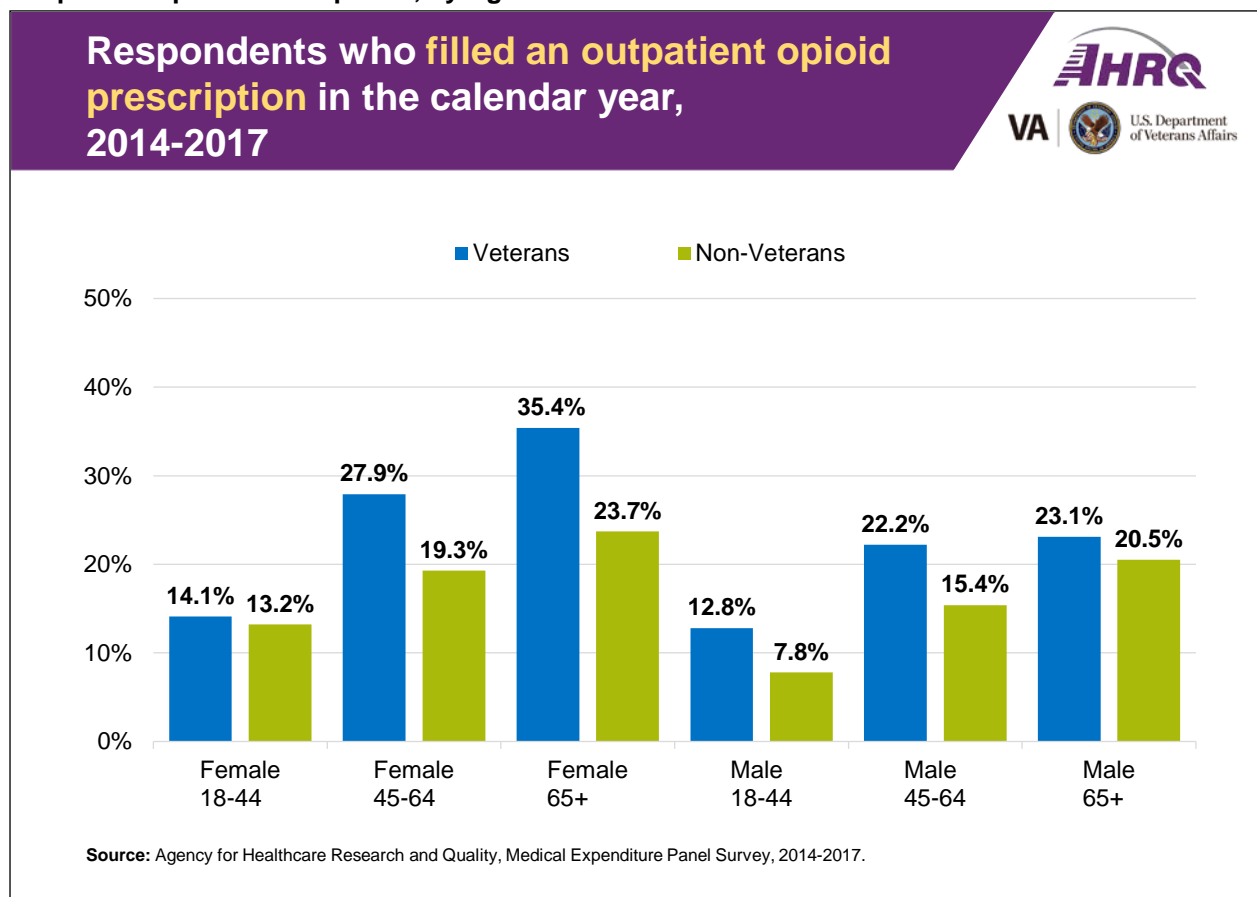


- **Importance:** Some drugs prescribed for older adults are known to be potentially harmful and can lead to adverse drug events that are both expensive and associated with poor health outcomes. While these drugs are potentially most harmful to older adults, they should be monitored for all ages, especially with certain conditions such as reduced kidney function (American Geriatrics Society, 2015).
- **Overall Rate:** In 2014-2017, 9.9% of Veterans and 8.1% of non-Veterans received inappropriate prescription medications for older adults (data not shown).
- **Groups With Disparities:** In 2014-2017, among adults age 18 years and over:
 - There were no statistically significant differences between female Veterans ages 18-44 and female non-Veterans ages 18-44 in the percentage who received inappropriate prescription medications for older adults (11.2% vs. 7.6%).

- There were no statistically significant differences between female Veterans ages 45-64 and female non-Veterans ages 45-64 in the percentage who received inappropriate prescription medications for older adults (19.1% vs. 12.6%).
- There were no statistically significant differences between female Veterans age 65+ and female non-Veterans age 65+ in the percentage who received inappropriate prescription medications for older adults (13.5% vs. 11.4%).
- Male Veterans ages 18-44 were significantly more likely to receive inappropriate prescription medications for older adults compared with male non-Veterans ages 18-44 (8.6% vs. 3.6%).
- Male Veterans ages 45-64 were significantly more likely to receive inappropriate prescription medications for older adults compared with male non-Veterans ages 45-64 (10.8% vs. 7.7%).
- There were no statistically significant differences between male Veterans age 65+ and male non-Veterans age 65+ in the percentage who received inappropriate prescription medications for older adults (8.6% vs. 8.3%).

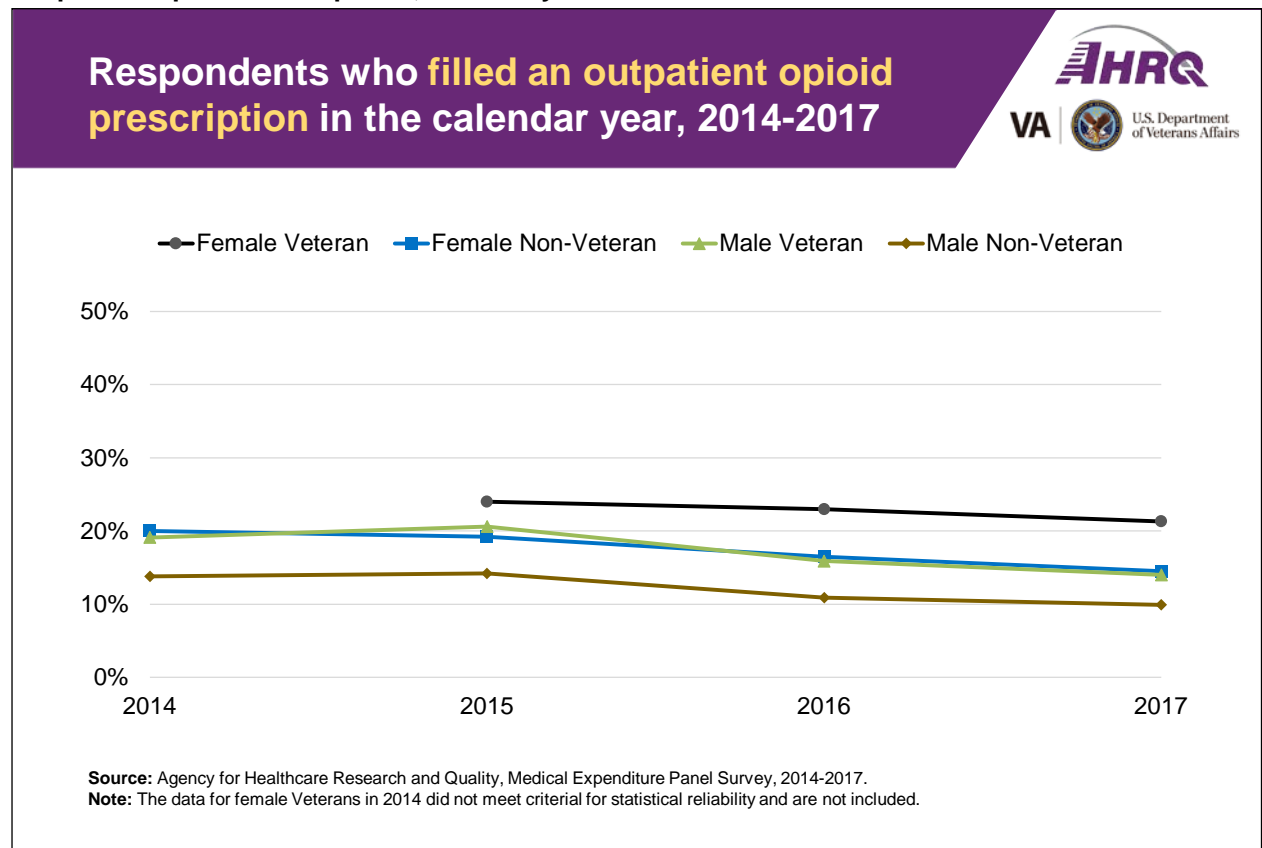
Outpatient Opioid Prescriptions

Outpatient Opioid Prescriptions, by Age and Gender



- **Importance:** Prescription opioids are often used to treat chronic and acute pain and, when used appropriately, can be an important component of treatment. However, serious risks are associated with their use, and it is essential to carefully consider the risks of using prescription opioids alongside their benefits. These risks include misuse, opioid use disorder (addiction), overdoses, and death (CDC, 2020).
- **Overall Rate:** In 2014-2017, 21.7% of Veterans and 14.9% of non-Veterans filled an outpatient opioid prescription (data not shown).
- **Groups With Disparities:** In 2014-2017, among adults age 18 years and over:
 - There were no statistically significant differences between female Veterans ages 18-44 and female non-Veterans ages 18-44 in the percentage who filled an outpatient opioid prescription (14.1% vs. 13.2%).
 - Female Veterans ages 45-64 were significantly more likely to fill an outpatient opioid prescription compared with female non-Veterans ages 45-64 (27.9% vs. 19.3%).
 - Female Veterans age 65+ were significantly more likely to fill an outpatient opioid prescription compared with female non-Veterans age 65+ (35.4% vs. 23.7%).
 - Male Veterans ages 18-44 were significantly more likely to fill an outpatient opioid prescription compared with male non-Veterans ages 18-44 (12.8% vs. 7.8%).
 - Male Veterans ages 45-64 were significantly more likely to fill an outpatient opioid prescription compared with male non-Veterans ages 45-64 (22.2% vs. 15.4%).
 - There were no statistically significant differences between male Veterans age 65+ and male non-Veterans age 65+ in the percentage who filled an outpatient opioid prescription (23.1% vs. 20.5%).

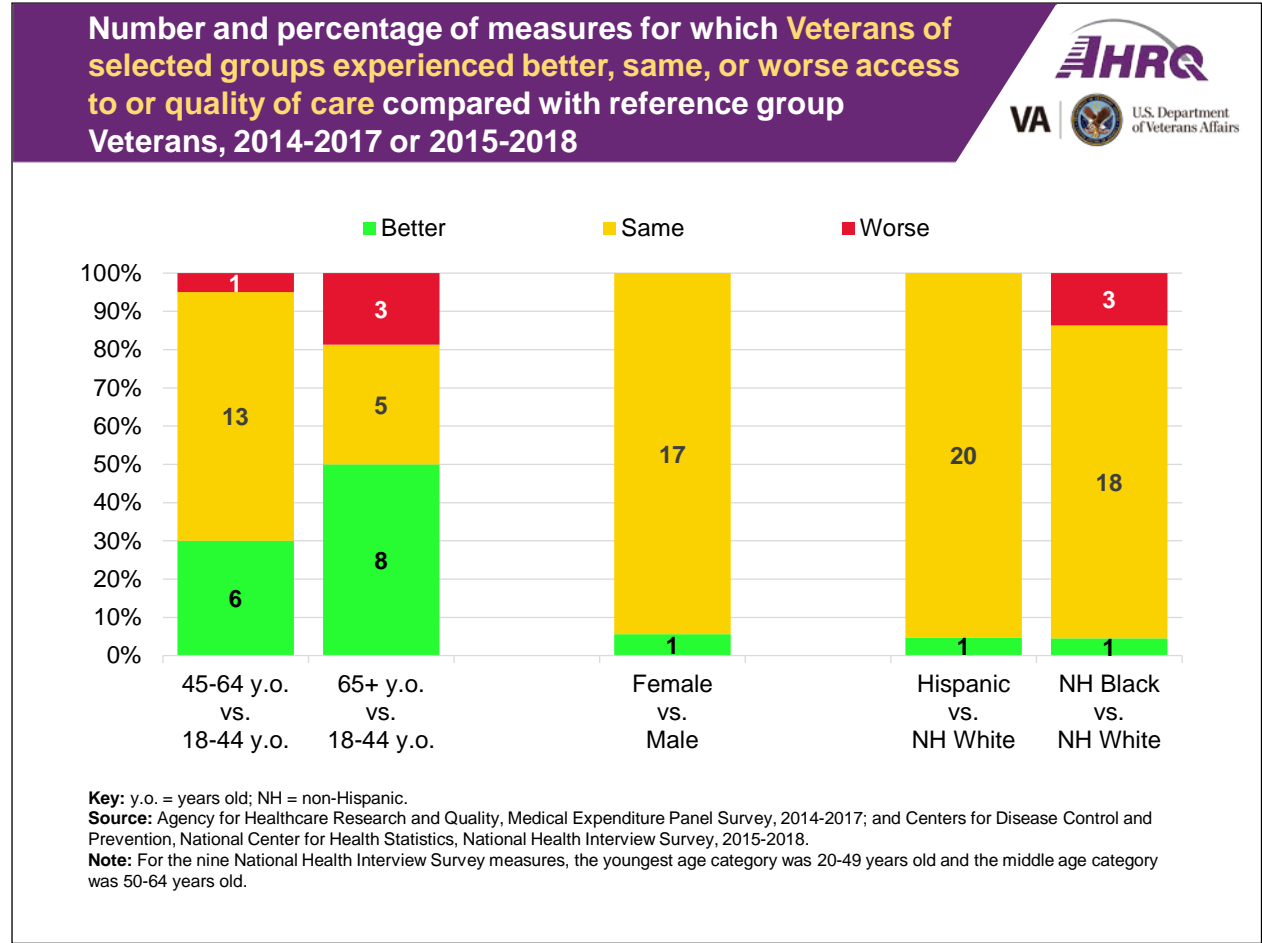
Outpatient Opioid Prescriptions, Trends by Gender



- **Importance:** Prescription opioids are often used to treat chronic and acute pain and, when used appropriately, can be an important component of treatment. However, serious risks are associated with their use, and it is essential to carefully consider the risks of using prescription opioids alongside their benefits. These risks include misuse, opioid use disorder (addiction), overdoses, and death (CDC, 2020).
- **Overall Rate:** In 2014-2017, 21.7% of Veterans and 14.9% of non-Veterans filled an outpatient opioid prescription (data not shown).
- **Trends:** From 2014-2017, findings show varying trends across female and male Veterans and non-Veterans.
 - Female Veterans had a decrease in the percentage who filled an outpatient opioid prescription from 2015 to 2017 (24.0% to 21.3%).
 - Female non-Veterans had a decrease in the percentage who filled an outpatient opioid prescription from 2014 to 2017 (20.0% to 14.5%).
 - Male Veterans had a decrease in the percentage who filled an outpatient opioid prescription from 2014 to 2017 (19.1% to 14.0%).
 - Male non-Veterans had a decrease in the percentage who filled an outpatient opioid prescription from 2014 to 2017 (13.8% to 9.9%).

CONTRAST 2 FINDINGS: DISPARITIES WITHIN THE VETERAN POPULATION

Disparities in the Veteran Population by Age, Gender, and Ethnicity



- **Importance:** The goal of quality improvement is to produce better quality of and access to care, and ultimately improved patient outcomes, regardless of Veteran characteristics.
- **Findings:** For the most recent 4-year period of data (2014-2017 or 2015-2018), findings show that some age, gender, and racial/ethnic disparities persist.

■ Age

- ◆ Veterans ages 45-64 (ages 49-64 for National Health Interview Survey [NHIS] measures) experienced better care than Veterans ages 18-44 (ages 20-49 for NHIS measures) on 6 measures (30%), similar care on 13 measures (65%), and worse care on 1 measure (5%).

- ◆ Veterans age 65+ experienced better care than Veterans ages 18-44 (ages 20-49 for NHIS measures) on 8 measures (50%), similar care on 5 measures (31%), and worse care on 3 measures (19%).

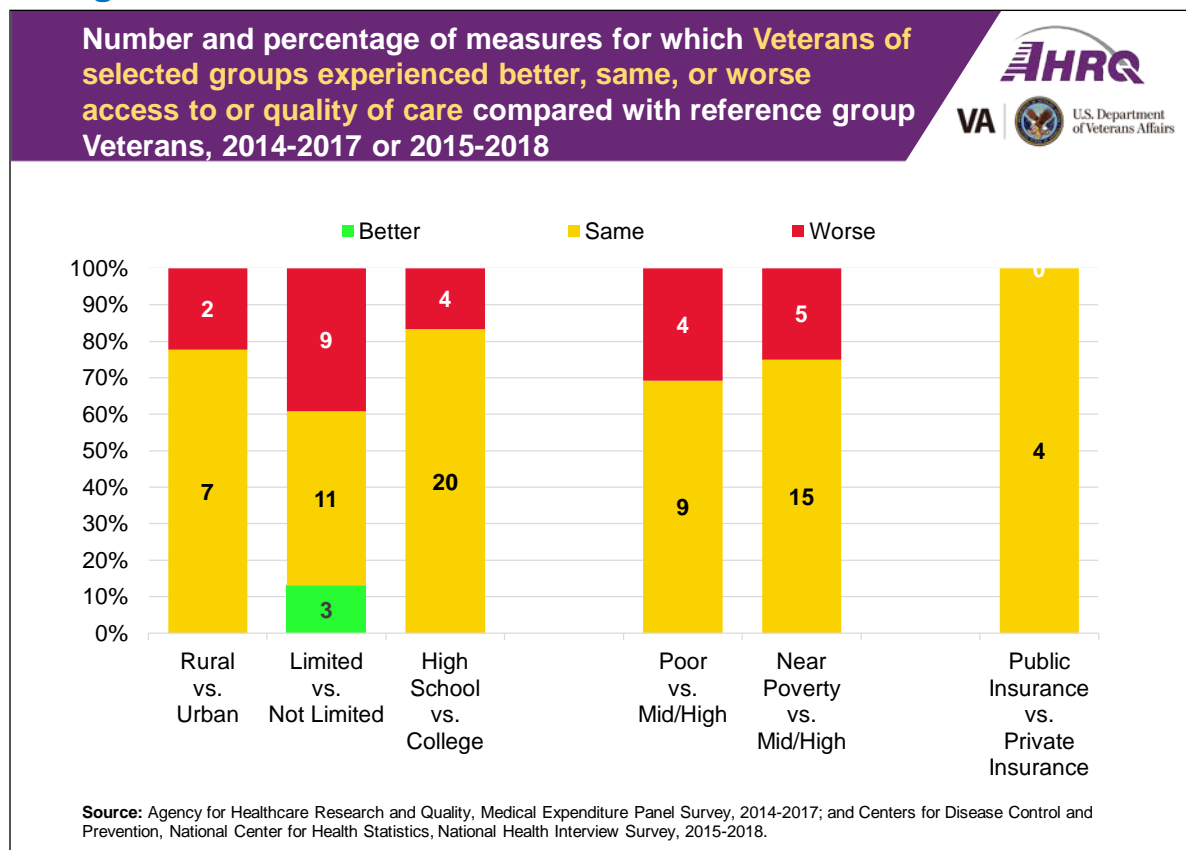
■ Gender

- ◆ Female Veterans experienced better care than male Veterans on 1 measure (6%) and similar care on 17 measures (94%).

■ Race/Ethnicity

- ◆ Hispanic Veterans experienced better care than non-Hispanic White Veterans on 1 measure (5%) and similar care on 20 measures (95%).
- ◆ Non-Hispanic Black Veterans experienced better care than non-Hispanic White Veterans on 1 measure (5%), similar care on 18 measures (82%), and worse care on 3 measures (14%).

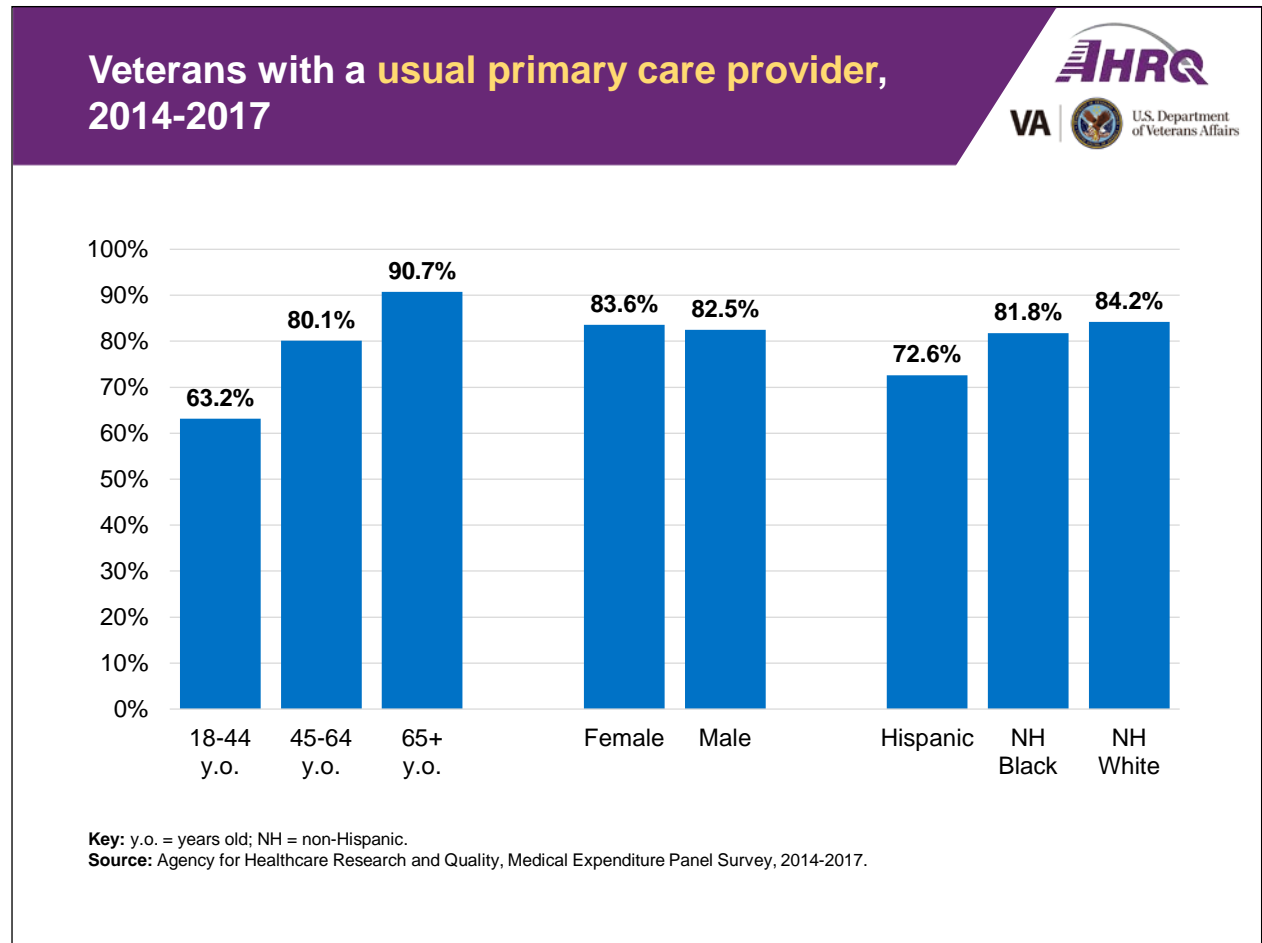
Disparities in the Veteran Population by Various Demographic Categories



- **Importance:** The goal of quality improvement is to produce better quality of and access to care, and ultimately improved patient outcomes, regardless of Veteran characteristics.
- **Findings:** For the most recent 4-year period of data (2014-2017 or 2015-2018), findings show that some location, disability status, educational, and income disparities persist.
 - **Location**
 - ♦ Rural Veterans experienced care similar to urban Veterans on 7 measures (78%) and worse care on 2 measures (22%).
 - **Disability Status**
 - ♦ Veterans with limited activity experienced better care than Veterans without limited activity on 3 measures (13%), similar care on 11 measures (48%), and worse care on 9 measures (39%).
 - **Education**
 - ♦ Veterans with a high school degree or less education experienced care similar to Veterans with at least some college on 20 measures (83%) and worse care on 4 measures (17%).
 - **Income**
 - ♦ Veterans with incomes below the poverty line experienced care similar to Veterans with middle or high incomes on 9 measures (69%) and worse care on 4 measures (31%).
 - ♦ Veterans with incomes just above the poverty line experienced care similar to Veterans with middle or high incomes on 15 measures (75%) and worse care on 5 measures (25%).
 - **Insurance**
 - ♦ Veterans with public insurance experienced care similar to Veterans with private insurance on 4 measures (100%).

Usual Primary Care Provider

Usual Primary Care Provider, by Age, Gender, and Ethnicity



- **Importance:** Having a usual source of care can decrease the probability of inpatient admissions and readmissions and decrease expenditures on emergency department visits for physical health, 30-day readmissions, and behavioral health inpatient admissions. It also has a positive effect on several quality measures (Fullerton, et al., 2019).
- **Overall Rate:** In 2014-2017, 82.6% of Veterans ages 18+ had a usual source of care (data not shown).
- **Groups With Disparities:** In 2014-2017, findings show significant disparities by age but not gender or race/ethnicity.

■ Age

- ♦ Veterans ages 45-64 were significantly more likely to have a primary care provider compared with Veterans ages 18-44 (80.1% vs. 63.2%).

- ◆ Veterans age 65+ were significantly more likely to have a primary care provider compared with Veterans ages 18-44 (90.7% vs. 63.2%).

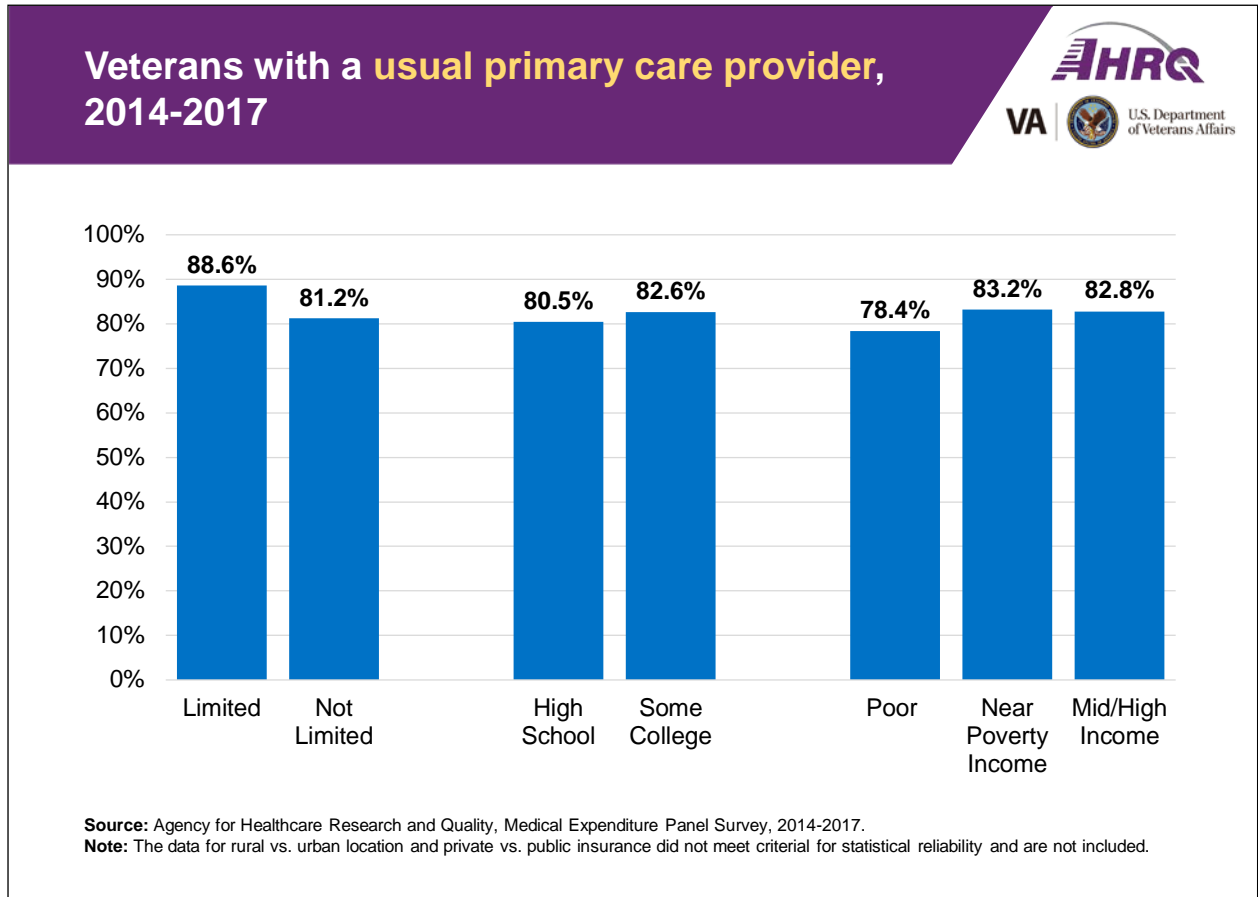
■ Gender

- ◆ There were no statistically significant differences between female Veterans and male Veterans in the percentage with a primary care provider (83.6% vs. 82.5%).

■ Race/Ethnicity

- ◆ There were no statistically significant differences between Hispanic Veterans and non-Hispanic White Veterans in the percentage with a primary care provider (72.6% vs. 84.2%).
- ◆ There were no statistically significant differences between non-Hispanic Black Veterans and non-Hispanic White Veterans in the percentage with a primary care provider (81.8% vs. 84.2%).

Usual Primary Care Provider, by Disability, Education, and Income



- **Importance:** Having a usual source of care can decrease the probability of inpatient admissions and readmissions and decrease expenditures on emergency department visits for physical health, 30-day readmissions, and behavioral health inpatient admissions. It also has a positive effect on several quality measures (Fullerton, et al., 2019).
- **Overall Rate:** In 2014-2017, 82.6% of Veterans age 18+ had a usual source of care (data not shown).
- **Groups With Disparities:** In 2014-2017, findings do not show significant disparities by activity status, education, or income.

■ Activity Status

- ◆ There were no statistically significant differences between Veterans with limited activity and Veterans without limited activity in the percentage with a primary care provider (88.6% vs. 81.2%).

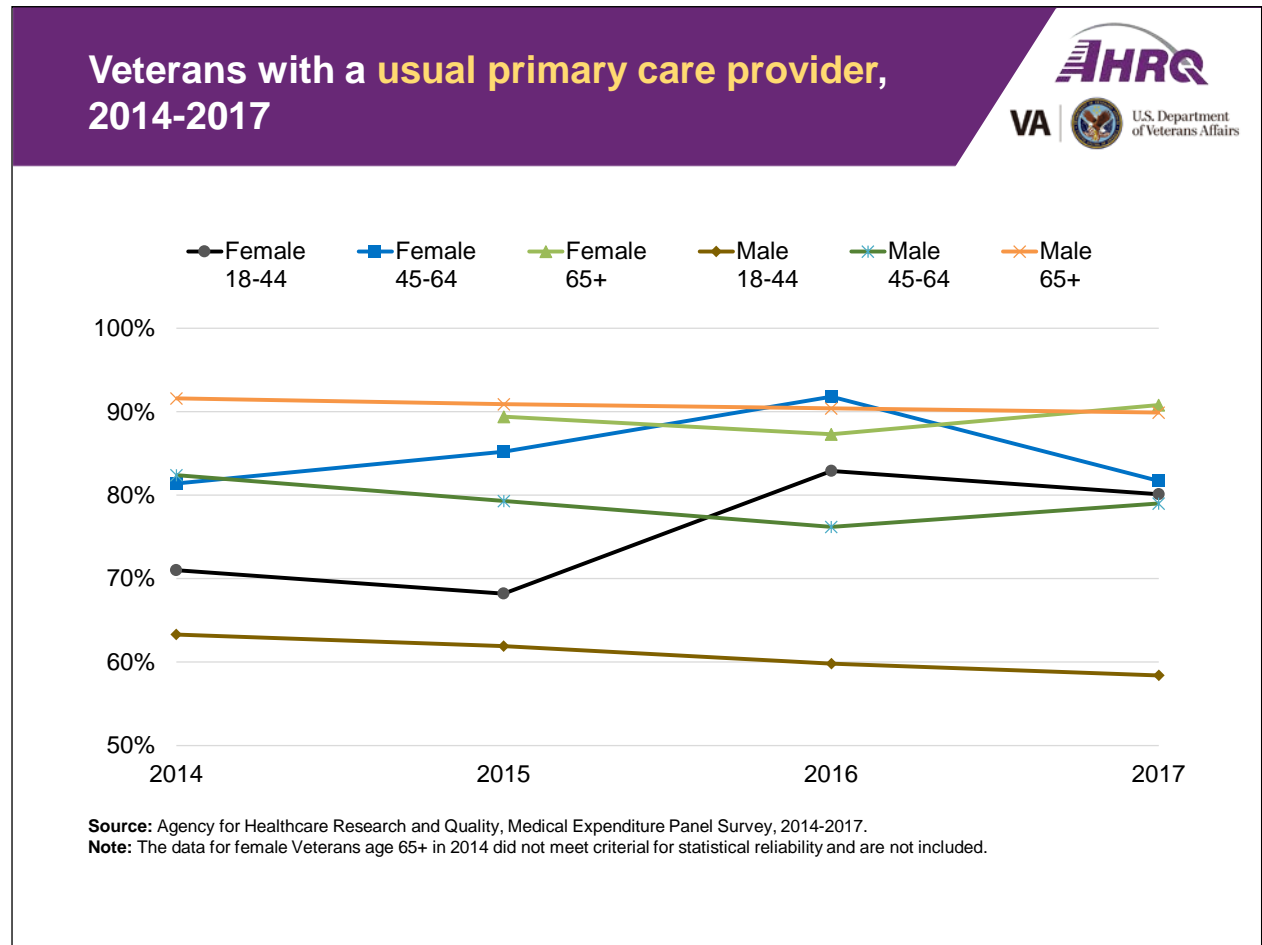
■ Education

- ◆ There were no statistically significant differences between Veterans with high school or less education and Veterans with at least some college education in the percentage with a primary care provider (80.5% vs. 82.6%).

■ Income

- ◆ There were no statistically significant differences between Veterans who were poor and Veterans with middle or high income in the percentage with a primary care provider (78.4% vs. 82.8%).
- ◆ There were no statistically significant differences between Veterans with near poverty income and Veterans with middle or high income in the percentage with a primary care provider (83.2% vs. 82.8%).

Usual Primary Care Provider, Trends by Age and Gender

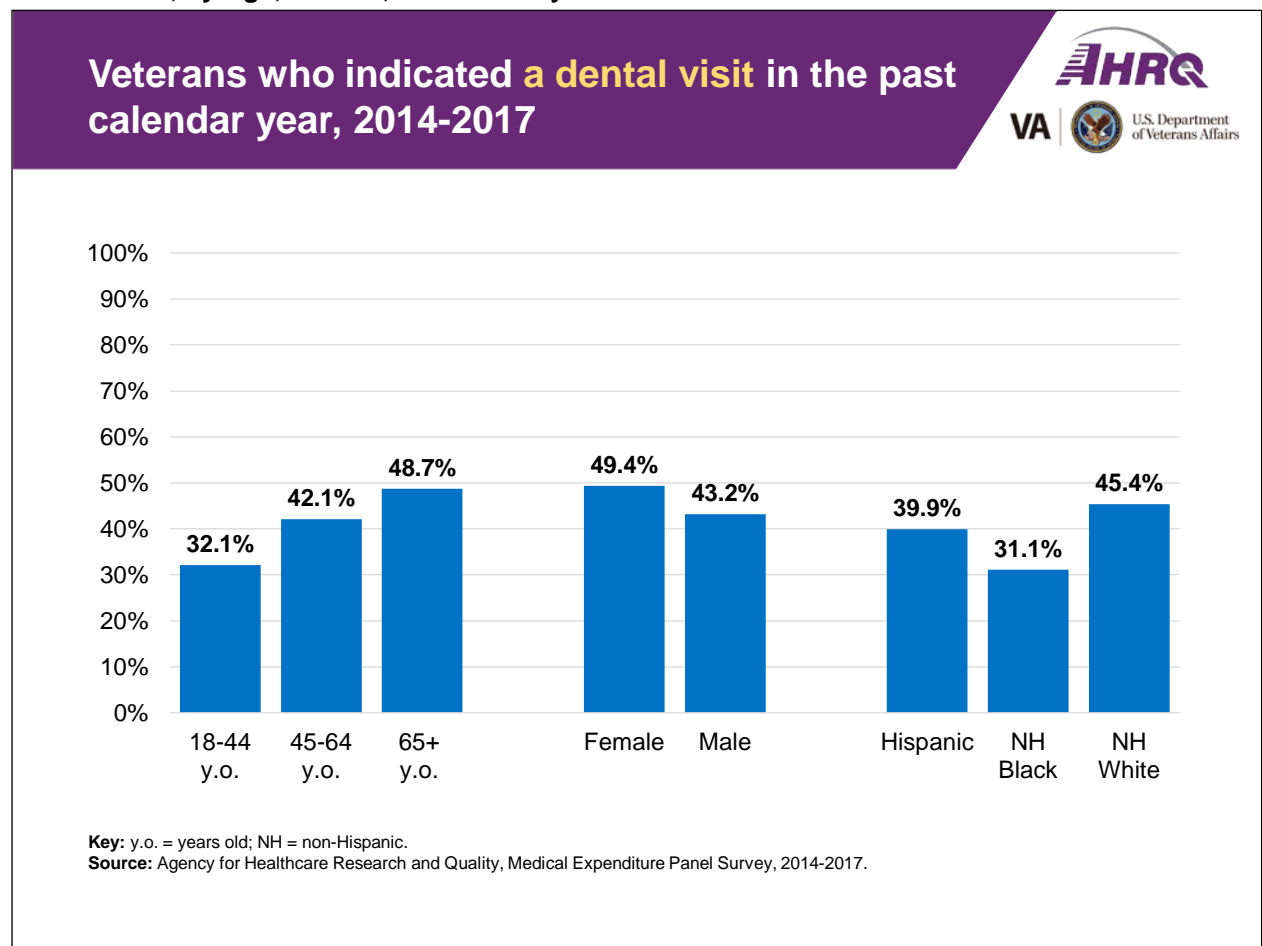


- **Importance:** Having a usual source of care can decrease the probability of inpatient admissions and readmissions and decrease expenditures on emergency department visits for physical health, 30-day readmissions, and behavioral health inpatient admissions. It also has a positive effect on several quality measures (Fullerton, et al., 2019).
- **Overall Rate:** In 2014-2017, 82.6% of Veterans had a usual primary care provider (data not shown).
- **Trends:** From 2014-2017, findings show varying trends across Veterans of different age/gender categories:
 - Female Veterans ages 18-44 had an increase in the percentage with a usual primary care provider from 2014 to 2017 (71.0% to 80.1%).
 - Female Veterans ages 45-64 had an increase in the percentage with a usual primary care provider from 2014 to 2017 (81.4% to 81.7%).
 - Female Veterans age 65+ had an increase in the percentage with a usual primary care provider from 2015 to 2017 (89.4% to 90.8%).

- Male Veterans ages 18-44 had a decrease in the percentage with a usual primary care provider from 2014 to 2017 (63.3% to 58.4%).
- Male Veterans ages 45-64 had a decrease in the percentage with a usual primary care provider from 2014 to 2017 (82.4% to 79.0%).
- Male Veterans age 65+ had a decrease in the percentage with a usual primary care provider from 2014 to 2017 (91.6% to 89.9%).

Dental Visits

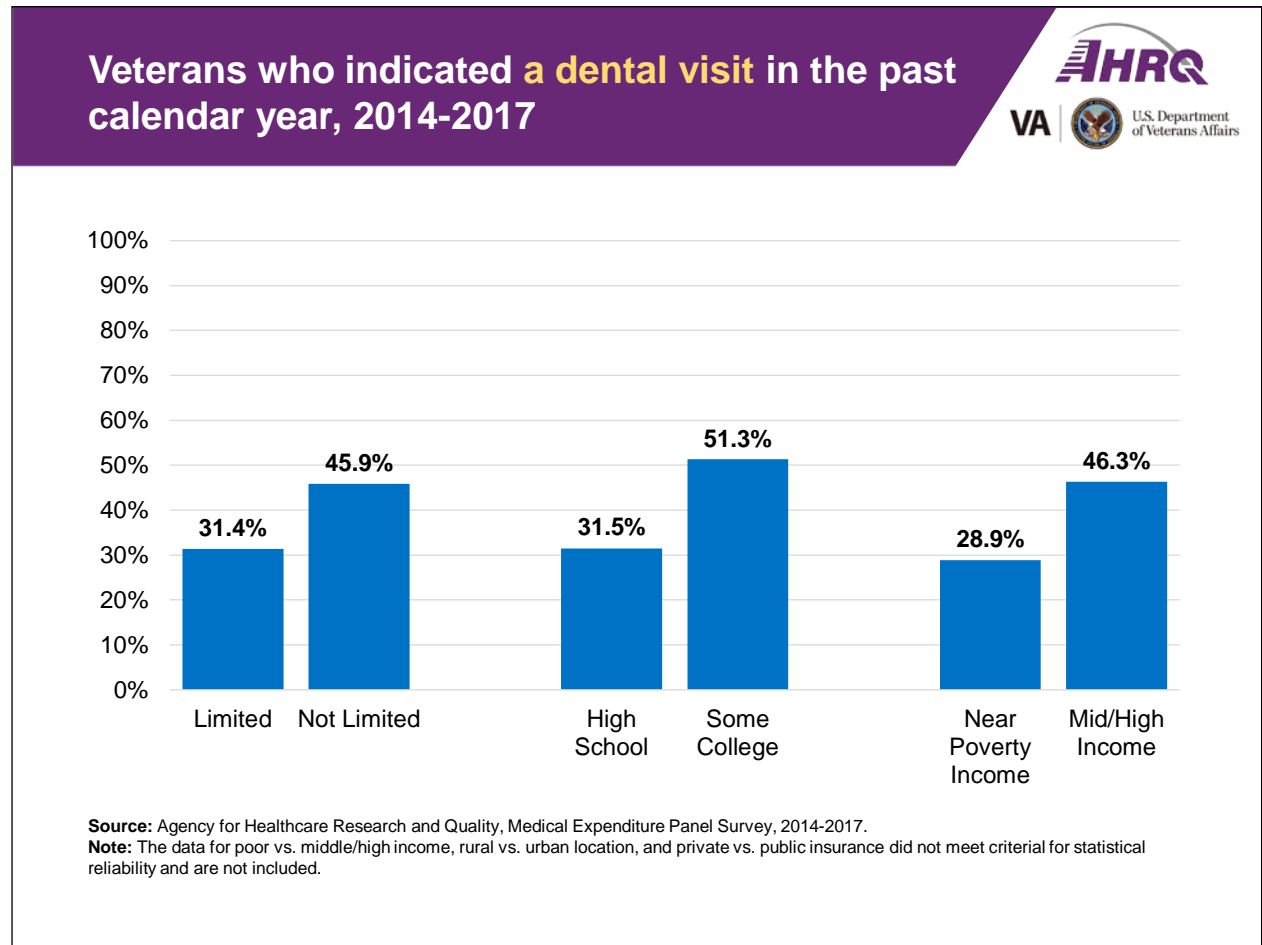
Dental Visits, by Age, Gender, and Ethnicity



- **Importance:** Oral health is important to an individual’s overall health and well-being. While advances in oral health have benefited most Americans, some cannot afford all the care they need, resulting in needless pain and suffering, complications that may devastate overall health and well-being, and social costs that diminish quality of life (National Institute of Dental and Craniofacial Research, 2000).
- **Overall Rate:** In 2014-2017, 43.8% of Veterans had a dental visit in the past year (data not shown).

- **Groups With Disparities:** In 2014-2017, findings show significant disparities by age but not gender or race/ethnicity.
 - **Age**
 - ♦ Veterans ages 45-64 were significantly more likely to have a dental visit compared with Veterans ages 18-44 (42.1% vs. 32.1%).
 - ♦ Veterans age 65+ were significantly more likely to have a dental visit compared with Veterans ages 18-44 (48.7% vs. 32.1%).
 - **Gender**
 - ♦ There were no statistically significant differences between female Veterans and male Veterans in the percentage who had a dental visit (49.4% vs. 43.2%).
 - **Race/Ethnicity**
 - ♦ There were no statistically significant differences between Hispanic Veterans and non-Hispanic White Veterans in the percentage who had a dental visit (39.9% vs. 45.4%).
 - ♦ There were no statistically significant differences between non-Hispanic Black Veterans and non-Hispanic White Veterans in the percentage who had a dental visit (31.1% vs. 45.4%).

Dental Visits, by Disability, Education, and Income



- **Importance:** Oral health is important to an individual’s overall health and well-being. While advances in oral health have benefited most Americans, some cannot afford all the care they need, resulting in needless pain and suffering, complications that may devastate overall health and well-being, and social costs that diminish quality of life (National Institute of Dental and Craniofacial Research, 2000).
- **Overall Rate:** In 2014-2017, 43.8% of Veterans had a dental visit in the past year (data not shown).
- **Groups With Disparities:** In 2014-2017, findings show significant disparities by activity status, education, and income.

■ **Activity Status**

- ♦ Veterans with limited activity were significantly less likely to have a dental visit compared with Veterans without limited activity (31.4% vs. 45.9%).

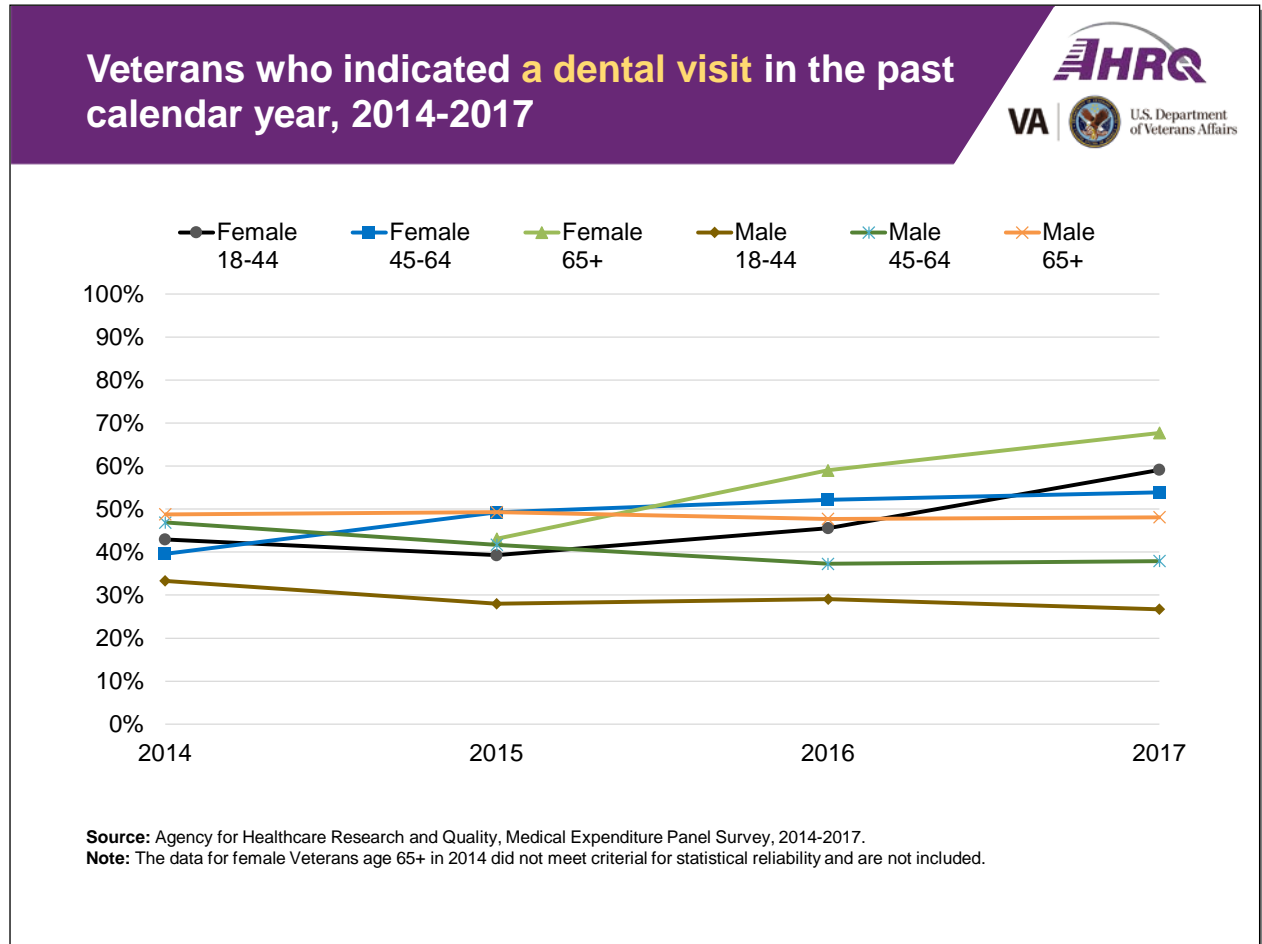
■ Education

- ◆ Veterans with a high school degree or less education were significantly less likely to have a dental visit compared with Veterans with at least some college (31.5% vs. 51.3%).

■ Income

- ◆ Veterans with incomes just above the poverty line (i.e., near poverty) were significantly less likely to have a dental visit compared with Veterans with middle or high incomes (28.9% vs. 46.3%).

Dental Visits, Trends by Age and Gender

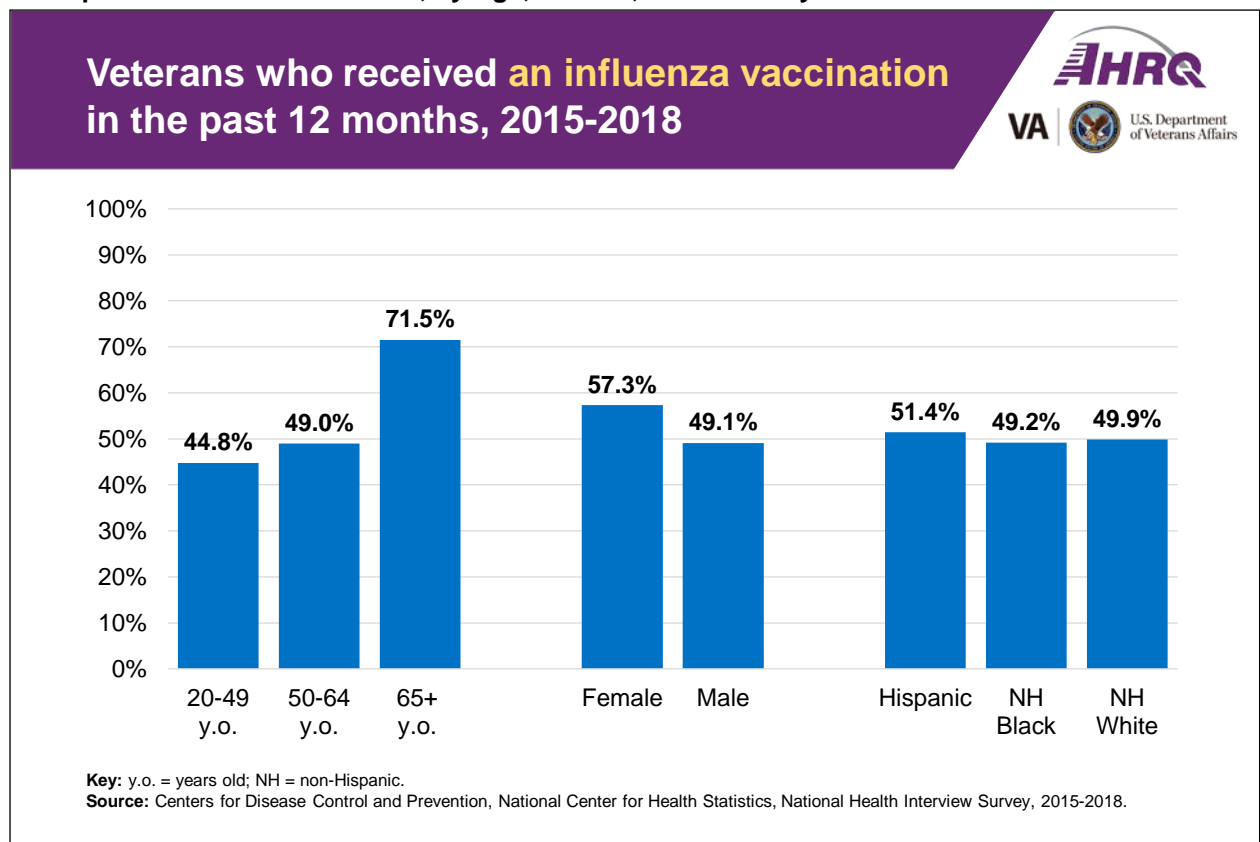


- **Importance:** Oral health is important to an individual’s overall health and well-being. While advances in oral health have benefited most Americans, some cannot afford all the care they need, resulting in needless pain and suffering, complications that may devastate overall health and well-being, and social costs that diminish quality of life (National Institute of Dental and Craniofacial Research, 2000).

- **Overall Rate:** In 2014-2017, 43.8% of Veterans had a dental visit in the past year (data not shown).
- **Trends:** From 2014-2017, findings show varying trends across Veterans of different age/gender categories.
 - Female Veterans ages 18-44 had an increase in the percentage with a dental visit from 2014 to 2017 (42.9% to 59.1%).
 - Female Veterans ages 45-64 had an increase in the percentage with a dental visit from 2014 to 2017 (39.6% to 53.9%).
 - Female Veterans age 65+ had an increase in the percentage with a dental visit from 2015 to 2017 (43.1% to 67.7%).
 - Male Veterans ages 18-44 had a decrease in the percentage with a dental visit from 2014 to 2017 (33.3% to 26.7%).
 - Male Veterans ages 45-64 had a decrease in the percentage with a dental visit from 2014 to 2017 (46.9% to 37.9%).
 - Male Veterans age 65+ had a decrease in the percentage with a dental visit from 2014 to 2017 (48.8% to 48.1%).

Receipt of Influenza Vaccination

Receipt of Influenza Vaccination, by Age, Gender, and Ethnicity



- **Importance:** Each year, millions of Americans get sick with influenza. Sometimes it causes mild illness but it can also be serious or even deadly, especially for people over 65, newborn babies, and people with certain chronic illnesses (NLM, 2020). Vaccination can prevent influenza and reduce influenza-related morbidity and mortality (CDC, 2019).
- **Overall Rate:** In 2015-2018, 50.2% of Veterans age 20+ had an influenza vaccination in the past 12 months (data not shown).
- **Groups With Disparities:** In 2015-2018, findings show significant disparities by age and gender but not race/ethnicity.

■ Age

- ♦ There were no statistically significant differences between Veterans ages 50-64 and Veterans ages 20-49 in the percentage who received an influenza vaccination (49.0% vs. 44.8%).
- ♦ Veterans age 65+ were significantly more likely to have an influenza vaccination compared with Veterans ages 20-49 (71.5% vs. 44.8%).

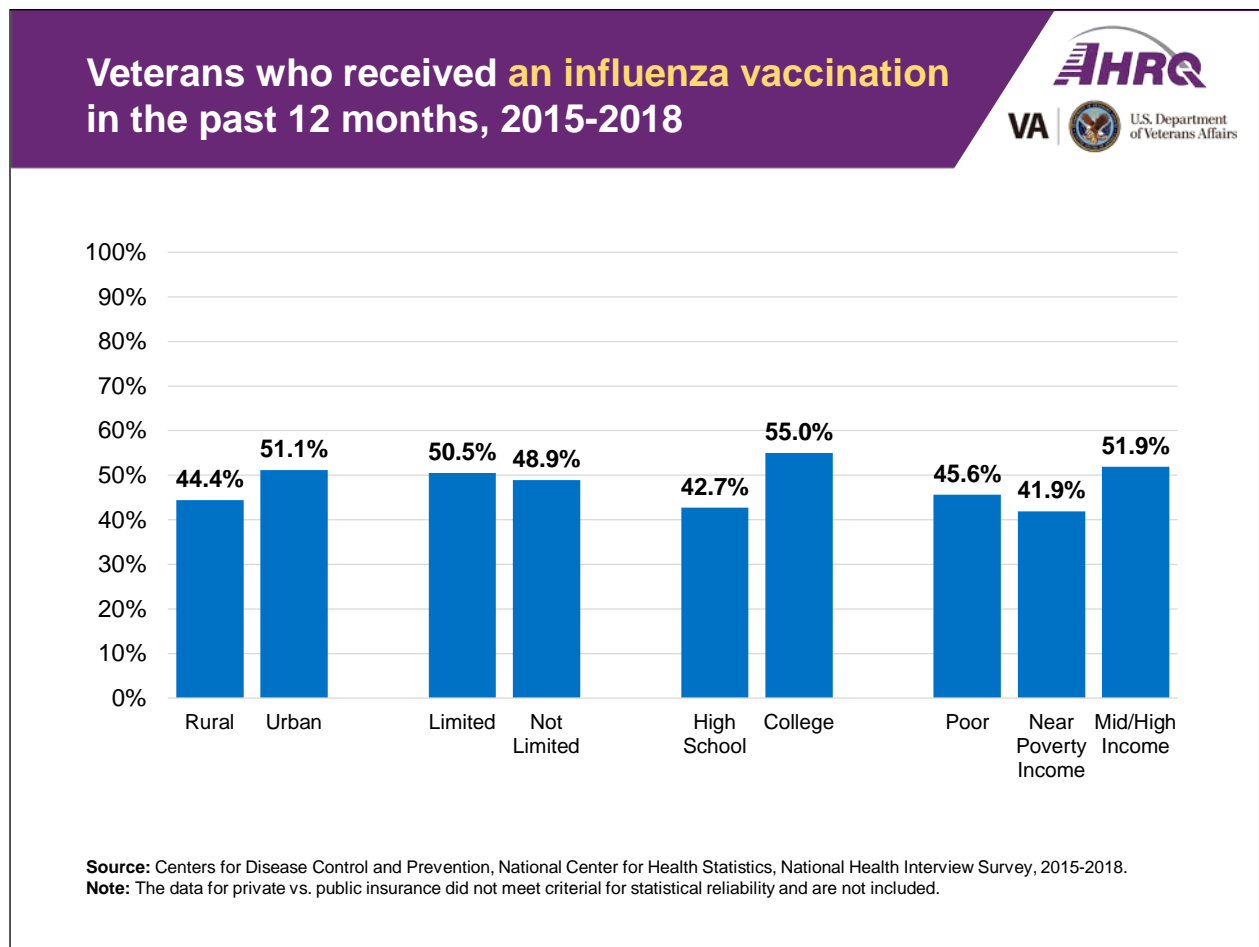
■ Gender

- ♦ Female Veterans were significantly more likely to have an influenza vaccination compared with male Veterans (57.3% vs. 49.1%).

■ Race/Ethnicity

- ♦ There were no statistically significant differences between Hispanic Veterans and non-Hispanic White Veterans in the percentage who received an influenza vaccination (51.4% vs. 49.9%).
- ♦ There were no statistically significant differences between non-Hispanic Black Veterans and non-Hispanic White Veterans in the percentage who received an influenza vaccination (49.2% vs. 49.9%).

Receipt of Influenza Vaccination, by Residence Location, Disability, Education, and Income



- **Importance:** Each year, millions of Americans get sick with influenza. Sometimes it causes mild illness but it can also be serious or even deadly, especially for people over 65, newborn babies, and people with certain chronic illnesses (NLM, 2020). Vaccination can prevent influenza and reduce influenza-related morbidity and mortality (CDC, 2019).
- **Overall Rate:** In 2015-2018, 50.2% of Veterans age 20+ had an influenza vaccination in the past 12 months (data not shown).
- **Groups With Disparities:** In 2015-2018, findings show significant disparities by location, education, and income but not activity status.

■ **Location**

- ◆ Rural Veterans were significantly less likely to have an influenza vaccination compared with urban Veterans (44.4% vs. 51.1%).

■ Activity Status

- ◆ There were no statistically significant differences between Veterans with limited activity and Veterans without limited activity in the percentage who received an influenza vaccination (50.5% vs. 48.9%).

■ Education

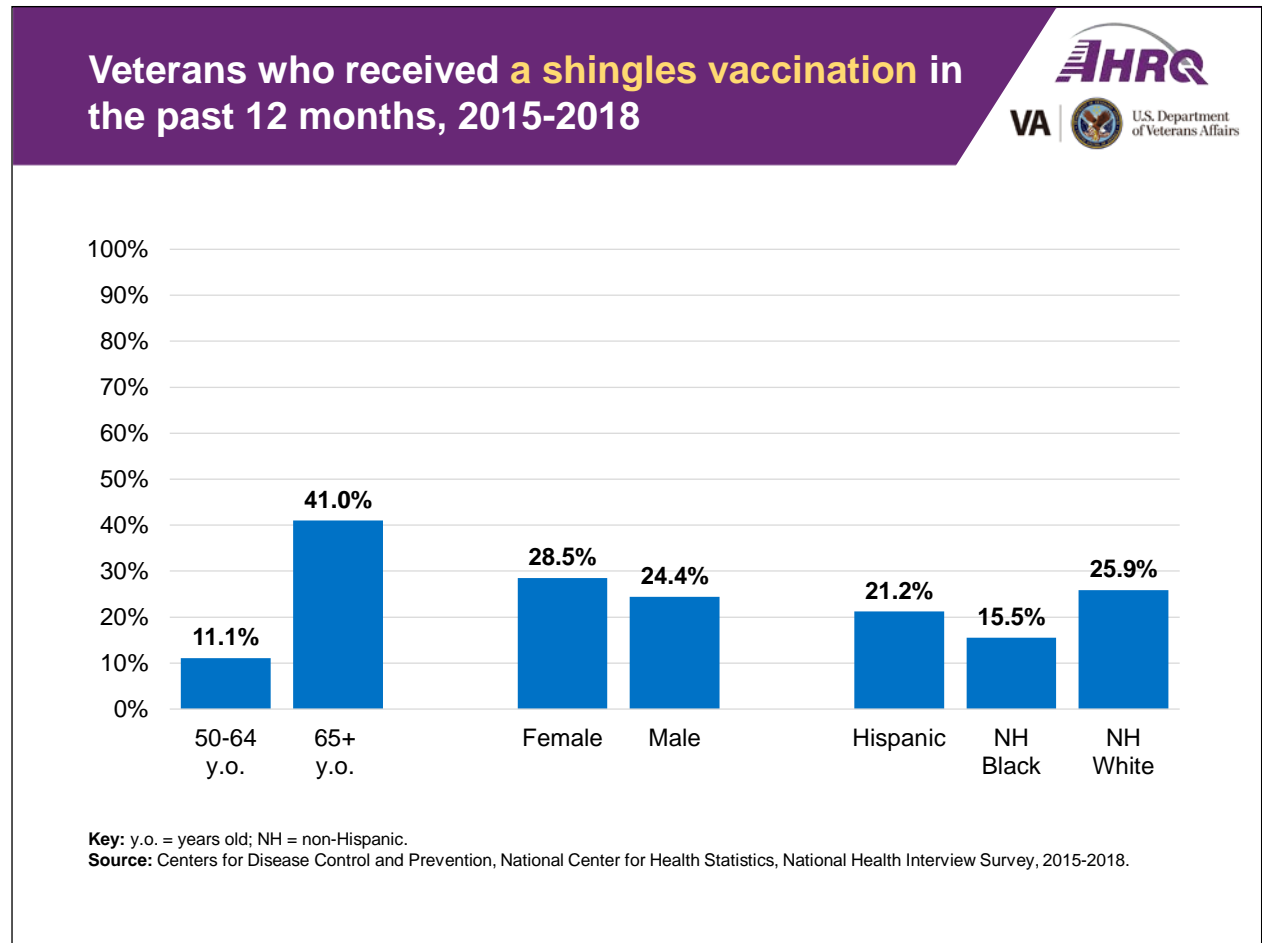
- ◆ Veterans with a high school degree or less education were significantly less likely to have an influenza vaccination compared with Veterans with at least some college (42.7% vs. 55.0%).

■ Income

- ◆ There were no statistically significant differences between Veterans with incomes below the poverty line and Veterans with middle or high incomes in the percentage who received an influenza vaccination (45.6% vs. 51.9%).
- ◆ Veterans with incomes just above the poverty line were significantly less likely to have an influenza vaccination compared with Veterans with middle or high incomes (41.9% vs. 51.9%).

Receipt of Shingles Vaccination

Receipt of Shingles Vaccination, by Age, Gender, and Ethnicity



- **Importance:** Shingles is a painful rash that usually develops on one side of the body, often the face or torso. For some people, long-lasting pain, which can last for months or even years after the rash goes away, is the most common complication of shingles. The risk of getting shingles increases with age (CDC, 2016) but decreases with vaccination (CDC, 2018).
- **Overall Rate:** In 2015-2018, 24.8% of Veterans age 50+ had a shingles vaccination in the past 12 months (data not shown).
- **Groups With Disparities:** In 2015-2018, findings show significant disparities by age and race/ethnicity but not gender.

■ Age

- ◆ Veterans age 65+ were significantly more likely to have a shingles vaccination compared with Veterans ages 50-64 (41.0% vs. 11.1%).

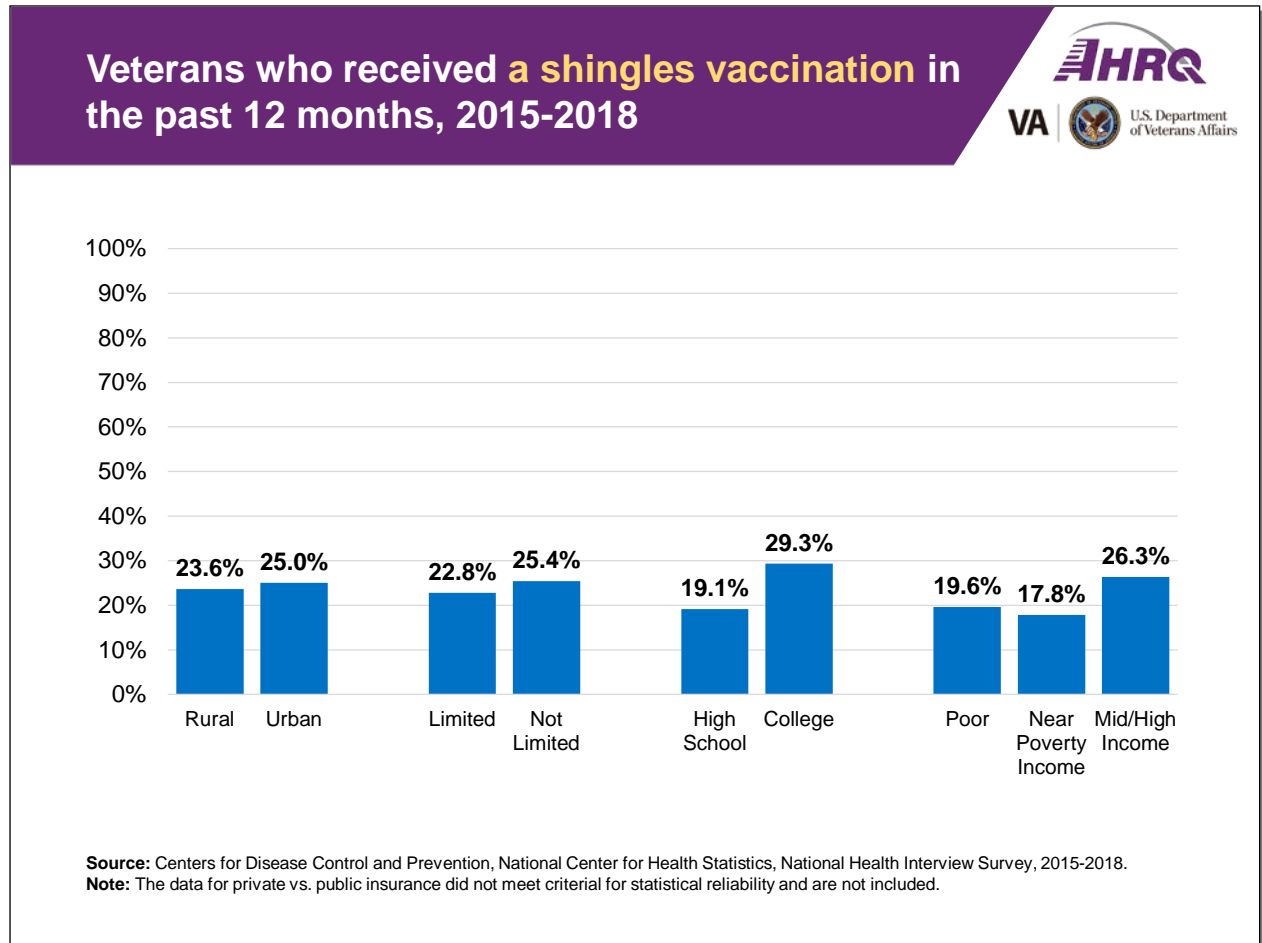
■ Gender

- ◆ There were no statistically significant differences between female Veterans and male Veterans in the percentage who received a shingles vaccination (28.5% vs. 24.4%).

■ Race/Ethnicity

- ◆ There were no statistically significant differences between Hispanic Veterans and non-Hispanic White Veterans in the percentage who received a shingles vaccination (21.2% vs. 25.9%).
- ◆ Non-Hispanic Black Veterans were significantly less likely to have a shingles vaccination compared with non-Hispanic White Veterans (15.5% vs. 25.9%).

Receipt of Shingles Vaccination, by Residence Location, Disability, Education, and Income



- **Importance:** Shingles is a painful rash that usually develops on one side of the body, often the face or torso. For some people, long-lasting pain, which can last for months or even years after the rash goes away, is the most common complication of shingles. The risk of getting shingles increases with age (CDC, 2016) but decreases with vaccination (CDC, 2018).
- **Overall Rate:** In 2015-2018, 24.8% of Veterans age 50+ had a shingles vaccination in the past 12 months (data not shown).
- **Groups With Disparities:** In 2015-2018, findings show significant disparities by education and income but not location or activity status.

■ Location

- ◆ There were no statistically significant differences between rural Veterans and urban Veterans in the percentage who received a shingles vaccination (23.6% vs. 25.0%).

■ Activity Status

- ◆ There were no statistically significant differences between Veterans with limited activity and Veterans without limited activity in the percentage who received a shingles vaccination (22.8% vs. 25.4%).

■ Education

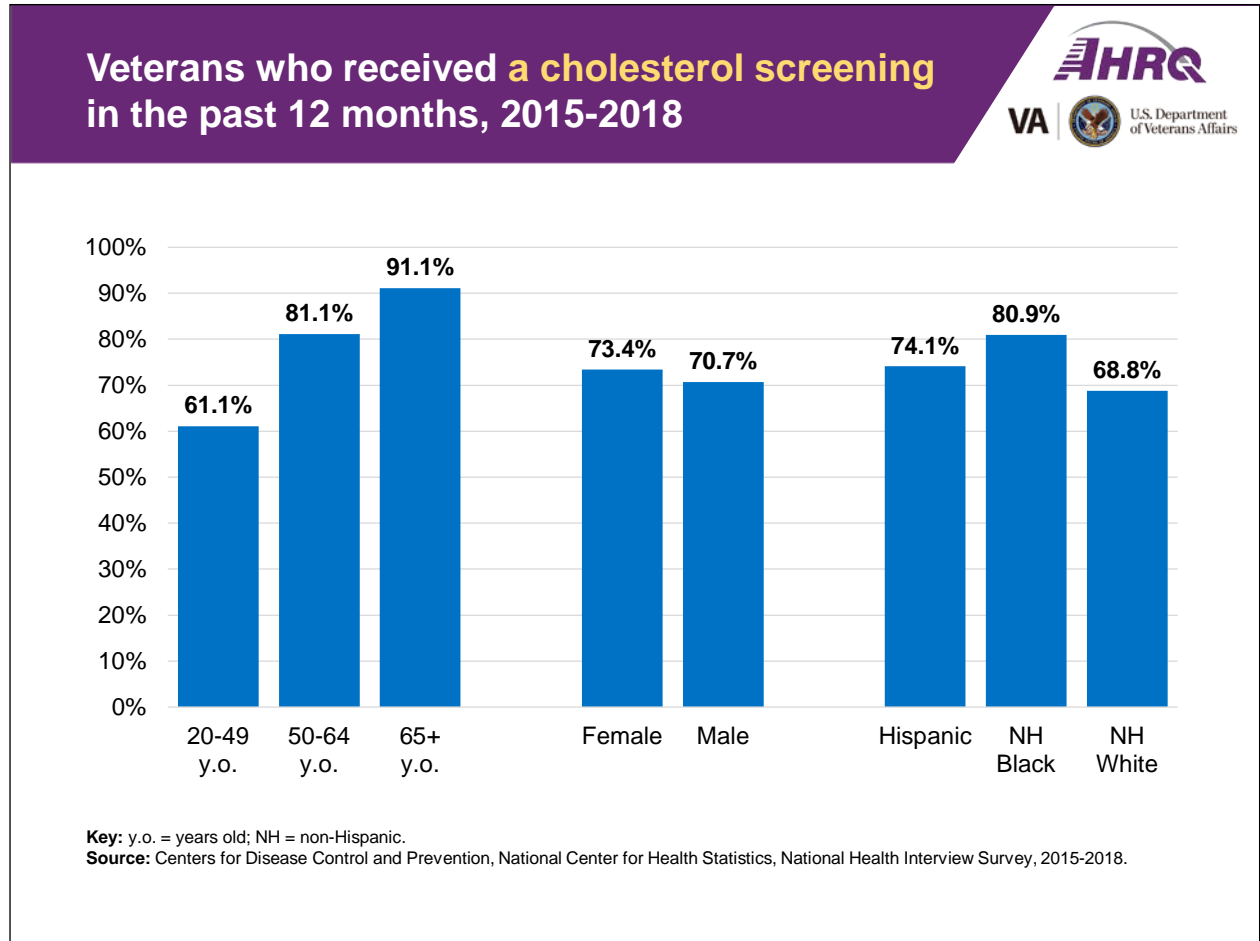
- ◆ Veterans with a high school degree or less education were significantly less likely to have a shingles vaccination compared with Veterans with at least some college (19.1% vs. 29.3%).

■ Income

- ◆ Veterans with incomes below the poverty line were significantly less likely to have a shingles vaccination compared with Veterans with middle or high incomes (19.6% vs. 26.3%).
- ◆ Veterans with incomes just above the poverty line were significantly less likely to have a shingles vaccination compared with Veterans with middle or high incomes (17.8% vs. 26.3%).

Cholesterol Screening

Receipt of Cholesterol Screening, by Age, Gender, and Ethnicity



- **Importance:** About 95 million Americans age 20 and older have total cholesterol levels higher than 200 mg/dL and nearly 29 million have total cholesterol levels higher than 240 mg/dL. High cholesterol raises the risk of heart disease, the leading cause of death, and stroke, the fifth leading cause of death (CDC, 2020).
- **Overall Rate:** In 2015-2018, 71.3% of Veterans age 20+ had a cholesterol screening (data not shown).
- **Groups With Disparities:** In 2015-2018, findings show significant disparities by age and race/ethnicity but not gender.

■ Age

- ◆ Veterans ages 50-64 were significantly more likely to have a cholesterol screening compared with Veterans ages 20-49 (81.1% vs. 61.1%).
- ◆ Veterans age 65+ were significantly more likely to have a cholesterol screening compared with Veterans ages 20-49 (91.1% vs. 61.1%).

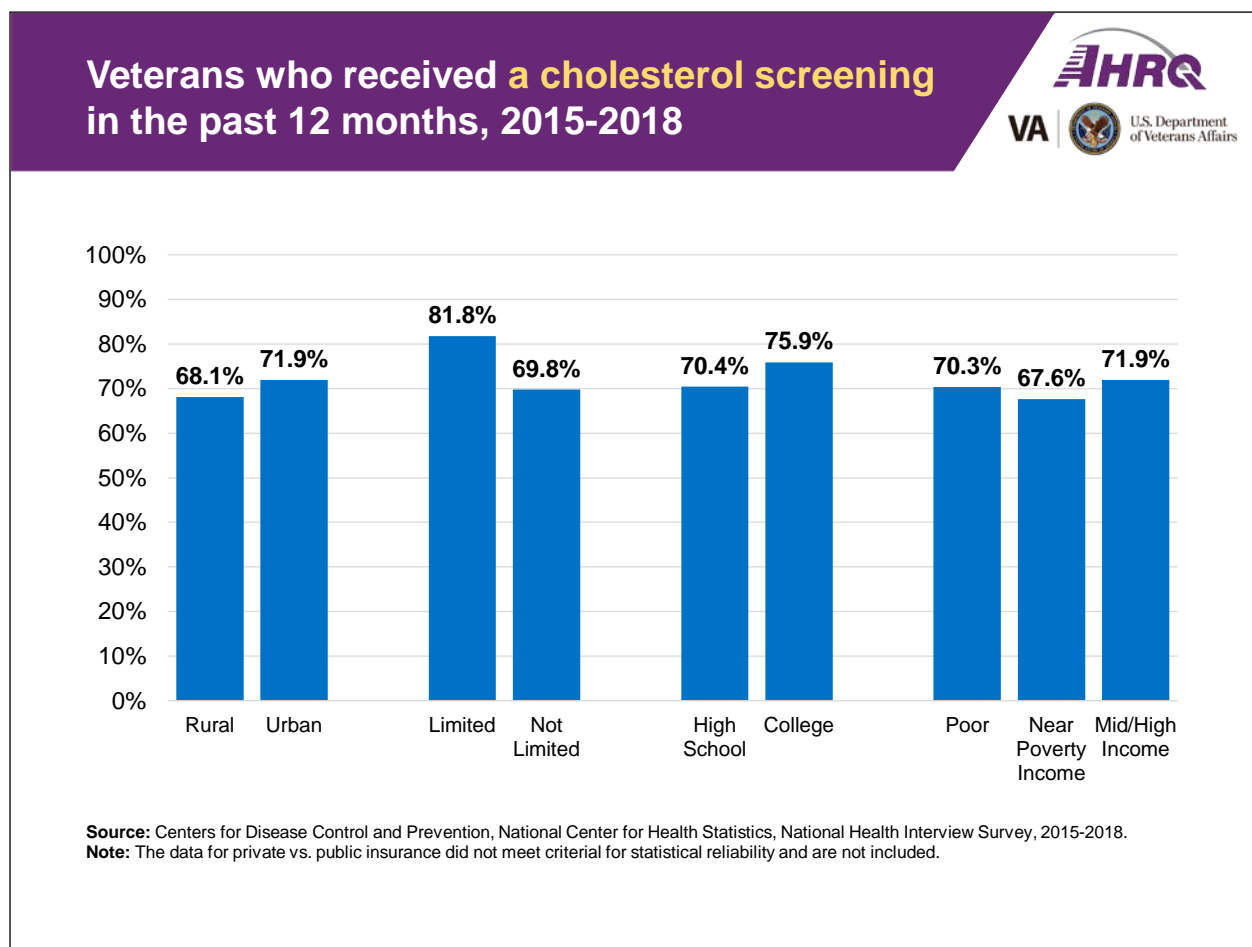
■ Gender

- ◆ There were no statistically significant differences between female Veterans and male Veterans in the percentage who received a cholesterol screening (73.4% vs. 70.7%).

■ Race/Ethnicity

- ◆ There were no statistically significant differences between Hispanic Veterans and non-Hispanic White Veterans in the percentage who received a cholesterol screening (74.1% vs. 68.8%).
- ◆ Non-Hispanic Black Veterans were significantly more likely to have a cholesterol screening compared with non-Hispanic White Veterans (80.9% vs. 68.8%).

Receipt of Cholesterol Screening, by Residence Location, Disability, Education, and Income



- **Importance:** About 95 million Americans age 20 and older have total cholesterol levels higher than 200 mg/dL and nearly 29 million have total cholesterol levels higher than 240 mg/dL. High cholesterol raises the risk of heart disease, the leading cause of death, and stroke, the fifth leading cause of death (CDC, 2020).
- **Overall Rate:** In 2015-2018, 71.3% of Veterans age 20+ had a cholesterol screening (data not shown).
- **Groups With Disparities:** In 2015-2018, findings show significant disparities by activity status but not location, education, or income.

■ Location

- ◆ There were no statistically significant differences between rural Veterans and urban Veterans in the percentage who received a cholesterol screening (68.1% vs. 71.9%).

■ Activity Status

- ◆ Veterans with limited activity were significantly more likely to have a cholesterol screening compared with Veterans without limited activity (81.8% vs. 69.8%).

■ Education

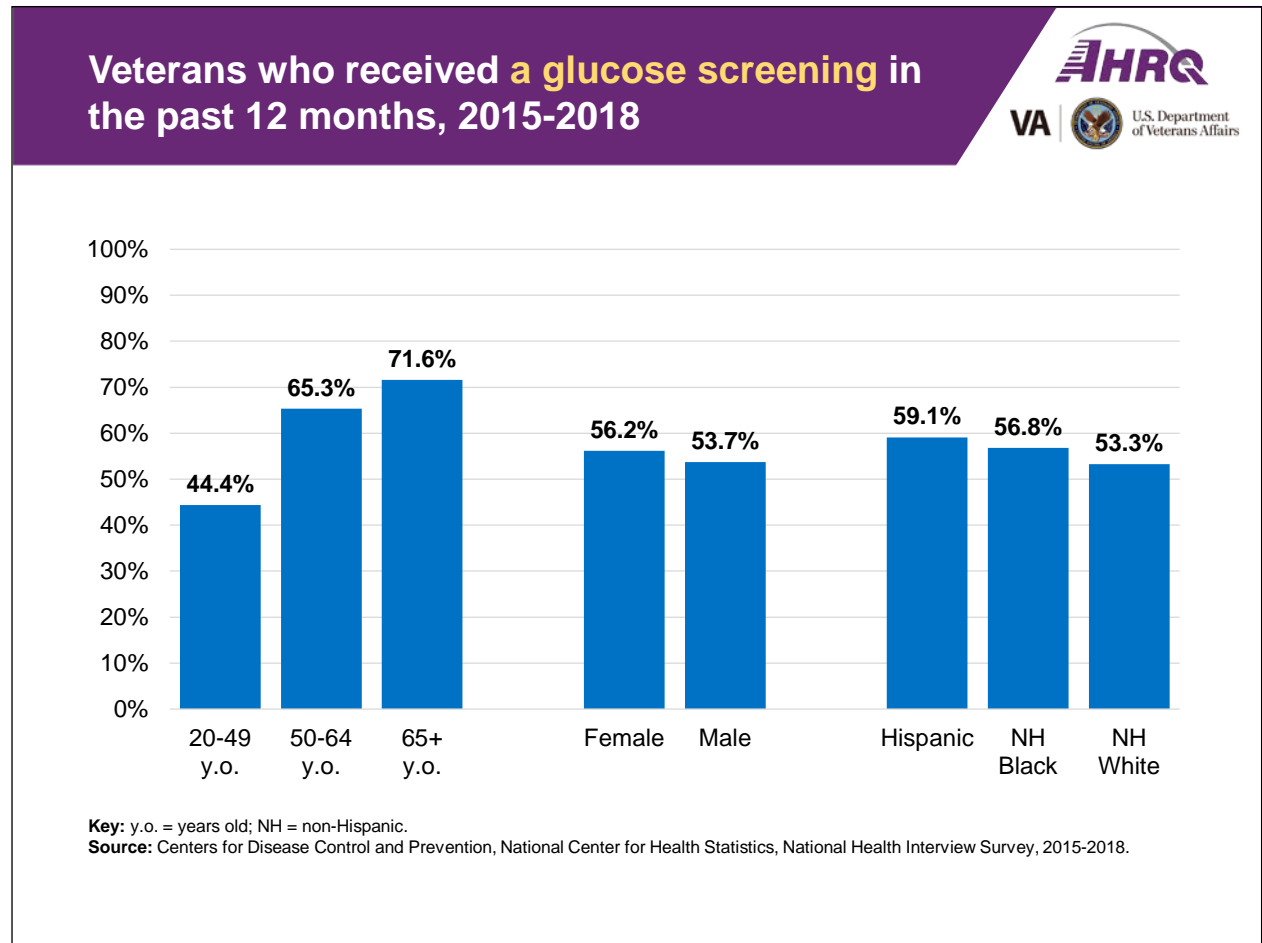
- ◆ There were no statistically significant differences between Veterans with a high school degree or less education and Veterans with at least some college in the percentage who received a cholesterol screening (70.4% vs. 75.9%).

■ Income

- ◆ There were no statistically significant differences between Veterans with incomes below the poverty line and Veterans with middle or high incomes in the percentage who received a cholesterol screening (70.3% vs. 71.9%).
- ◆ There were no statistically significant differences between Veterans with incomes just above the poverty line and Veterans with middle or high incomes in the percentage who received a cholesterol screening (67.6% vs. 71.9%).

Glucose Screening

Receipt of Glucose Screening, by Age, Gender, and Ethnicity



- **Importance:** Glucose screening is a test used to diagnose prediabetes and type 1, type 2, or gestational diabetes. Diabetes is a chronic health condition in which the body either does not make enough insulin or cannot use the insulin it makes as well as it should. Diabetes is a leading cause of morbidity and mortality in the United States (CDC, 2019, 2020).
- **Overall Rate:** In 2015-2018, 54.3% of Veterans age 20+ had a glucose screening (data not shown).
- **Groups With Disparities:** In 2015-2018, findings show significant disparities by age and race/ethnicity but not gender.

■ Age

- ♦ Veterans ages 50-64 were significantly more likely to have a glucose screening compared with Veterans ages 20-49 (65.3% vs. 44.4%).

- ◆ Veterans age 65+ were significantly more likely to have a glucose screening compared with Veterans ages 20-49 (71.6% vs. 44.4%).

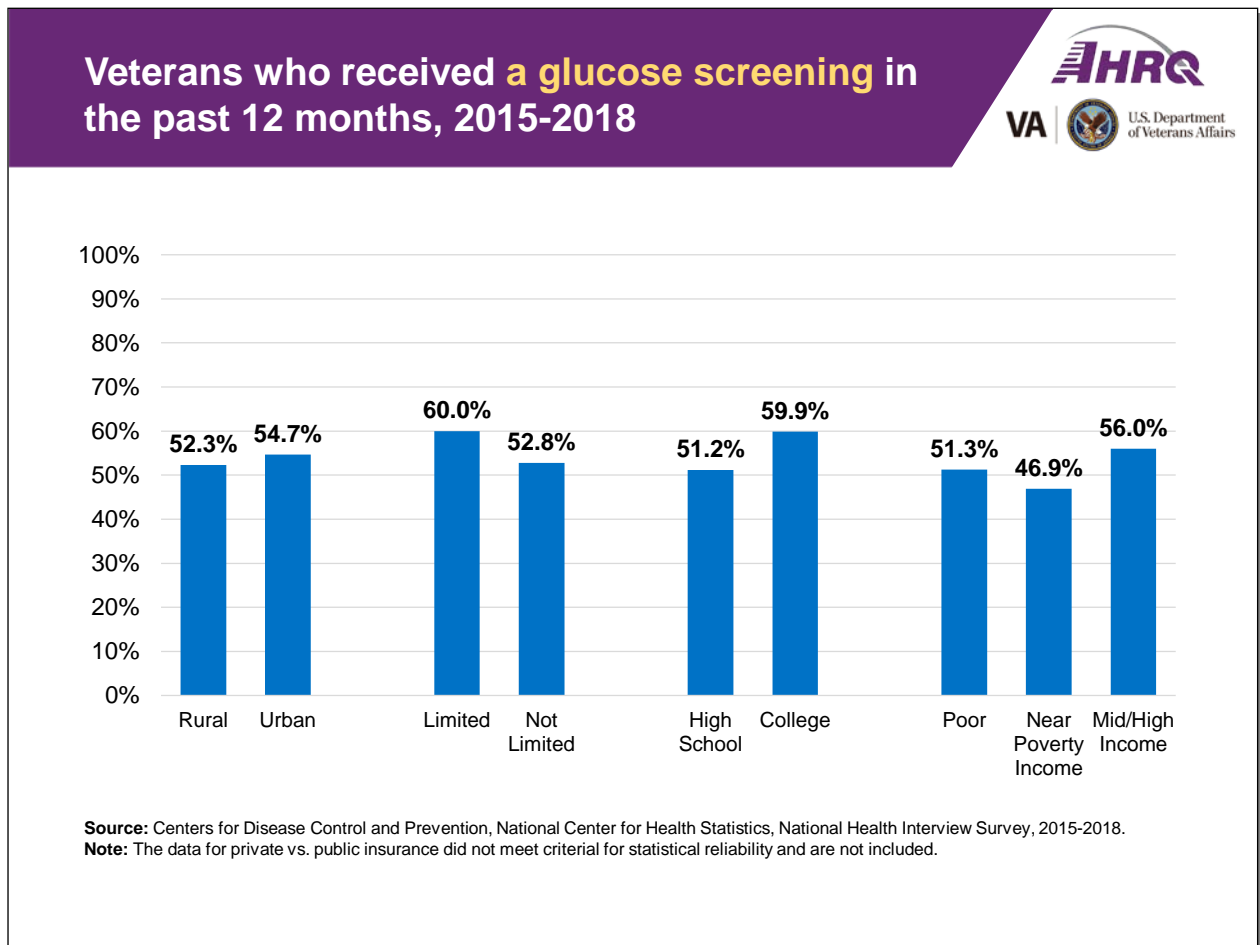
■ Gender

- ◆ There were no statistically significant differences between female Veterans and male Veterans in the percentage who received a glucose screening (56.2% vs. 53.7%).

■ Race/Ethnicity

- ◆ Hispanic Veterans were significantly more likely to have a glucose screening compared with non-Hispanic White Veterans (59.1% vs. 53.3%).
- ◆ There were no statistically significant differences between non-Hispanic Black Veterans and non-Hispanic White Veterans in the percentage who received a glucose screening (56.8% vs. 53.3%).

Receipt of Glucose Screening, by Residence Location, Disability, Education, and Income



- **Importance:** Glucose screening is a test used to diagnose prediabetes and type 1, type 2, or gestational diabetes. Diabetes is a chronic health condition in which the body either does not make enough insulin or cannot use the insulin it makes as well as it should. Diabetes is a leading cause of morbidity and mortality in the United States (CDC, 2019, 2020).
- **Overall Rate:** In 2015-2018, 54.3% of Veterans age 20+ had a glucose screening (data not shown).
- **Groups With Disparities:** In 2015-2018, findings show significant disparities by education and income but not location or activity status.

■ Location

- ◆ There were no statistically significant differences between rural Veterans and urban Veterans in the percentage who received a glucose screening (52.3% vs. 54.7%).

■ Activity Status

- ◆ There were no statistically significant differences between Veterans with limited activity and Veterans without limited activity in the percentage who received a glucose screening (60.0% vs. 52.8%).

■ Education

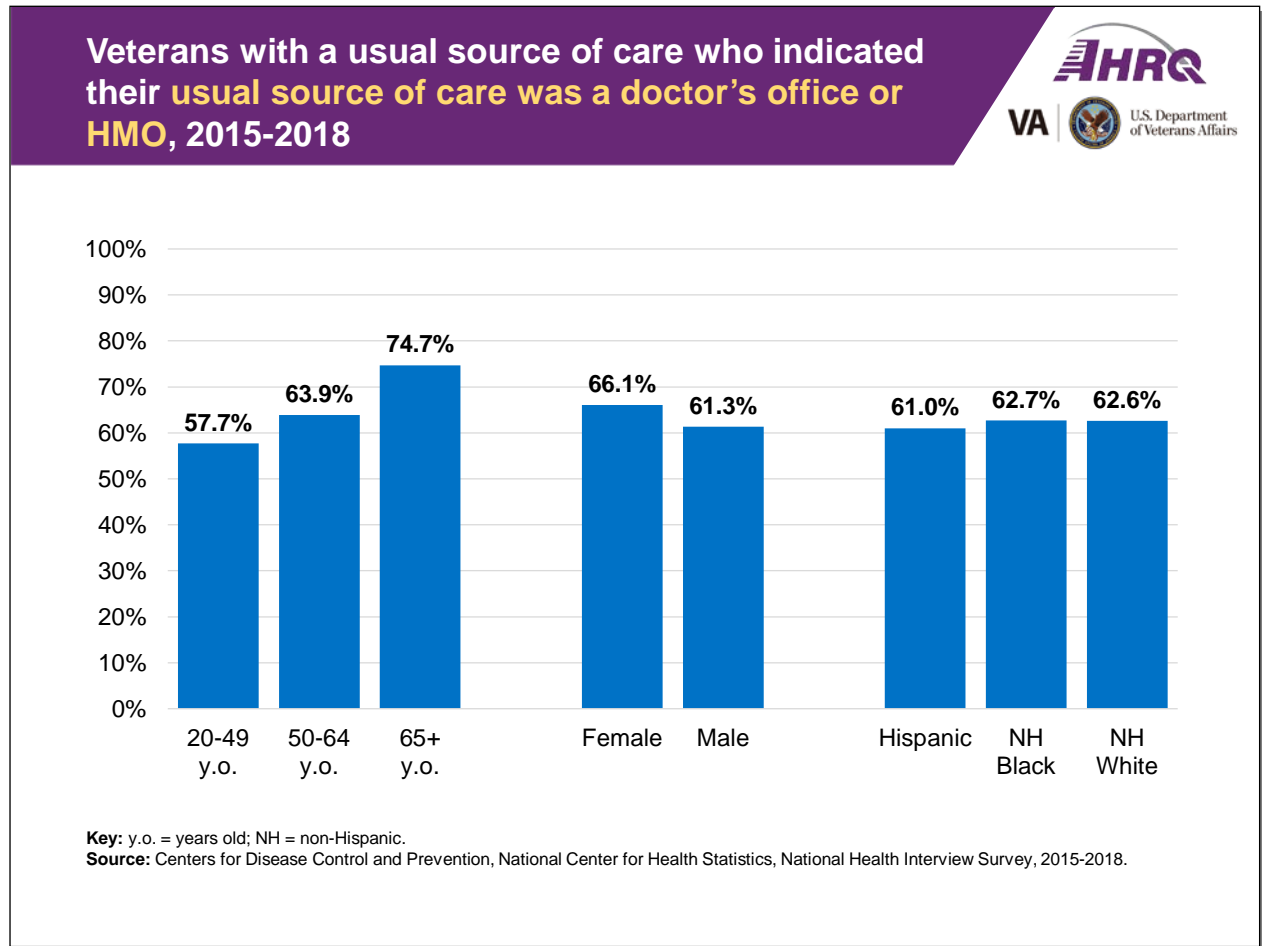
- ◆ Veterans with a high school degree or less education were significantly less likely to have a glucose screening compared with Veterans with at least some college (51.2% vs. 59.9%).

■ Income

- ◆ There were no statistically significant differences between Veterans with incomes below the poverty line and Veterans with middle or high incomes in the percentage who received a glucose screening (51.3% vs. 56.0%).
- ◆ Veterans with incomes just above the poverty line were significantly less likely to have a glucose screening compared with Veterans with middle or high incomes (46.9% vs. 56.0%).

Doctor’s Office or HMO as Usual Source of Care

Veterans Whose Usual Source of Care Was a Doctor’s Office or HMO, by Age, Gender, and Ethnicity



- Importance:** Having a usual source of care can decrease the probability of inpatient admissions and readmissions and decrease expenditures on emergency department visits for physical health, 30-day readmissions, and behavioral health inpatient admissions. It also had a positive effect on several quality measures (Fullerton, et al., 2019). Veterans may consider a Veterans Affairs Medical Center or community-based outpatient clinic (VAMC/CBOC) as a usual source of care.
- Overall Rate:** In 2015-2018, 62.5% of Veterans age 20+ with a usual source of care indicated their usual source was a doctor’s office or health maintenance organization (HMO) (data not shown).

- **Groups With Disparities:** In 2015-2018, findings show significant disparities by age but not gender or race/ethnicity.

- Age

- ♦ Veterans ages 50-64 with a usual source of care were significantly more likely to indicate their usual source was a doctor's office or HMO compared with Veterans ages 20-49 with a usual source of care (63.9% vs. 57.7%).
- ♦ Veterans age 65+ with a usual source of care were significantly more likely to indicate their usual source was a doctor's office or HMO compared with Veterans ages 20-49 with a usual source of care (74.7% vs. 57.7%).

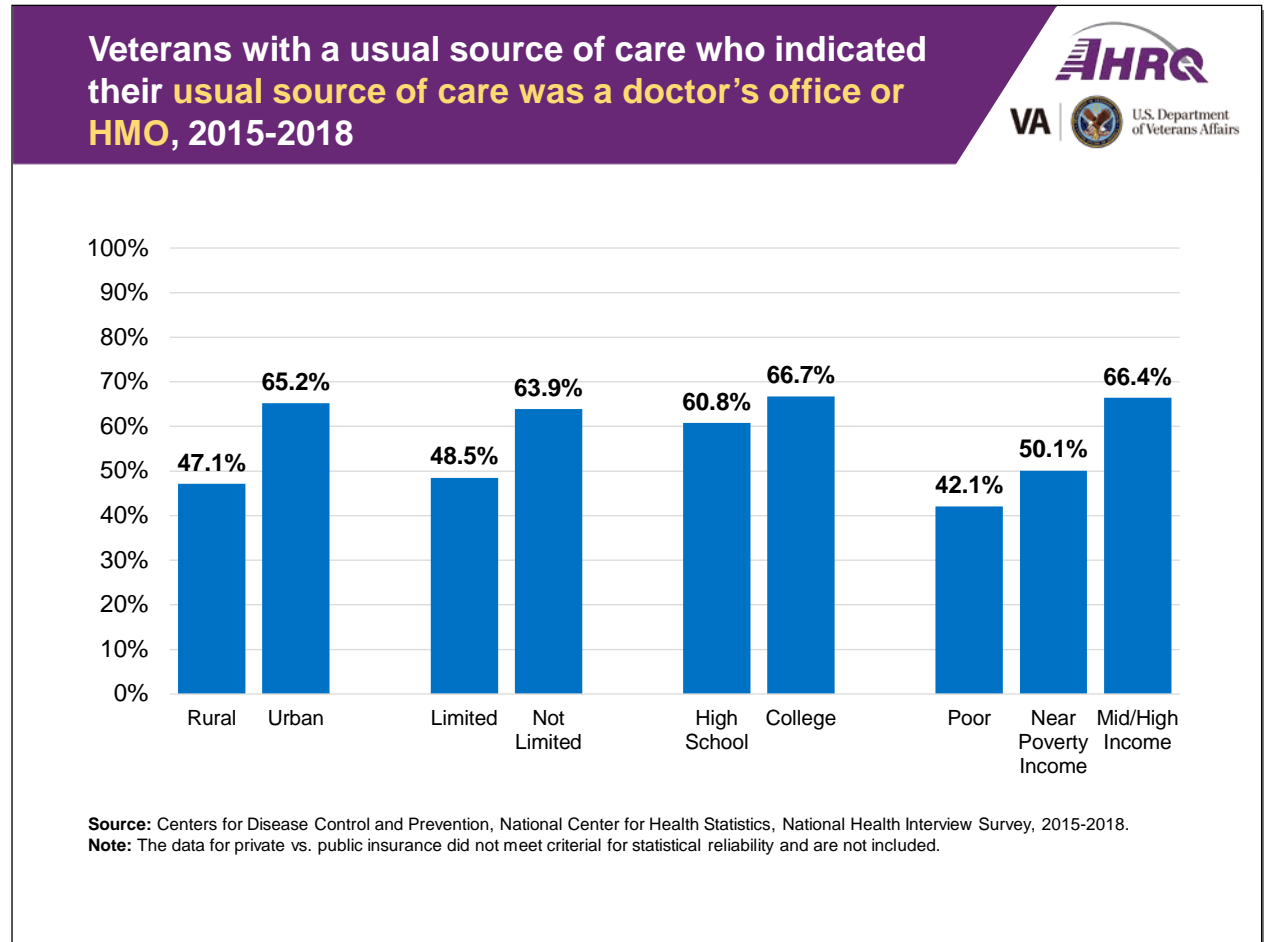
- Gender

- ♦ There were no statistically significant differences between female Veterans and male Veterans with a usual source of care who indicated their usual source was a doctor's office or HMO (66.1% vs. 61.3%).

- Race/Ethnicity

- ♦ There were no statistically significant differences between Hispanic Veterans and non-Hispanic White Veterans with a usual source of care who indicated their usual source was a doctor's office or HMO (61.0% vs. 62.6%).
- ♦ There were no statistically significant differences between non-Hispanic Black Veterans and non-Hispanic White Veterans with a usual source of care who indicated their usual source was a doctor's office or HMO (62.7% vs. 62.6%).

Veterans Whose Usual Source of Care Was a Doctor’s Office or HMO, by Residence Location, Disability, Education, and Income



- Importance:** Having a usual source of care can decrease the probability of inpatient admissions and readmissions and decrease expenditures on emergency department visits for physical health, 30-day readmissions, and behavioral health inpatient admissions. It also had a positive effect on several quality measures (Fullerton, et al., 2019). Veterans may consider a Veterans Affairs Medical Center or community-based outpatient clinic (VAMC/CBOC) as a usual source of care.
- Overall Rate:** In 2015-2018, 62.5% of Veterans age 20+ with a usual source of care indicated their usual source was a doctor’s office or health maintenance organization (HMO) (data not shown).

- **Groups With Disparities:** In 2015-2018, findings show significant disparities by location, activity status, and income but not education.

- **Location**

- ◆ Rural Veterans with a usual source of care were significantly less likely to indicate their usual source was a doctor's office or HMO compared with urban Veterans with a usual source of care (47.1% vs. 65.2%).

- **Activity Status**

- ◆ Veterans with limited activity and a usual source of care were significantly less likely to indicate their usual source was a doctor's office or HMO compared with Veterans without limited activity and a usual source of care (48.5% vs. 63.9%).

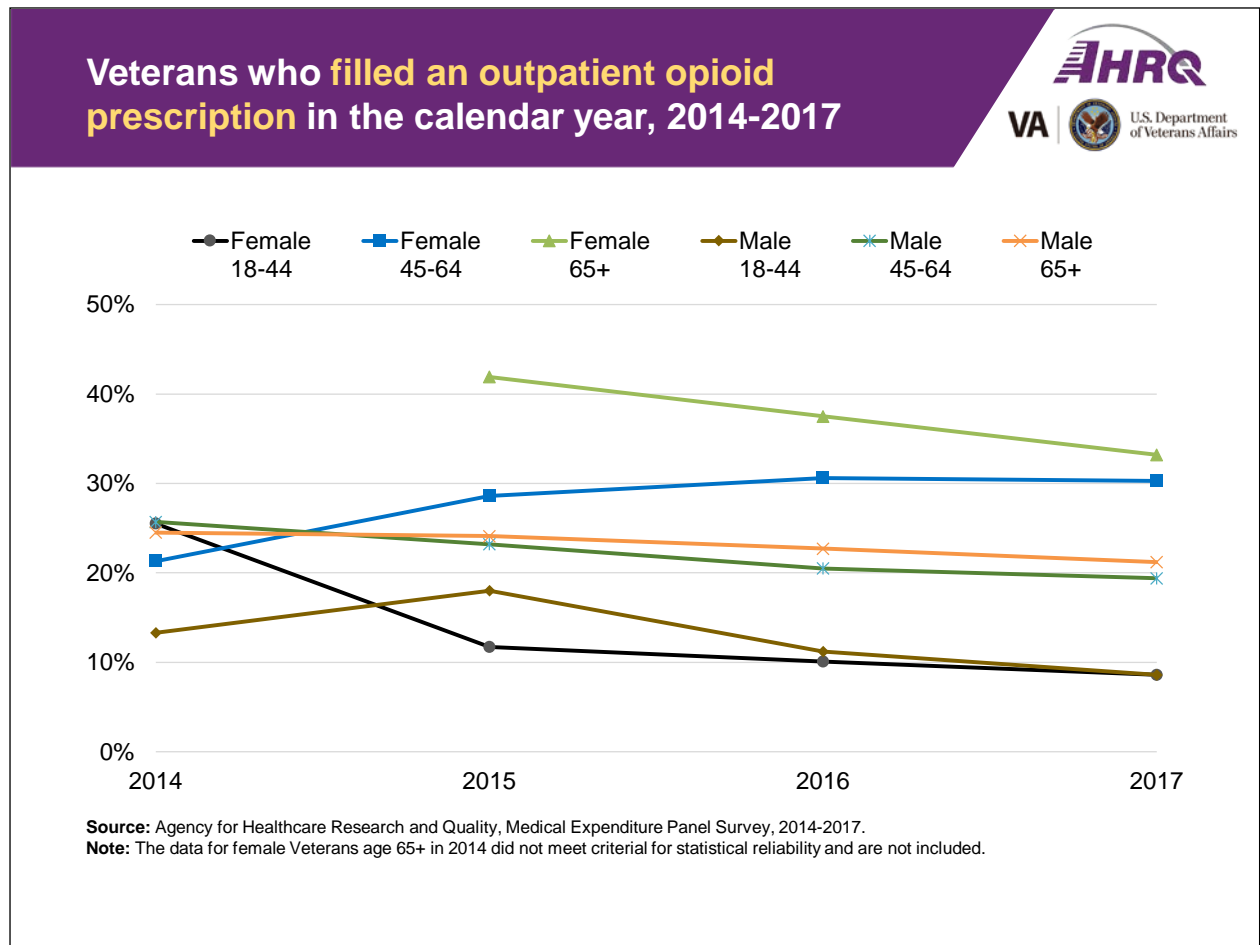
- **Education**

- ◆ There were no statistically significant differences between Veterans with a high school degree or less education and Veterans with at least some college in the percentage with a usual source of care who indicated their usual source was a doctor's office or HMO (60.8% vs. 66.7%).

- **Income**

- ◆ Veterans with incomes below the poverty line and a usual source of care were significantly less likely to indicate their usual source was a doctor's office or HMO compared with Veterans with middle or high incomes and a usual source of care (42.1% vs. 66.4%).
- ◆ Veterans with incomes just above the poverty line and a usual source of care were significantly less likely to indicate their usual source was a doctor's office or HMO compared with Veterans with middle or high incomes and a usual source of care (50.1% vs. 66.4%).

Opioid Prescriptions Among Veterans



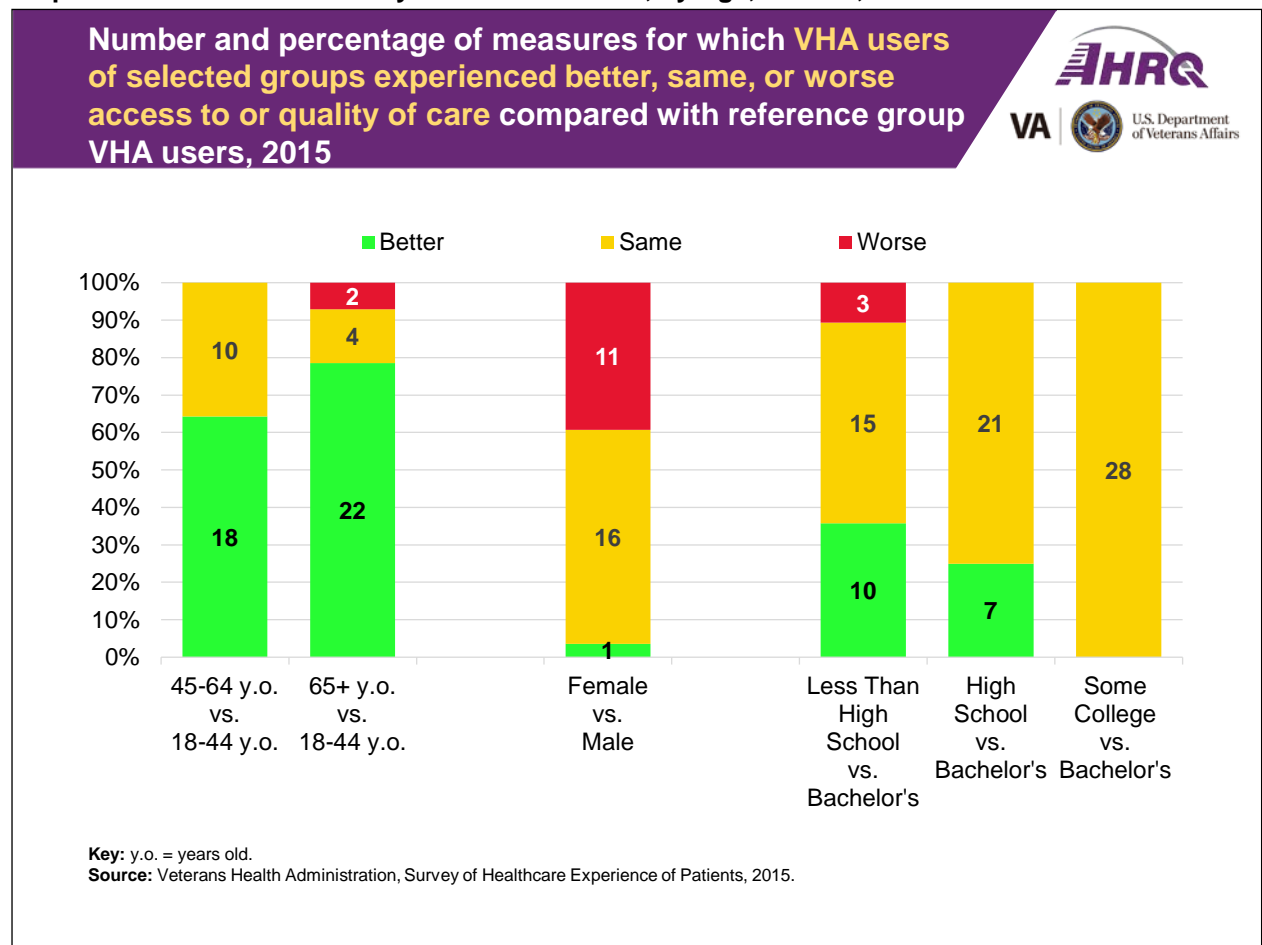
- **Importance:** Prescription opioids are often used to treat chronic and acute pain and, when used appropriately, can be an important component of treatment. However, serious risks are associated with their use, and it is essential to carefully consider the risks of using prescription opioids alongside their benefits. These risks include misuse, opioid use disorder (addiction), overdoses, and death (CDC, 2020).
- **Overall Rate:** In 2014-2017, 21.7% of Veterans filled an outpatient opioid prescription (data not shown).
- **Trends:** From 2014-2017, findings show varying trends across female and male Veterans in different age categories.
 - Female Veterans ages 18-44 had a decrease in outpatient opioid prescriptions from 2014 to 2017 (25.5% to 8.6%).
 - Female Veterans ages 45-64 had an increase in outpatient opioid prescriptions from 2014 to 2017 (21.3% to 30.3%).
 - Female Veterans age 65+ had a decrease in outpatient opioid prescriptions from 2015 to 2017 (41.9% to 33.2%).

- Male Veterans ages 18-44 had a decrease in outpatient opioid prescriptions from 2014 to 2017 (13.3% to 8.6%).
- Male Veterans ages 45-64 had a decrease in outpatient opioid prescriptions from 2014 to 2017 (25.7% to 19.4%).
- Male Veterans age 65+ had a decrease in outpatient opioid prescriptions from 2014 to 2017 (24.5% to 21.2%).

CONTRAST 3 FINDINGS: DISPARITIES WITHIN VHA USERS

Access and Quality Measures

Disparities in Access or Quality Within VHA Users, by Age, Gender, and Education



- **Importance:** The goal of quality improvement is to produce better quality of and access to care, and ultimately improved patient outcomes, regardless of VHA user characteristics.

- **Findings:** For the most recent data year (2015), findings show that age, education, and gender disparities persist.

- Age

- ◆ VHA users ages 45-64 experienced better care than VHA users ages 18-44 on 18 measures (64%) and similar care on 10 measures (36%).
- ◆ VHA users age 65+ experienced better care than VHA users ages 18-44 on 22 measures (79%), similar care on 4 measures (14%), and worse care on 2 measures (7%).

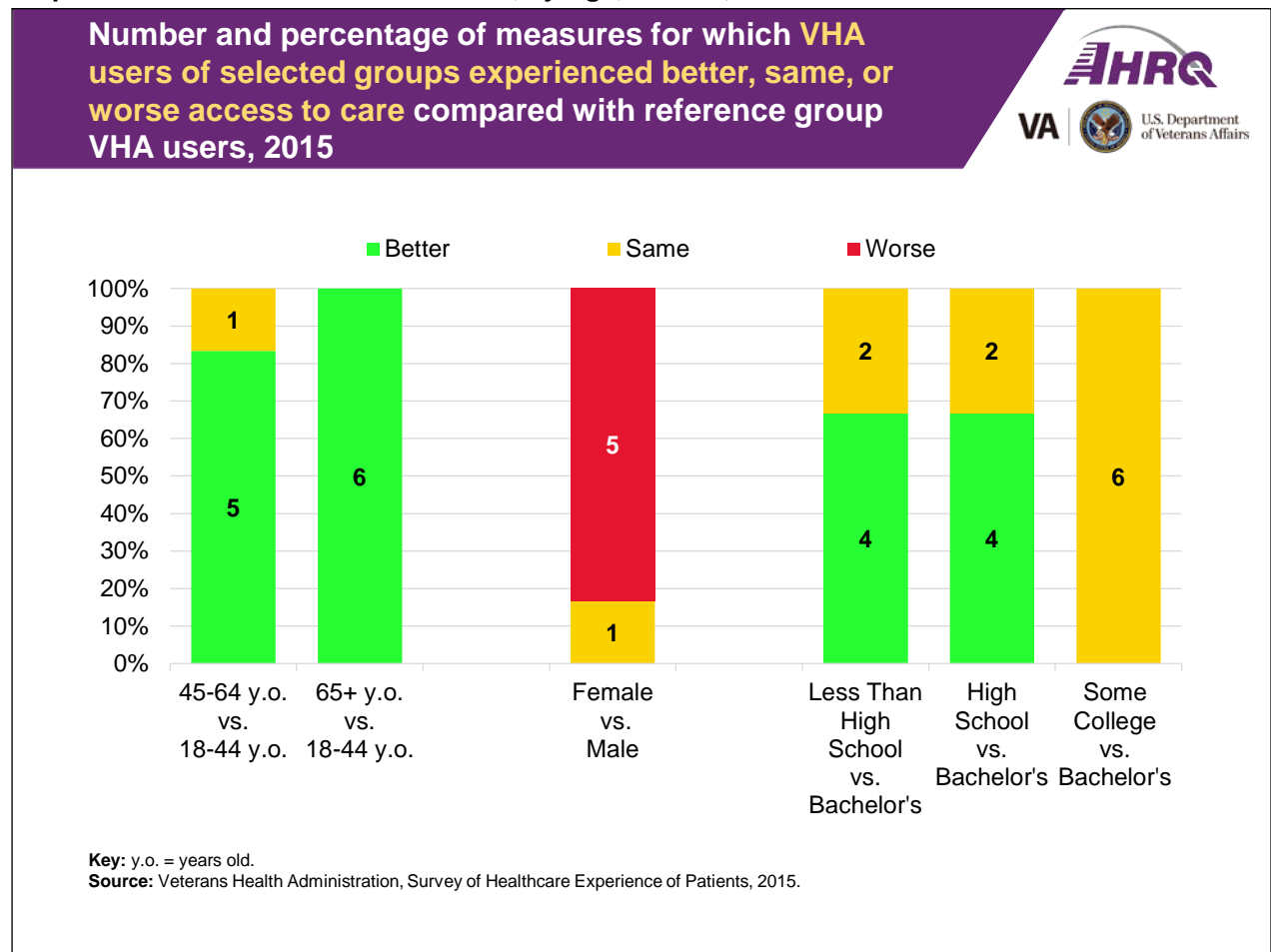
- Gender

- ◆ Female VHA users experienced better care than male VHA users on 1 measure (4%), similar care on 16 measures (57%), and worse care on 11 measures (39%).

- Education

- ◆ VHA users with less than a high school education experienced better care than VHA users with a bachelor's degree on 10 measures (36%), similar care on 15 measures (54%), and worse care on 3 measures (11%).
- ◆ VHA users with a high school education experienced better care than VHA users with a bachelor's degree on 7 measures (25%) and similar care on 21 measures (75%).
- ◆ VHA users with some college education experienced care similar to VHA users with a bachelor's degree on 28 measures (100%).

Disparities in Access Within VHA Users, by Age, Gender, and Education



- **Importance:** The goal of quality improvement is to produce better quality of and access to care, and ultimately improved patient outcomes, regardless of VHA user characteristics.
- **Findings:** For the most recent data year (2015), findings show that age, education, and gender disparities persist across ACCESS measures.

■ Age

- ♦ VHA users ages 45-64 experienced better care than VHA users ages 18-44 on 5 measures (83%) and similar care on 1 measure (17%).
- ♦ VHA users age 65+ experienced better care than VHA users ages 18-44 on 6 measures (100%).

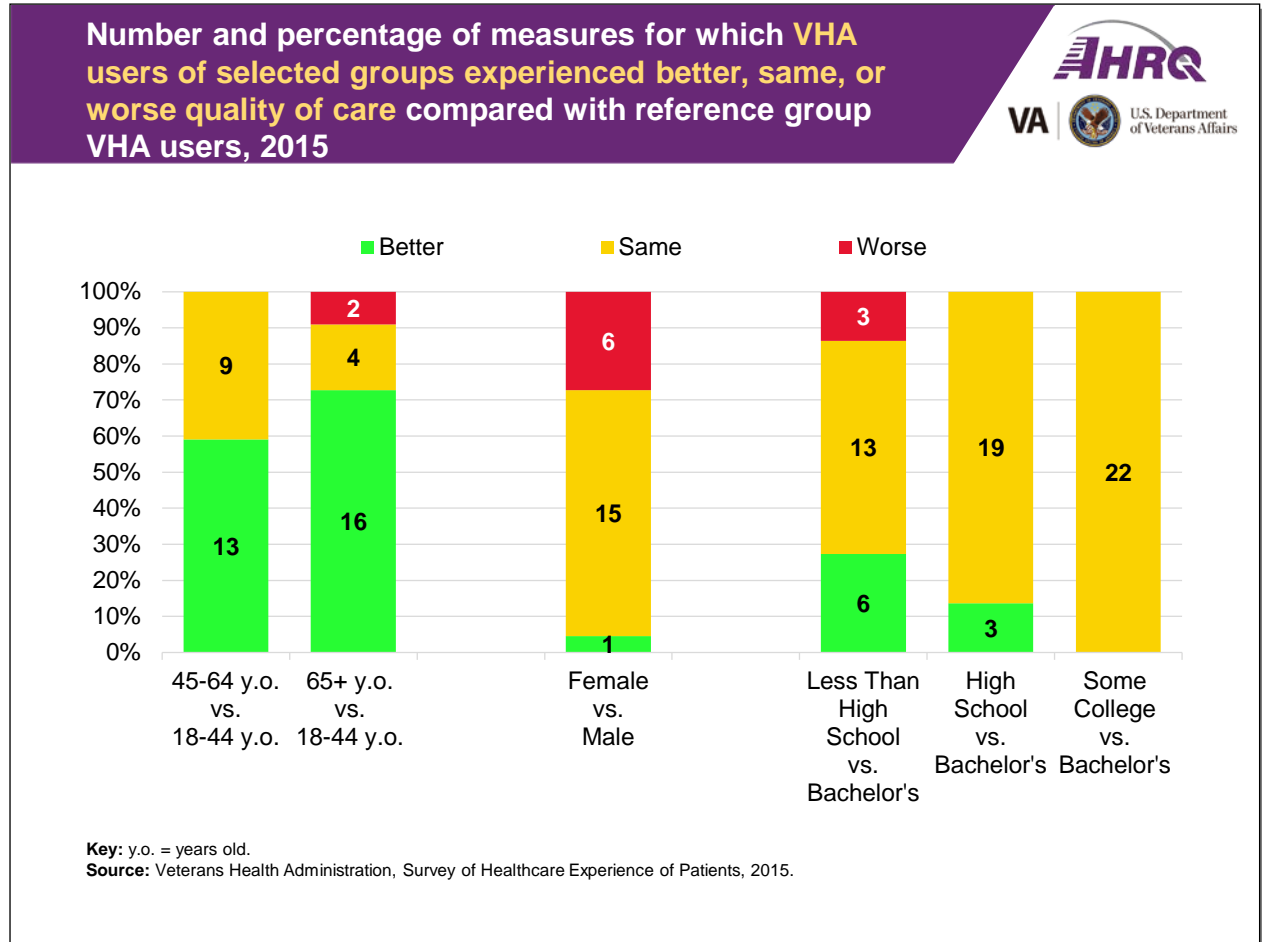
■ Gender

- ◆ Female VHA users experienced care similar to male VHA users on 1 measure (17%) and worse care on 5 measures (83%).

■ Education

- ◆ VHA users with less than a high school education experienced better care than VHA users with a bachelor’s degree on 4 measures (67%) and similar care on 2 measures (33%).
- ◆ VHA users with a high school education experienced better care than VHA users with a bachelor’s degree on 4 measures (67%) and similar care on 2 measures (33%).
- ◆ VHA users with some college education experienced care similar to VHA users with a bachelor’s degree on 6 measures (100%).

Disparities in Quality Within VHA Users, by Age, Gender, and Education



- **Importance:** The goal of quality improvement is to produce better quality of and access to care, and ultimately improved patient outcomes, regardless of VHA user characteristics.
- **Findings:** For the most recent data year (2015), findings show that age, education, and gender disparities persist across QUALITY measures.

■ Age

- ♦ VHA users ages 45-64 experienced better care than VHA users ages 18-44 on 13 measures (59%) and similar care on 9 measures (41%).
- ♦ VHA users age 65+ experienced better care than VHA users ages 18-44 on 16 measures (73%), similar care on 4 measures (18%), and worse care on 2 measures (9%).

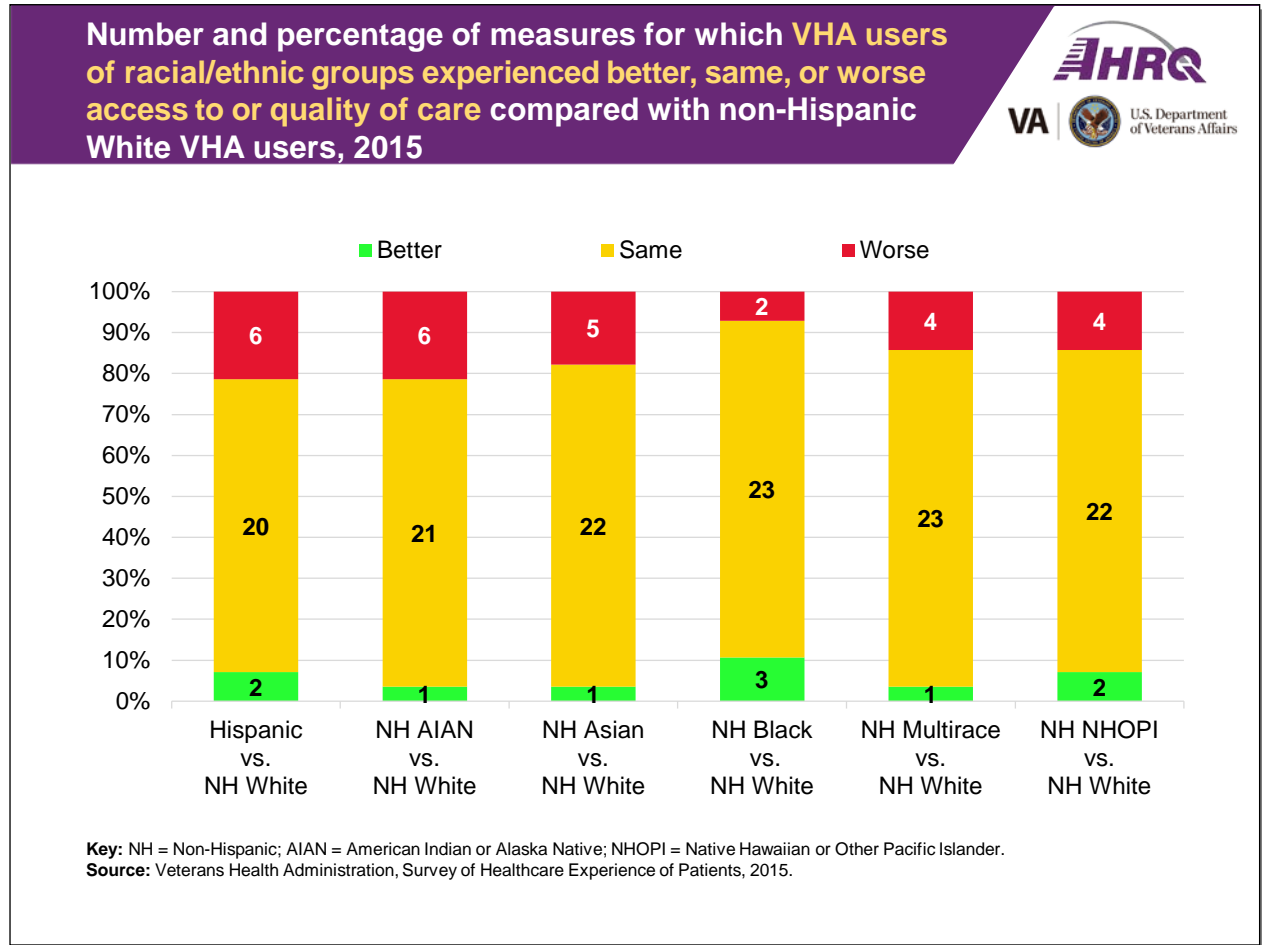
■ Gender

- ♦ Female VHA users experienced better care than male VHA users on 1 measure (4%), similar care on 15 measures (68%), and worse care on 6 measures (27%).

■ Education

- ♦ VHA users with less than a high school education experienced better care than VHA users with a bachelor's degree on 6 measures (27%), similar care on 13 measures (59%), and worse care on 3 measures (14%).
- ♦ VHA users with a high school education experienced better care than VHA users with a bachelor's degree on 3 measures (14%) and similar care on 19 measures (86%).
- ♦ VHA users with some college education experienced care similar to VHA users with a bachelor's degree on 22 measures (100%).

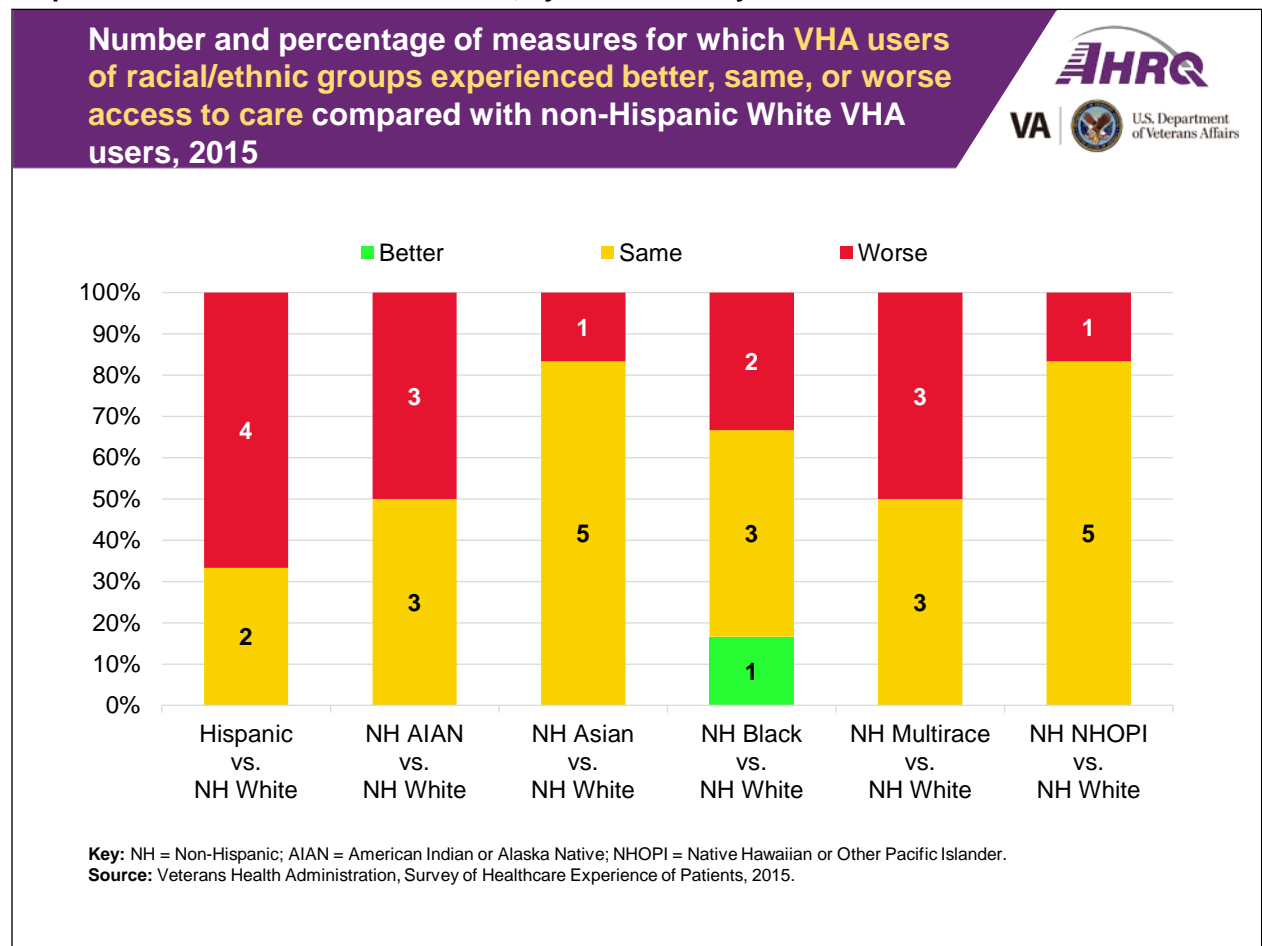
Disparities in Access or Quality Within VHA Users, by Race/Ethnicity



- **Importance:** The goal of quality improvement is to produce better quality of and access to care, and ultimately improved patient outcomes, regardless of VHA user characteristics.
- **Findings:** For the most recent data year (2015), findings show that racial/ethnic disparities persist.
 - Hispanic VHA users experienced better care than non-Hispanic White VHA users on 2 measures (7%), similar care on 20 measures (71%), and worse care on 6 measures (21%).
 - Non-Hispanic American Indian/Alaska Native VHA users experienced better care than non-Hispanic White VHA users on 1 measure (4%), similar care on 21 measures (75%), and worse care on 6 measures (21%).
 - Non-Hispanic Asian VHA users experienced better care than non-Hispanic White VHA users on 1 measure (4%), similar care on 22 measures (79%), and worse care on 5 measures (18%).

- Non-Hispanic Black VHA users experienced better care than non-Hispanic White VHA users on 3 measures (11%), similar care on 23 measures (82%), and worse care on 2 measures (7%).
- Non-Hispanic multirace VHA users experienced better care than non-Hispanic White VHA users on 1 measure (4%), similar care on 23 measures (82%), and worse care on 4 measures (14%).
- Non-Hispanic Native Hawaiian/Other Pacific Islander VHA users experienced better care than non-Hispanic White VHA users on 2 measures (7%), similar care on 22 measures (79%), and worse care on 4 measures (14%).

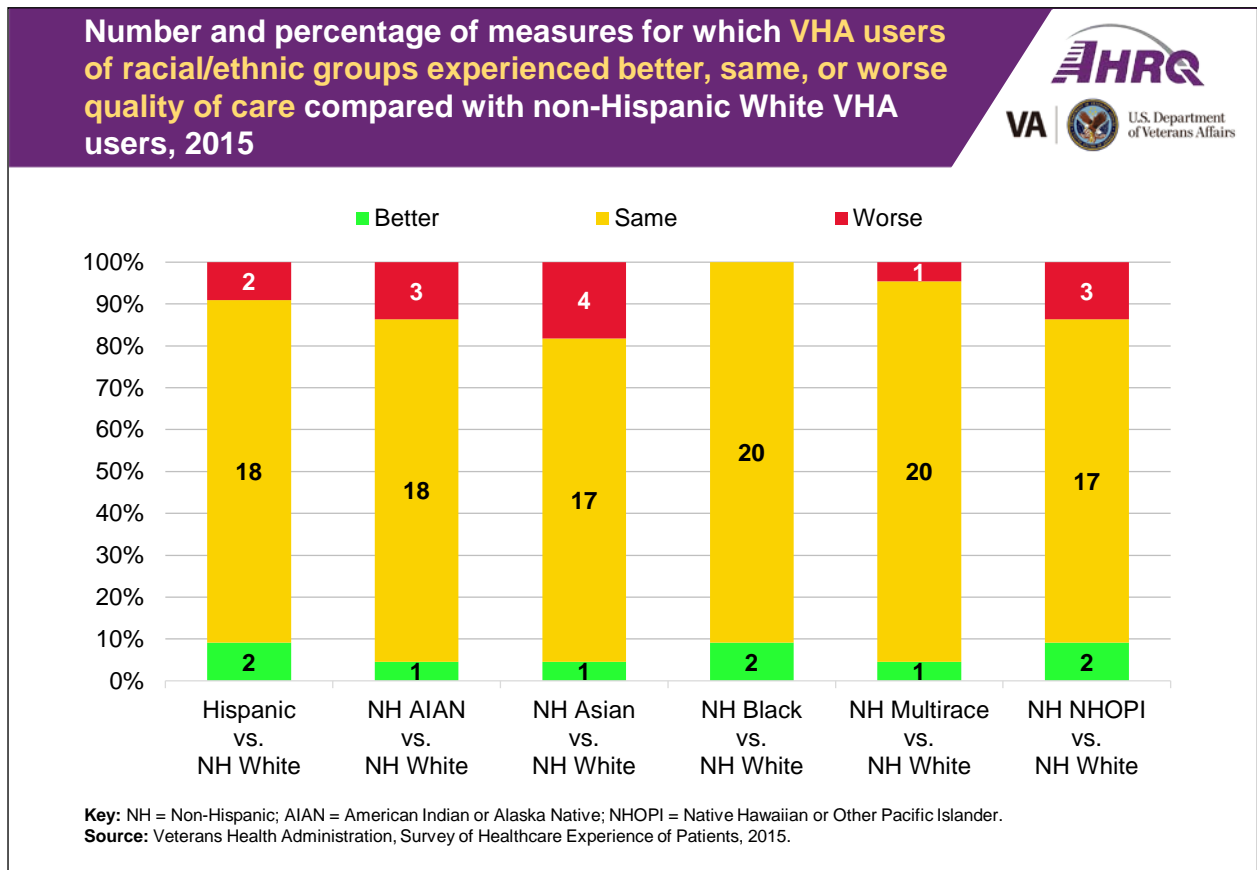
Disparities in Access Within VHA Users, by Race/Ethnicity



- **Importance:** The goal of quality improvement is to produce better quality of and access to care, and ultimately improved patient outcomes, regardless of VHA user characteristics.

- Findings:** For the most recent data year (2015), findings show that racial/ethnic disparities persist across ACCESS measures.
 - Hispanic VHA users experienced care similar to non-Hispanic White VHA users on 2 measures (33%) and worse care on 4 measures (67%).
 - Non-Hispanic American Indian/Alaska Native VHA users experienced care similar to non-Hispanic White VHA users on 3 measures (50%) and worse care on 3 measures (50%).
 - Non-Hispanic Asian VHA users experienced care similar to non-Hispanic White VHA users on 5 measures (83%) and worse care on 1 measure (17%).
 - Non-Hispanic Black VHA users experienced better care than non-Hispanic White VHA users on 1 measure (17%), similar care on 3 measures (50%), and worse care on 2 measures (33%).
 - Non-Hispanic multirace VHA users experienced care similar to non-Hispanic White VHA users on 3 measures (50%) and worse care on 3 measures (50%).
 - Non-Hispanic Native Hawaiian/Other Pacific Islander VHA users experienced care similar to non-Hispanic White VHA users on 5 measures (83%) and worse care on 1 measure (17%).

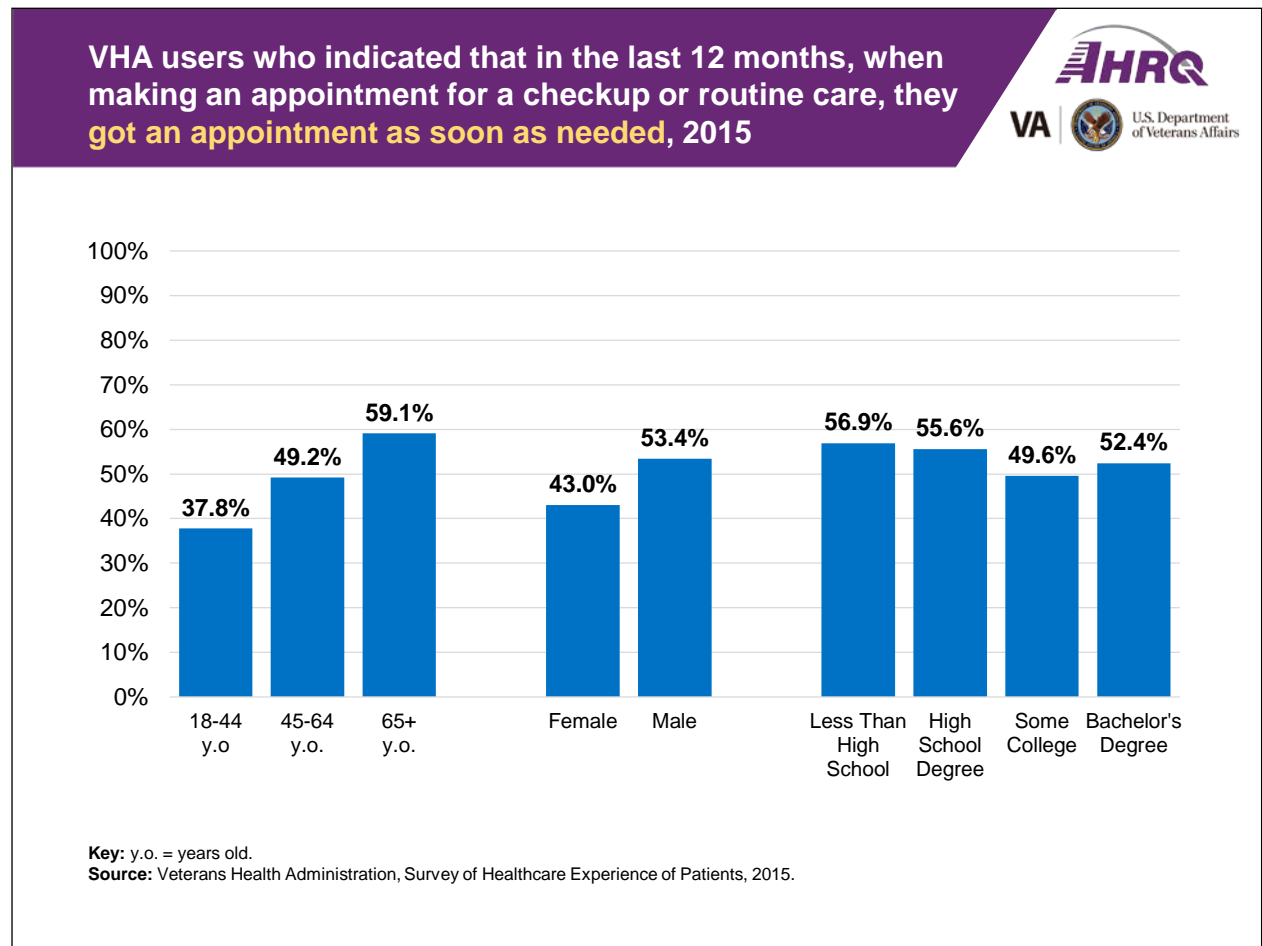
Disparities in Quality Within VHA Users, by Race/Ethnicity



- **Importance:** The goal of quality improvement is to produce better quality of and access to care, and ultimately improved patient outcomes, regardless of VHA user characteristics.
- **Findings:** For the most recent data year (2015), findings show that racial/ethnic disparities persist across QUALITY measures.
 - Hispanic VHA users experienced better care than non-Hispanic White VHA users on 2 measures (9%), similar care on 18 measures (82%), and worse care on 2 measures (9%).
 - Non-Hispanic American Indian/Alaska Native VHA users experienced better care than non-Hispanic White VHA users on 1 measure (4%), similar care on 18 measures (82%), and worse care on 3 measures (14%).
 - Non-Hispanic Asian VHA users experienced better care than non-Hispanic White VHA users on 1 measure (4%), similar care on 17 measures (77%), and worse care on 4 measures (18%).
 - Non-Hispanic Black VHA users experienced better care than non-Hispanic White VHA users on 2 measures (9%) and similar care on 20 measures (91%).
 - Non-Hispanic multirace VHA users experienced better care than non-Hispanic White VHA users on 1 measure (4%), similar care on 20 measures (91%), and worse care on 1 measure (4%).
 - Non-Hispanic Native Hawaiian/Other Pacific Islander VHA users experienced better care than non-Hispanic White VHA users on 2 measures (9%), similar care on 17 measures (77%), and worse care on 3 measures (14%).

Timely Access to Care

VHA Users Who Got an Appointment for Routine Care As Soon as Needed, by Age, Gender, and Education



- **Importance:** Timely delivery of appropriate care is a measure of the healthcare system’s capacity to provide care quickly after a need is recognized (Smart and Titus, 2011).
- **Overall Rate:** In 2015, 52.4% of VHA users, when making an appointment for a checkup or routine care, got an appointment as soon as needed (data not shown).
- **Groups With Disparities:** In 2015, findings show significant disparities by age and gender but not education.

■ Age

- ♦ VHA users ages 45-64 were significantly more likely to indicate they got a routine care appointment as soon as needed compared with VHA users ages 18-44 (49.2% vs. 37.8%).

- ♦ VHA users age 65+ were significantly more likely to indicate they got a routine care appointment as soon as needed compared with VHA users ages 18-44 (59.1% vs. 37.8%).

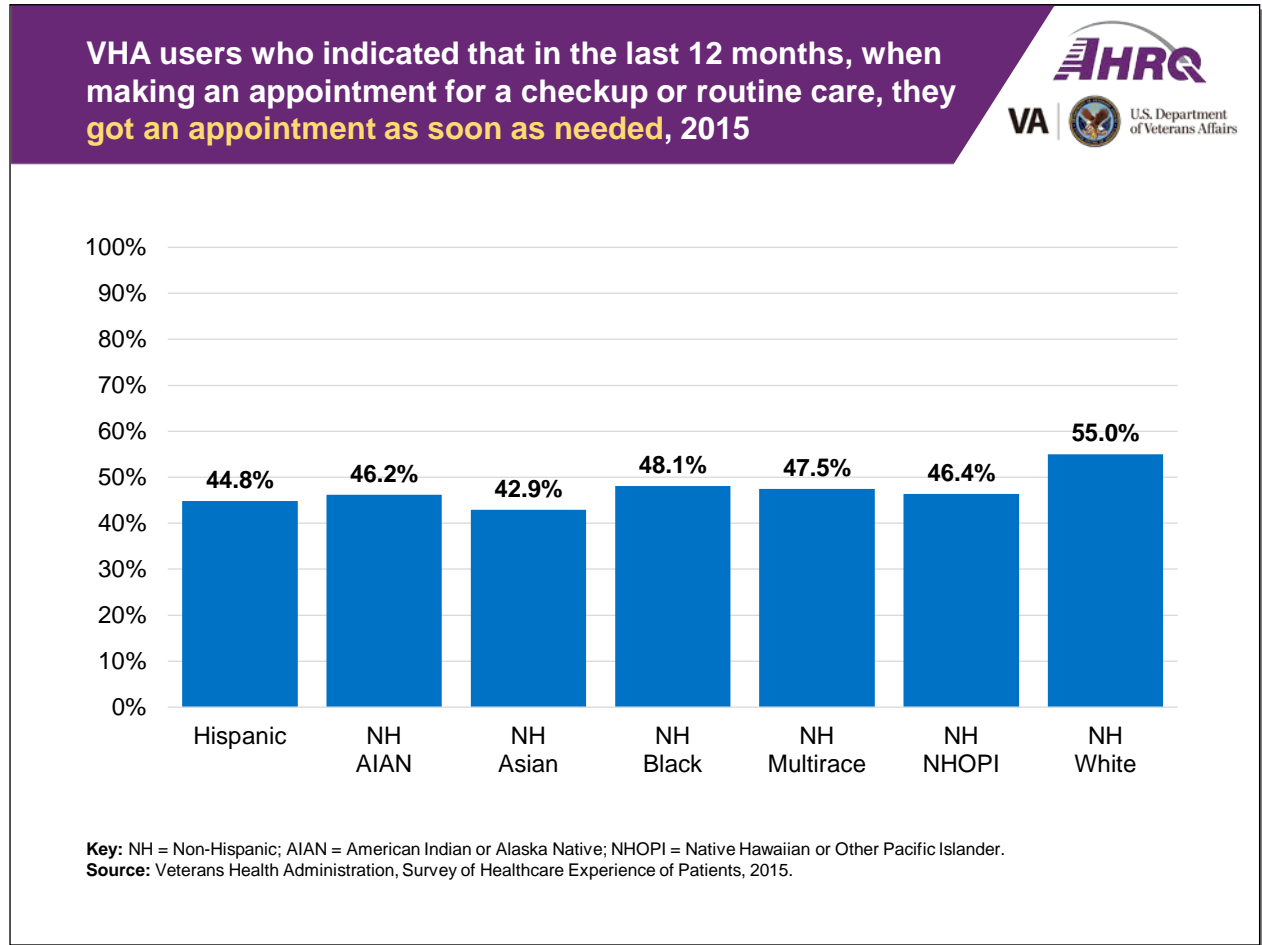
■ Gender

- ♦ Female VHA users were significantly less likely to indicate they got a routine care appointment as soon as needed compared with male VHA users (43.0% vs. 53.4%).

■ Education

- ♦ There were no statistically significant differences between VHA users with less than a high school degree and VHA users with a bachelor's degree in the percentage who indicated they got a routine care appointment as soon as needed (56.9% vs. 52.4%).
- ♦ There were no statistically significant differences between VHA users with a high school degree and VHA users with a bachelor's degree in the percentage who indicated they got a routine care appointment as soon as needed (55.6% vs. 52.4%).
- ♦ There were no statistically significant differences between VHA users with some college education and VHA users with a bachelor's degree in the percentage who indicated they got a routine care appointment as soon as needed (49.6% vs. 52.4%).

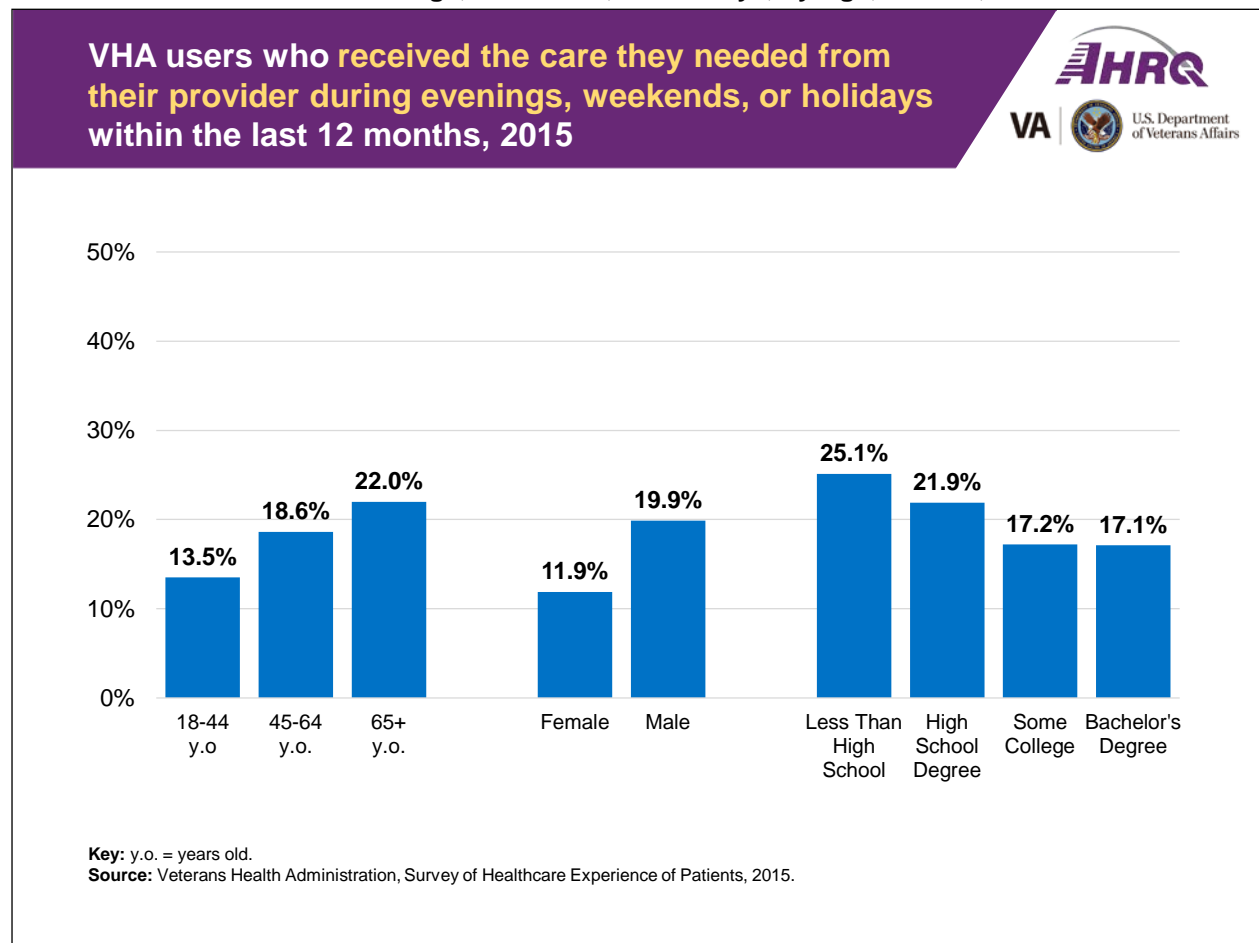
VHA Users Who Got an Appointment for Routine Care As Soon as Needed, by Race/Ethnicity



- **Importance:** Timely delivery of appropriate care is a measure of the healthcare system’s capacity to provide care quickly after a need is recognized (Smart and Titus, 2011).
- **Overall Rate:** In 2015, 52.4% of VHA users, when making an appointment for a checkup or routine care, got an appointment as soon as needed (data not shown).
- **Groups With Disparities:** In 2015, findings show significant racial/ethnic disparities.
 - Hispanic VHA users were significantly less likely to indicate they got a routine care appointment as soon as needed compared with non-Hispanic White VHA users (44.8% vs. 55.0%).
 - Non-Hispanic American Indian/Alaska Native VHA users were significantly less likely to indicate they got a routine care appointment as soon as needed compared with non-Hispanic White VHA users (46.2% vs. 55.0%).

- Non-Hispanic Asian VHA users were significantly less likely to indicate they got a routine care appointment as soon as needed compared with non-Hispanic White VHA users (42.9% vs. 55.0%).
- Non-Hispanic Black VHA users were significantly less likely to indicate they got a routine care appointment as soon as needed compared with non-Hispanic White VHA users (48.1% vs. 55.0%).
- Non-Hispanic multirace VHA users were significantly less likely to indicate they got a routine care appointment as soon as needed compared with non-Hispanic White VHA users (47.5% vs. 55.0%).
- Non-Hispanic Native Hawaiian/Other Pacific Islander VHA users were significantly less likely to indicate they got a routine care appointment as soon as needed compared with non-Hispanic White VHA users (46.4% vs. 55.0%).

VHA Users Who Got Care Evenings, Weekends, or Holidays, by Age, Gender, and Education

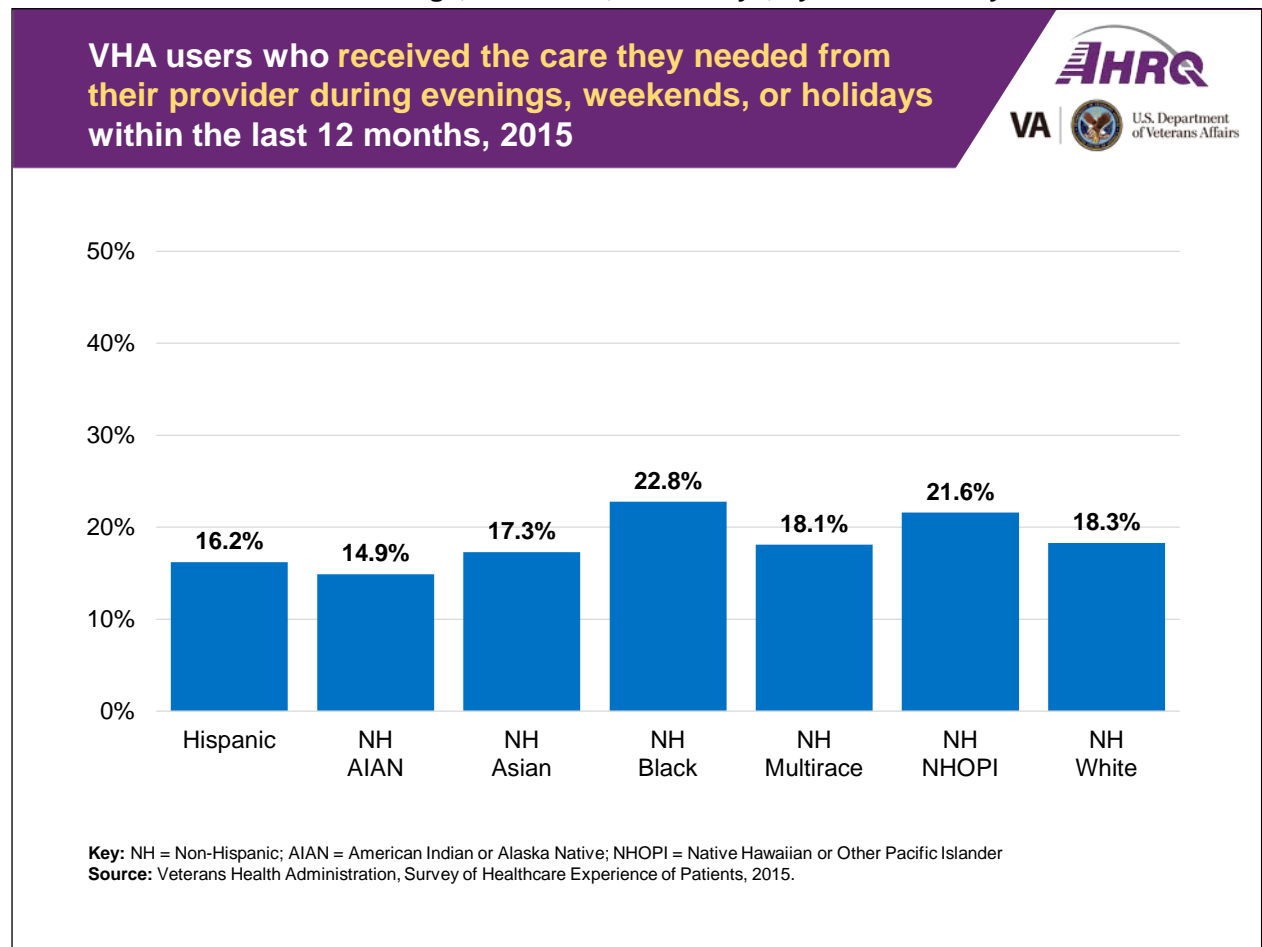


- **Importance:** An analysis of the 2010 Health Tracking Household Survey found that among people with a usual source of primary care, 40.2% reported that their practice offered extended hours, such as at night or on weekends. The analysis also

found that one in five people who attempted after-hours contact with their primary care provider reported it was “very difficult” or “somewhat difficult” to reach a clinician. Those who reported less difficulty contacting a clinician after hours had significantly fewer emergency department visits (30.4% compared with 37.7%) and lower rates of unmet medical need (6.1% compared with 13.7%) than people who experienced more difficulty (O’Malley, 2013).

- **Overall Rate:** In 2015, 18.9% of VHA users received care they needed during evenings, weekends, or holidays (data not shown).
- **Groups With Disparities:** In 2015, findings show significant disparities by age, gender, and education.
 - **Age**
 - ♦ VHA users ages 45-64 were significantly more likely to receive care they needed during evenings, weekends, or holidays compared with VHA users ages 18-44 (18.6% vs. 13.5%).
 - ♦ VHA users age 65+ were significantly more likely to receive care they needed during evenings, weekends, or holidays compared with VHA users ages 18-44 (22.0% vs. 13.5%).
 - **Gender**
 - ♦ Female VHA users were significantly less likely to receive care they needed during evenings, weekends, or holidays compared with male VHA users (11.9% vs. 19.9%).
 - **Education**
 - ♦ VHA users with less than a high school degree were significantly more likely to receive care they needed during evenings, weekends, or holidays compared with VHA users with a bachelor’s degree (25.1% vs. 17.1%).
 - ♦ VHA users with a high school degree were significantly more likely to receive care they needed during evenings, weekends, or holidays compared with VHA users with a bachelor’s degree (21.9% vs. 17.1%).
 - ♦ There were no statistically significant differences between VHA users with some college education and VHA users with a bachelor’s degree who received care they needed during evenings, weekends, or holidays (17.2% vs. 17.1%).

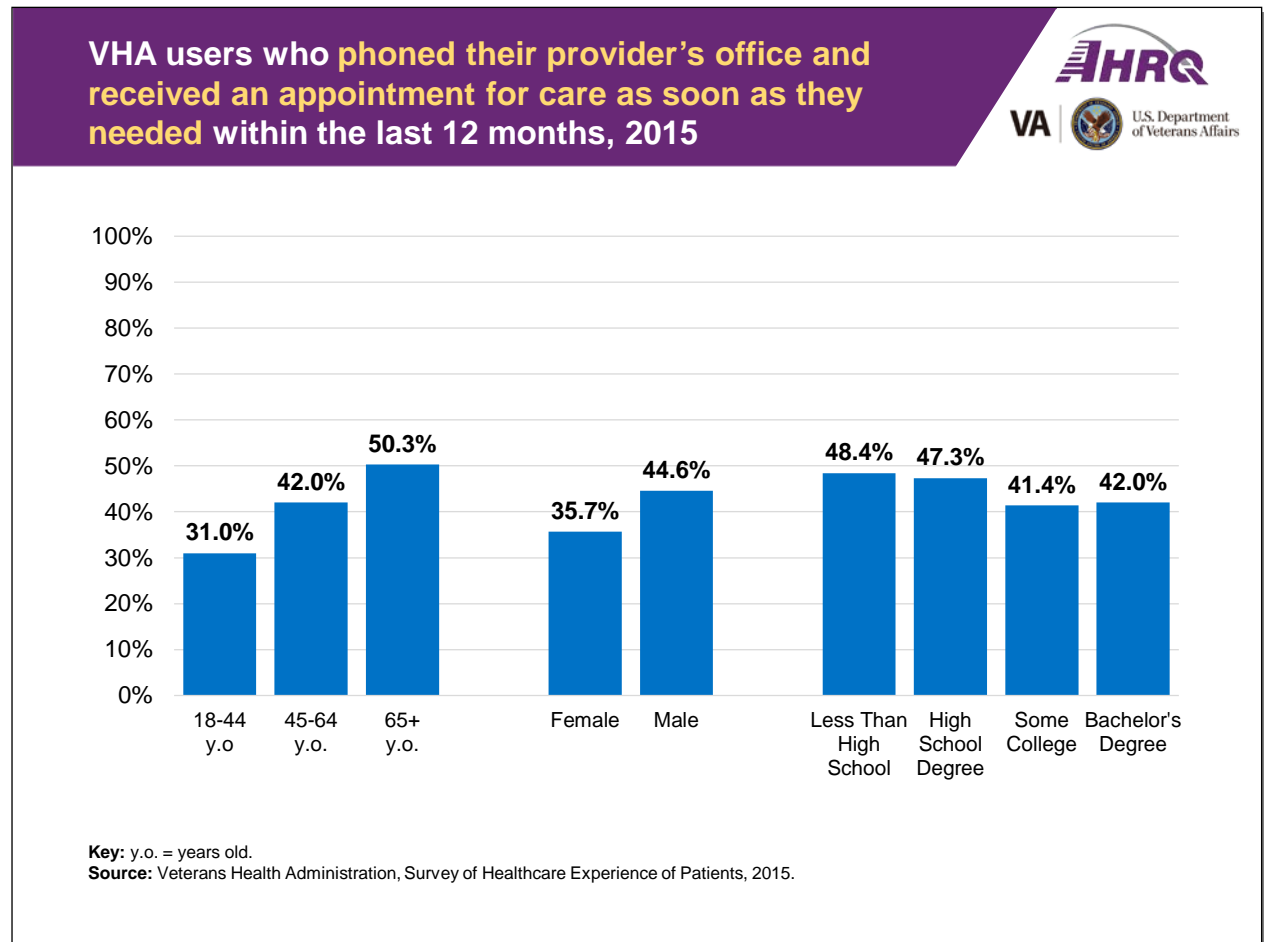
VHA Users Who Got Care Evenings, Weekends, or Holidays, by Race/Ethnicity



- Importance:** An analysis of the 2010 Health Tracking Household Survey found that among people with a usual source of primary care, 40.2% reported that their practice offered extended hours, such as at night or on weekends. The analysis also found that one in five people who attempted after-hours contact with their primary care provider reported it was “very difficult” or “somewhat difficult” to reach a clinician. Those who reported less difficulty contacting a clinician after hours had significantly fewer emergency department visits (30.4% compared with 37.7%) and lower rates of unmet medical need (6.1% compared with 13.7%) than people who experienced more difficulty (O’Malley, 2013).
- Overall Rate:** In 2015, 18.9% of VHA users received care they needed during evenings, weekends, or holidays (data not shown).

- **Groups With Disparities:** In 2015, findings show significant racial/ethnic disparities.
 - Hispanic VHA users were significantly less likely to receive care they needed during evenings, weekends, or holidays compared with non-Hispanic White VHA users (16.2% vs. 18.3%).
 - There were no statistically significant differences between non-Hispanic American Indian/Alaska Native VHA users and non-Hispanic White VHA users in the percentage who received care they needed during evenings, weekends, or holidays (14.9% vs. 18.3%).
 - There were no statistically significant differences between non-Hispanic Asian VHA users and non-Hispanic White VHA users in the percentage who received care they needed during evenings, weekends, or holidays (17.3% vs. 18.3%).
 - Non-Hispanic Black VHA users were significantly more likely to receive care they needed during evenings, weekends, or holidays compared with non-Hispanic White VHA users (22.8% vs. 18.3%).
 - There were no statistically significant differences between non-Hispanic multirace VHA users and non-Hispanic White VHA users in the percentage who received care they needed during evenings, weekends, or holidays (18.1% vs. 18.3%).
 - There were no statistically significant differences between non-Hispanic Native Hawaiian/Other Pacific Islander VHA users and non-Hispanic White VHA users in the percentage who received care they needed during evenings, weekends, or holidays (21.6% vs. 18.3%).

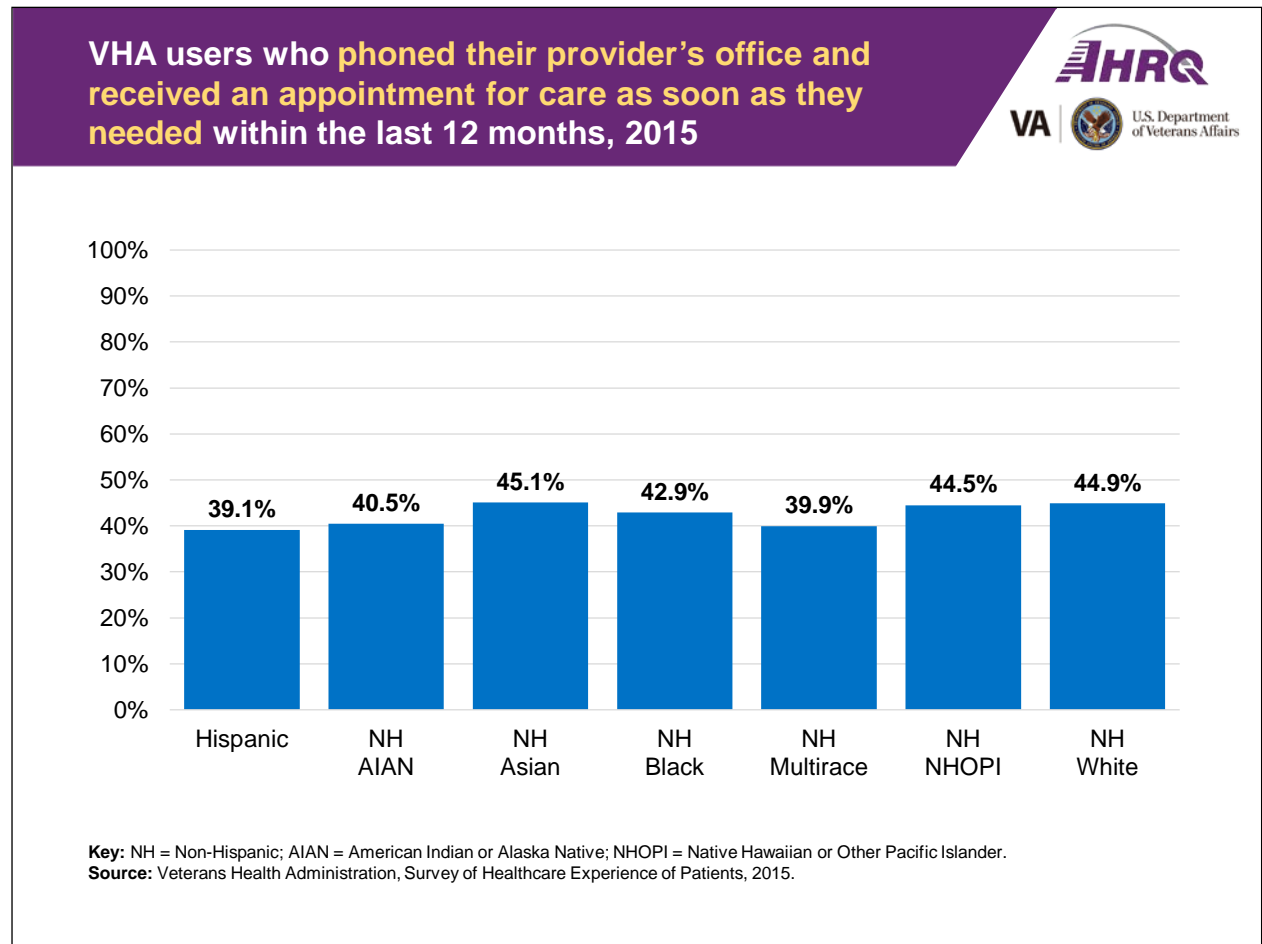
VHA Users Who Phoned Their Provider’s Office and Got an Appointment As Soon As Needed, by Age, Gender, and Education



- **Importance:** Timely delivery of appropriate care is a measure of the healthcare system’s capacity to provide care quickly after a need is recognized (Healthy People 2020). One study examined patient followup care at primary care practices and patient-centered medical homes following emergency department discharge. The study found that only 31% of patients using primary care practices were able to obtain an appointment in 7 days while practices with a patient-centered medical home designation were less likely to offer appointments within 7 days than those without the designation (23.4% vs. 33.1%) (Chou, et. al., 2018).
- **Overall Rate:** In 2015, 43.7% of VHA users, when phoning their provider’s office, got an appointment as soon as needed (data not shown).

- **Groups With Disparities:** In 2015, findings show significant disparities by age, gender, and education.
 - **Age**
 - ♦ VHA users ages 45-64 were significantly more likely to indicate they got an appointment as soon as needed compared with VHA users ages 18-44 (42.0% vs. 31.0%).
 - ♦ VHA users age 65+ were significantly more likely to indicate they got an appointment as soon as needed compared with VHA users ages 18-44 (50.3% vs. 31.0%).
 - **Gender**
 - ♦ Female VHA users were significantly less likely to indicate they got an appointment as soon as needed compared with male VHA users (35.7% vs. 44.6%).
 - **Education**
 - ♦ VHA users with less than a high school degree were significantly more likely to indicate they got an appointment as soon as needed compared with VHA users with a bachelor's degree (48.4% vs. 42.0%).
 - ♦ VHA users with a high school degree were significantly more likely to indicate they got an appointment as soon as needed compared with VHA users with a bachelor's degree (47.3% vs. 42.0%).
 - ♦ There were no statistically significant differences between VHA users with some college education and VHA users with a bachelor's degree in the percentage who indicated they got an appointment as soon as needed (41.4% vs. 42.0%).

VHA Users Who Phoned Their Provider’s Office and Got an Appointment As Soon As Needed, by Race/Ethnicity

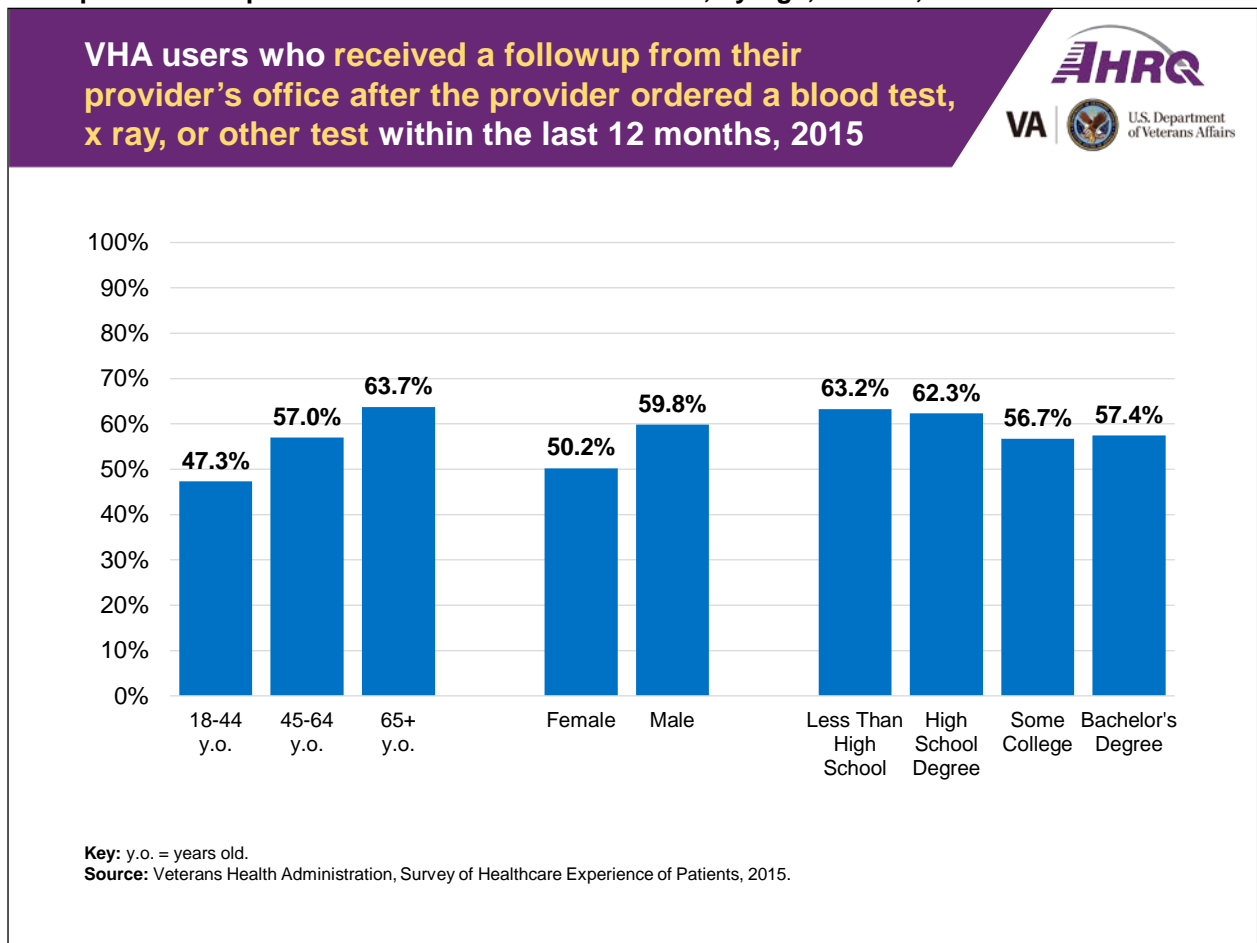


- **Importance:** Timely delivery of appropriate care is a measure of the healthcare system’s capacity to provide care quickly after a need is recognized (Healthy People 2020). One study examined patient followup care at primary care practices and patient-centered medical homes following emergency department discharge. The study found that only 31% of patients using primary care practices were able to obtain an appointment in 7 days while practices with a patient-centered medical home designation were less likely to offer appointments within 7 days than those without the designation (23.4% vs. 33.1%) (Chou, et. al., 2018).
- **Overall Rate:** In 2015, 43.7% of VHA users, when phoning their provider’s office, got an appointment as soon as needed (data not shown).
- **Groups With Disparities:** In 2015, findings show significant racial/ethnic disparities.
 - Hispanic VHA users were significantly less likely to indicate they got an appointment as soon as needed compared with non-Hispanic White VHA users (39.1% vs. 44.9%).

- There were no statistically significant differences between non-Hispanic American Indian/Alaska Native VHA users and non-Hispanic White VHA users who indicated they got an appointment as soon as needed (40.5% vs. 44.9%).
- There were no statistically significant differences between non-Hispanic Asian VHA users and non-Hispanic White VHA users who indicated they got an appointment as soon as needed (45.1% vs. 44.9%).
- There were no statistically significant differences between non-Hispanic Black VHA users and non-Hispanic White VHA users who indicated they got an appointment as soon as needed (42.9% vs. 44.9%).
- Non-Hispanic multirace VHA users were significantly less likely to indicate they got an appointment as soon as needed compared with non-Hispanic White VHA users (39.9% vs. 44.9%).
- There were no statistically significant differences between non-Hispanic Native Hawaiian/Other Pacific Islander VHA users and non-Hispanic White VHA users who indicated they got an appointment as soon as needed (44.5% vs. 44.9%).

Receipt of Followup

Receipt of Followup From Provider’s Office After Tests, by Age, Gender, and Education



- **Importance:** Failure to follow up on test results is an important safety concern that requires urgent attention. In one review of studies quantifying the extent of failure to follow up test results among ambulatory patients, the impact on patient outcomes included missed cancer diagnoses (Callen, 2012). Among hospitalized patients, another systematic review of studies investigated the failure to follow up for inpatients. The review found that the lack of followup of test results for inpatients ranged from 20.0% to 61.6% (Callen, 2011). The consequences of missed test results for patient care included delayed diagnoses such as malignancies, hypothyroidism, hyperthyroidism, and osteoporosis (Callen, 2015).
- **Overall Rate:** In 2015, 58.9% of VHA users received a followup from their provider's office after the provider ordered a blood test, x ray, or other test within the last 12 months (data not shown).
- **Groups With Disparities:** In 2015, findings show significant disparities by age, gender, and education.

- Age

- ◆ VHA users ages 45-64 were significantly more likely to receive followup compared with VHA users ages 18-44 (57.0% vs. 47.3%).
- ◆ VHA users age 65+ were significantly more likely to receive followup compared with VHA users ages 18-44 (63.7% vs. 47.3%).

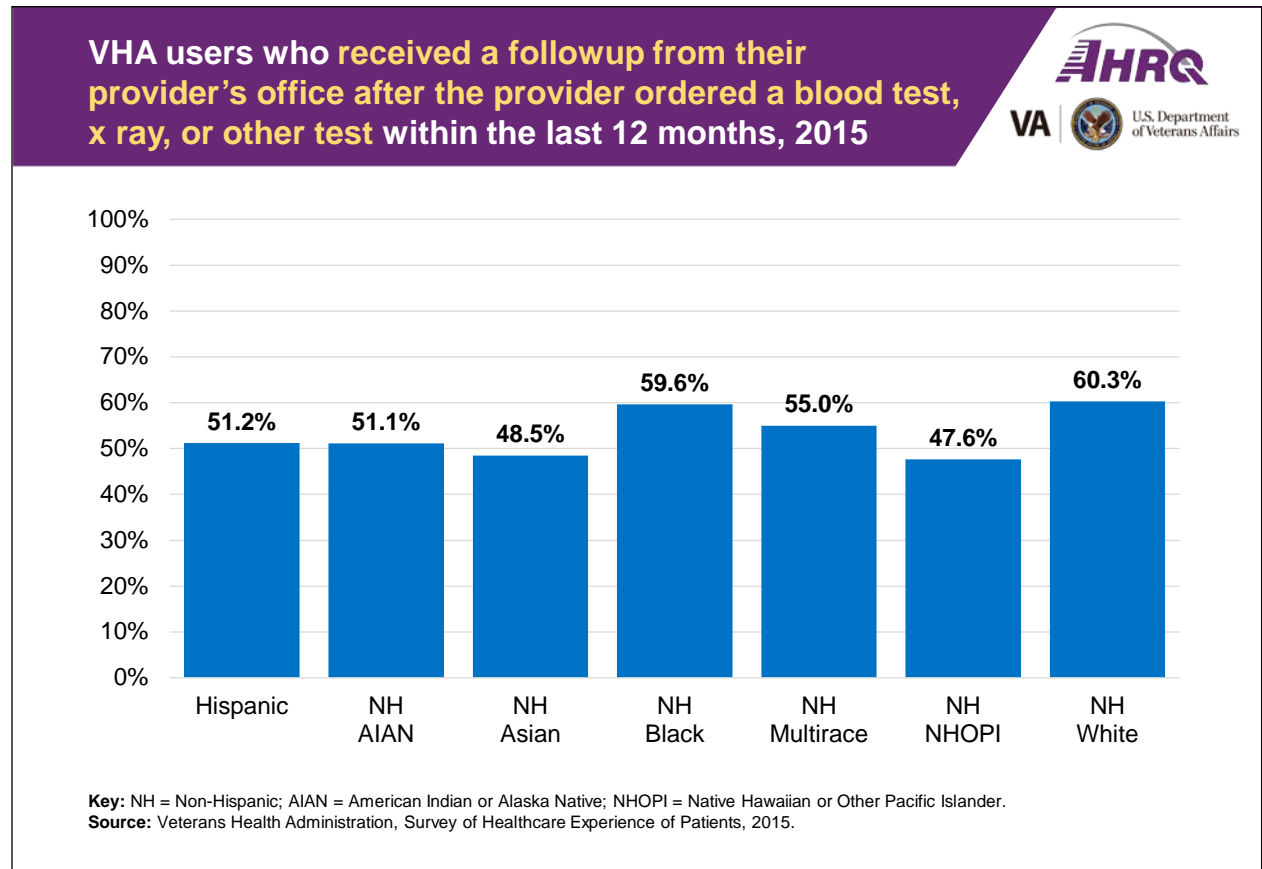
- Gender

- ◆ Female VHA users were significantly less likely to receive followup compared with male VHA users (50.2% vs. 59.8%).

- Education

- ◆ VHA users with less than a high school degree were significantly more likely to receive followup compared with VHA users with a bachelor's degree (63.2% vs. 57.4%).
- ◆ There were no statistically significant differences between VHA users with a high school degree and VHA users with a bachelor's degree in the percentage who received followup (62.3% vs. 57.4%).
- ◆ There were no statistically significant differences between VHA users with some college education and VHA users with a bachelor's degree in the percentage who received followup (56.7% vs. 57.4%).

Receipt of Followup From Provider's Office After Tests, by Race/Ethnicity

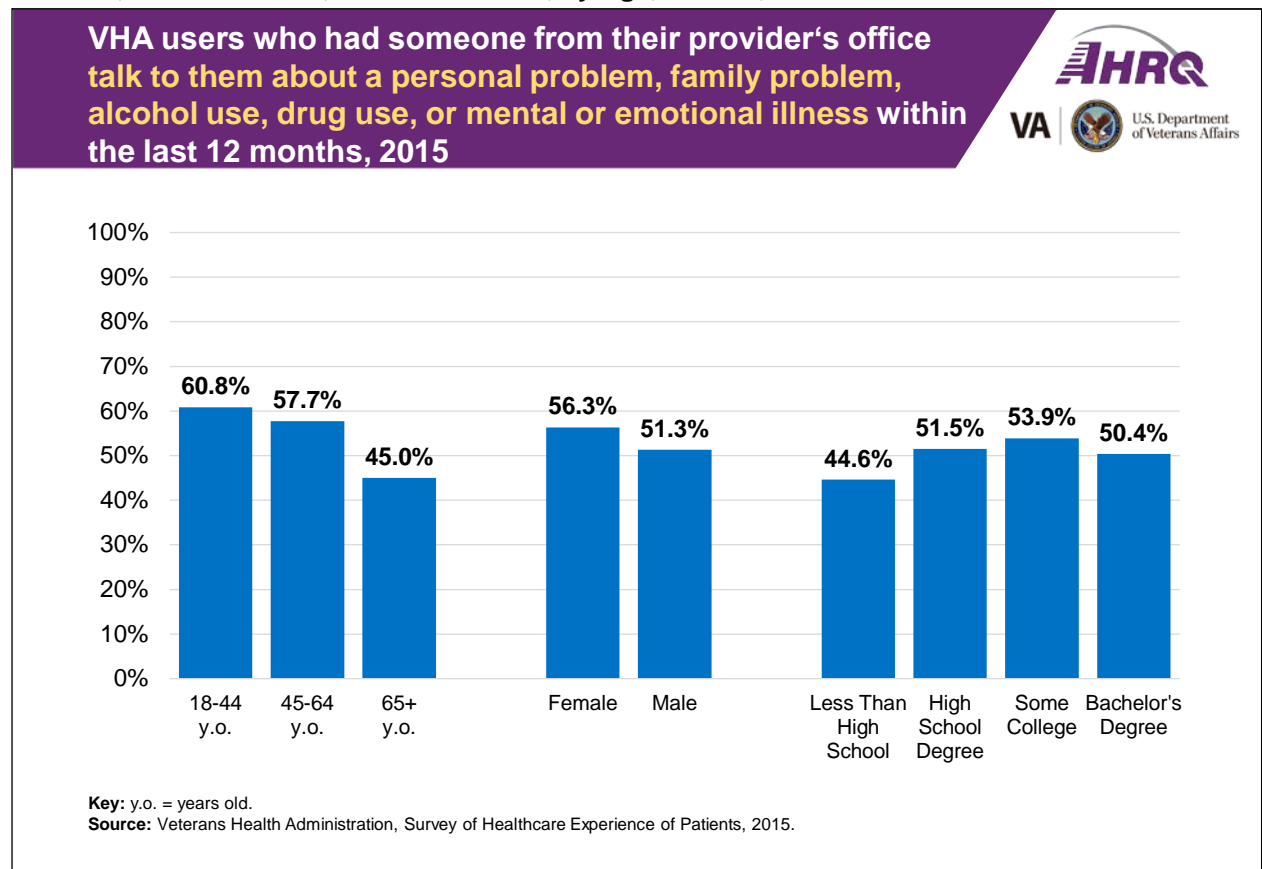


- Importance:** Failure to follow up on test results is an important safety concern that requires urgent attention. In one review of studies quantifying the extent of failure to follow up test results among ambulatory patients, the impact on patient outcomes included missed cancer diagnoses (Callen, 2012). Among hospitalized patients, another systematic review of studies investigated the failure to follow up for inpatients. The review found that the lack of followup of test results for inpatients ranged from 20.0% to 61.6% (Callen, 2011). The consequences of missed test results for patient care included delayed diagnoses such as malignancies, hypothyroidism, hyperthyroidism, and osteoporosis (Callen, 2015).
- Overall Rate:** In 2015, 58.9% of VHA users received a followup from their provider's office after the provider ordered a blood test, x-ray, or other test within the last 12 months (data not shown).
- Groups With Disparities:** In 2015, findings show significant racial/ethnic disparities.
 - Hispanic VHA users were significantly less likely to receive followup compared with non-Hispanic White VHA users (51.2% vs. 60.3%).

- Non-Hispanic American Indian/Alaska Native VHA users were significantly less likely to receive followup compared with non-Hispanic White VHA users (51.1% vs. 60.3%).
- Non-Hispanic Asian VHA users were significantly less likely to receive followup compared with non-Hispanic White VHA users (48.5% vs. 60.3%).
- There were no statistically significant differences between non-Hispanic Black VHA users and non-Hispanic White VHA users in the percentage who received followup (59.6% vs. 60.3%).
- There were no statistically significant differences between non-Hispanic multirace VHA users and non-Hispanic White VHA users in the percentage who received followup (55.0% vs. 60.3%).
- Non-Hispanic Native Hawaiian/Other Pacific Islander VHA users were significantly less likely to receive followup compared with non-Hispanic White VHA users (47.6% vs. 60.3%).

Provider Discussions About Personal Problems, Substance Use, or Mental Illness

VHA Users Who Had Someone From Their Provider’s Office Talk to Them About a Personal Problem, Substance Use, or Mental Illness, by Age, Gender, and Education

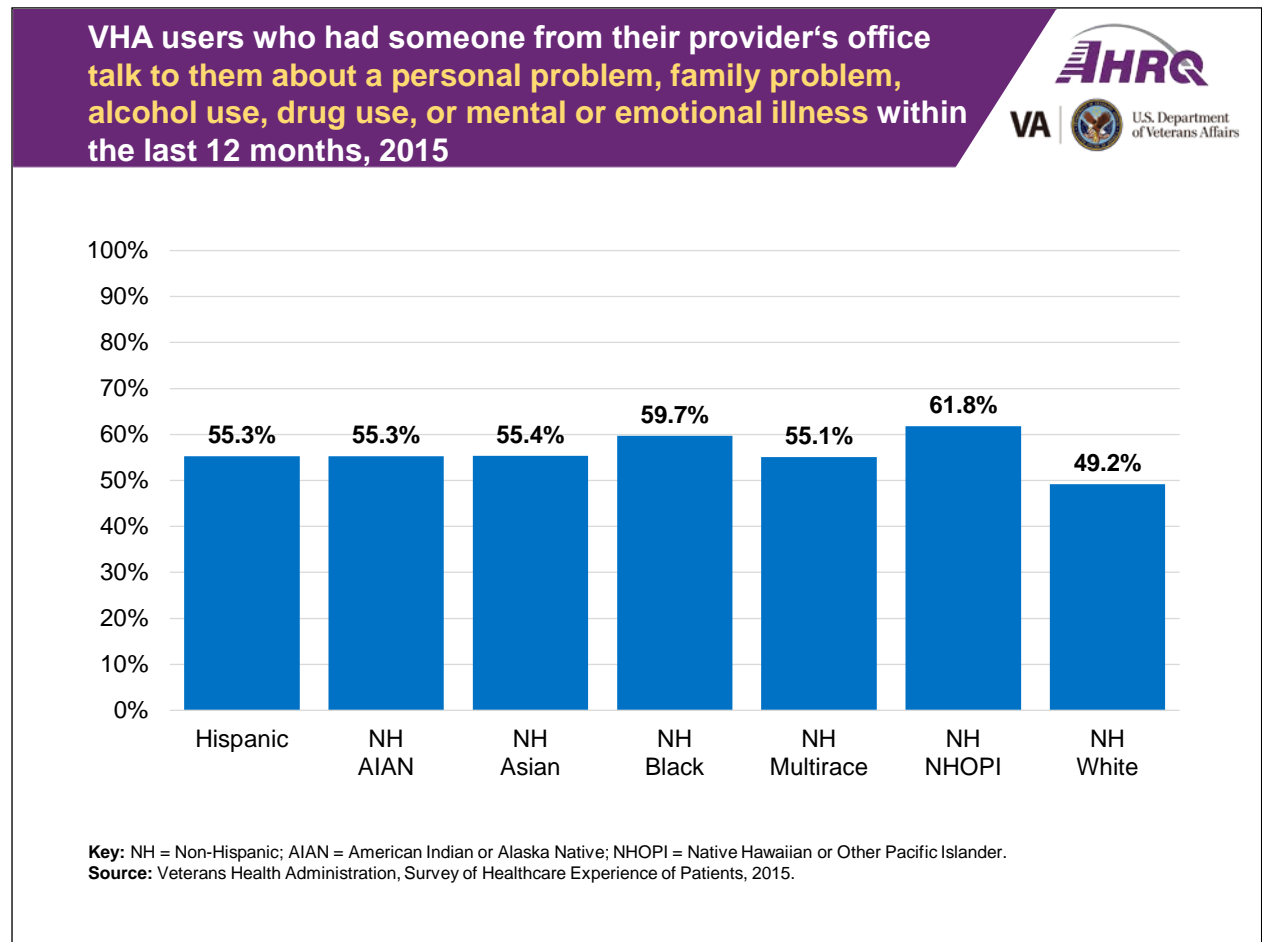


- **Importance:**
 - Team-based care offers many potential advantages, including more effective and efficient delivery of additional services that are essential to providing high-quality care, such as patient education, behavioral health, self-management support, and care coordination (Schottenfield, 2016).
 - It is common for patients to see a primary care provider because of behavioral health issues, including mental illnesses such as depression, anxiety, or problems with alcohol use. On January 1, 2017, the Centers for Medicare & Medicaid Services began paying primary care clinicians separately for collaborative care services they provide to patients being treated for a mental or behavioral health condition. Collaborative care is when a behavioral healthcare manager becomes part of the patient's treatment team and helps the primary care provider evaluate the patient's mental health. If the patient receives a diagnosis of a mental health disorder and wants treatment, the care manager, primary care provider, and patient work together to develop a treatment plan (NIMH, 2016).
- **Overall Rate:** In 2015, 51.9% of VHA users had someone talk to them about a personal problem, family problem, alcohol use, drug use, or mental or emotional illness within the last 12 months (data not shown).
- **Groups With Disparities:** In 2015, findings show significant disparities by age and education but not gender.
 - Age
 - ◆ There were no statistically significant differences between VHA users ages 45-64 and VHA users ages 18-44 in the percentage who had someone talk about personal issues (57.7% vs. 60.8%).
 - ◆ VHA users age 65+ were significantly less likely to have someone talk about personal issues compared with VHA users ages 18-44 (45.0% vs. 60.8%).
 - Gender
 - ◆ There were no statistically significant differences between female VHA users and male VHA users in the percentage who had someone talk about personal issues (56.3% vs. 51.3%).

■ Education

- ◆ VHA users with less than a high school degree were significantly less likely to have someone talk about personal issues compared with VHA users with a bachelor’s degree (44.6% vs. 50.4%).
- ◆ There were no statistically significant differences between VHA users with a high school degree and VHA users with a bachelor’s degree in the percentage who had someone talk about personal issues (51.5% vs. 50.4%).
- ◆ There were no statistically significant differences between VHA users with some college education and VHA users with a bachelor’s degree in the percentage who had someone talk about personal issues (53.9% vs. 50.4%).

VHA Users Who Someone From Their Provider’s Office Talk to Them About a Personal Problem, Substance Use, or Mental Illness, by Race/Ethnicity

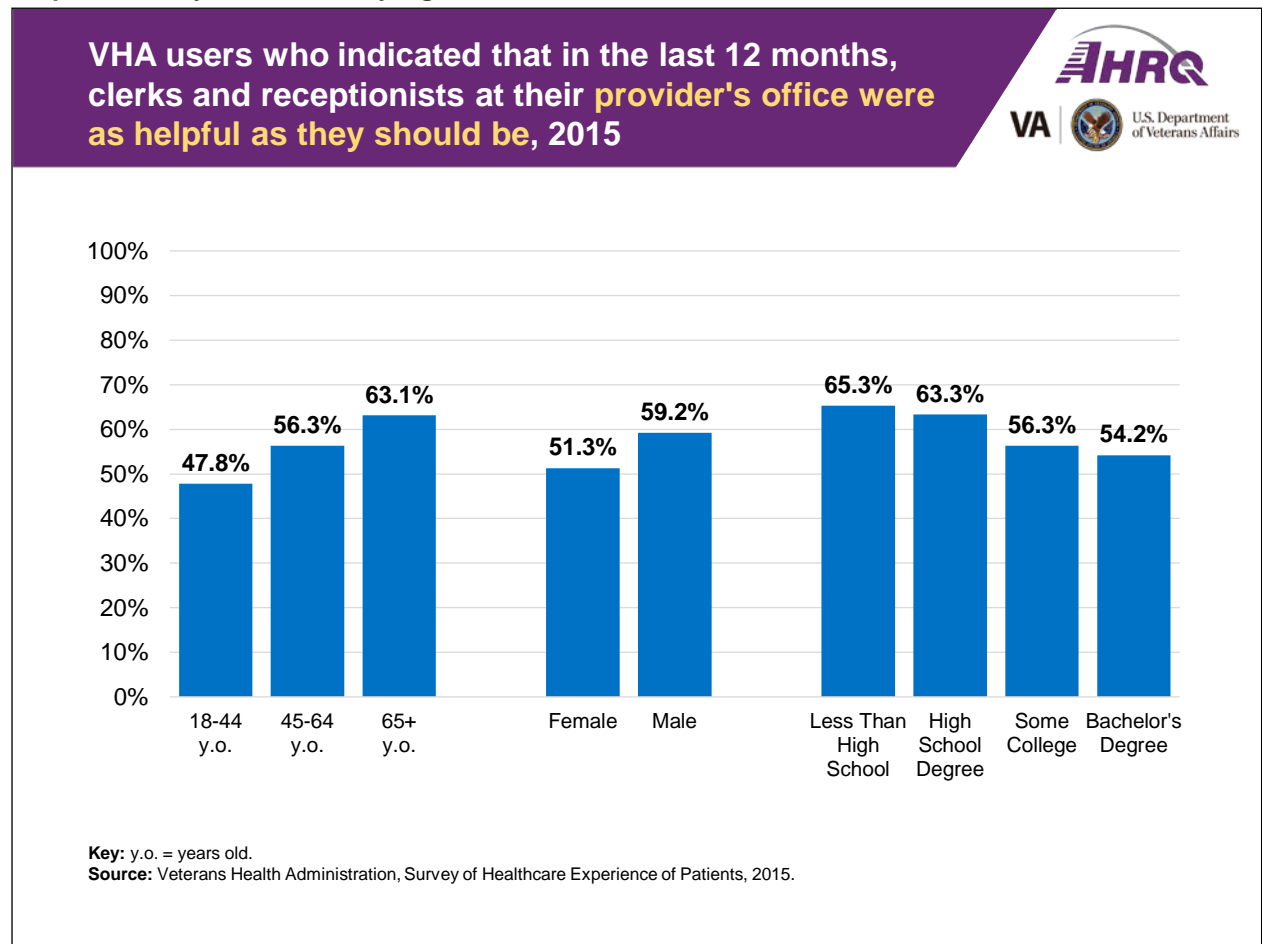


- **Importance:**
 - Team-based care offers many potential advantages, including more effective and efficient delivery of additional services that are essential to providing high-quality care, such as patient education, behavioral health, self-management support, and care coordination (Schottenfield, 2016).
 - It is common for patients to see a primary care provider because of behavioral health issues, including mental illnesses such as depression, anxiety, or problems with alcohol use. On January 1, 2017, the Centers for Medicare & Medicaid Services began paying primary care clinicians separately for collaborative care services they provide to patients being treated for a mental or behavioral health condition. Collaborative care is when a behavioral healthcare manager becomes part of the patient's treatment team and helps the primary care provider evaluate the patient's mental health. If the patient receives a diagnosis of a mental health disorder and wants treatment, the care manager, primary care provider, and patient work together to develop a treatment plan (NIMH, 2016).
- **Overall Rate:** In 2015, 51.9% of VHA users had someone talk to them about a personal problem, family problem, alcohol use, drug use, or mental or emotional illness within the last 12 months (data not shown).
- **Groups With Disparities:** In 2015, findings show significant racial/ethnic disparities.
 - Hispanic VHA users were significantly more likely to have someone talk about personal issues compared with non-Hispanic White VHA users (55.3% vs. 49.2%).
 - Non-Hispanic American Indian/Alaska Native VHA users were significantly more likely to have someone talk about personal issues compared with non-Hispanic White VHA users (55.3% vs. 49.2%).
 - Non-Hispanic Asian VHA users were significantly more likely to have someone talk about personal issues compared with non-Hispanic White VHA users (55.4% vs. 49.2%).
 - Non-Hispanic Black VHA users were significantly more likely to have someone talk about personal issues compared with non-Hispanic White VHA users (59.7% vs. 49.2%).
 - Non-Hispanic multirace VHA users were significantly more likely to have someone talk about personal issues compared with non-Hispanic White VHA users (55.1% vs. 49.2%).

- Non-Hispanic Native Hawaiian/Other Pacific Islander VHA users were significantly more likely to have someone talk about personal issues compared with non-Hispanic White VHA users (61.8% vs. 49.2%).

Quality of Service by Clerks and Receptionists

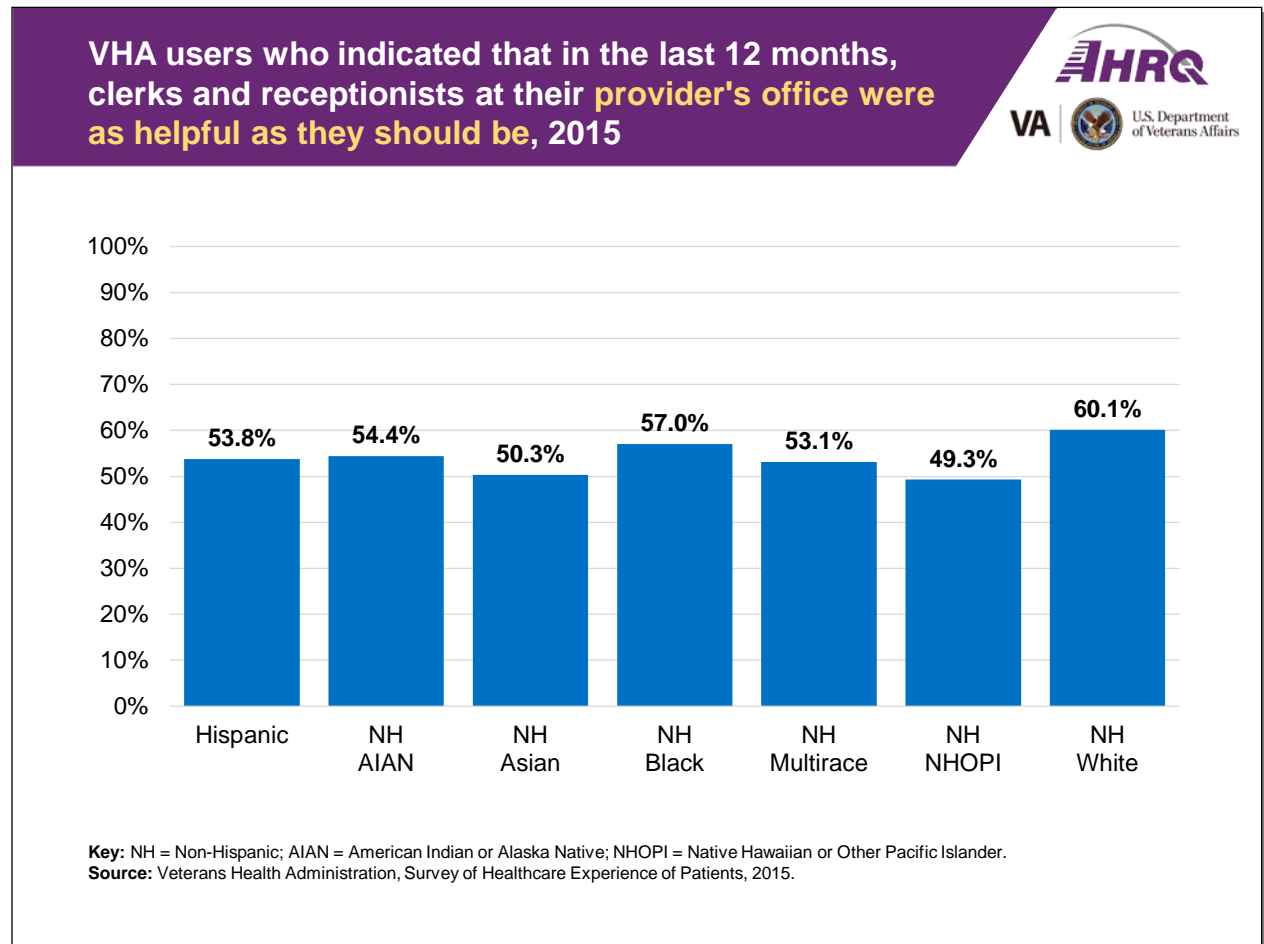
VHA Users Who Indicated That Clerks and Receptionists at Their Provider’s Office Were as Helpful as They Should Be, by Age, Gender, and Education



- **Importance:** Courtesy and respect go a long way toward maintaining a positive relationship between staff and patient. The more comfortable patients are, the more likely they are to bring up issues the doctor needs to know about and discuss with them during diagnosis (Advanced Data Systems Corporation, 2019). In a study of patient satisfaction during spine clinic visits, patients’ perception of teamwork between staff and providers along with reliable followup communication were found to be significant determinants of overall patient satisfaction and perceived quality of care (Bible, et al., 2018).
- **Overall Rate:** In 2015, 58.5% of VHA users indicated clerks and receptionists at their provider’s office were as helpful as they should be (data not shown).

- **Groups With Disparities:** In 2015, findings show significant disparities by age, gender, and education.
 - **Age**
 - ♦ VHA users ages 45-64 were significantly more likely to indicate clerks and receptionists at their provider's office were as helpful as they should be compared with VHA users ages 18-44 (56.3% vs. 47.8%).
 - ♦ VHA users age 65+ were significantly more likely to indicate clerks and receptionists at their provider's office were as helpful as they should be compared with VHA users ages 18-44 (63.1% vs. 47.8%).
 - **Gender**
 - ♦ Female VHA users were significantly less likely to indicate clerks and receptionists at their provider's office were as helpful as they should be compared with male VHA users (51.3% vs. 59.2%).
 - **Education**
 - ♦ VHA users with less than a high school degree were significantly more likely to indicate clerks and receptionists at their provider's office were as helpful as they should be compared with VHA users with a bachelor's degree (65.3% vs. 54.2%).
 - ♦ VHA users with a high school degree were significantly more likely to indicate clerks and receptionists at their provider's office were as helpful as they should be compared with VHA users with a bachelor's degree (63.3% vs. 54.2%).
 - ♦ There were no statistically significant differences between VHA users with some college education and VHA users with a bachelor's degree in the percentage who indicated clerks and receptionists at their provider's office were as helpful as they should be (56.3% vs. 54.2%).

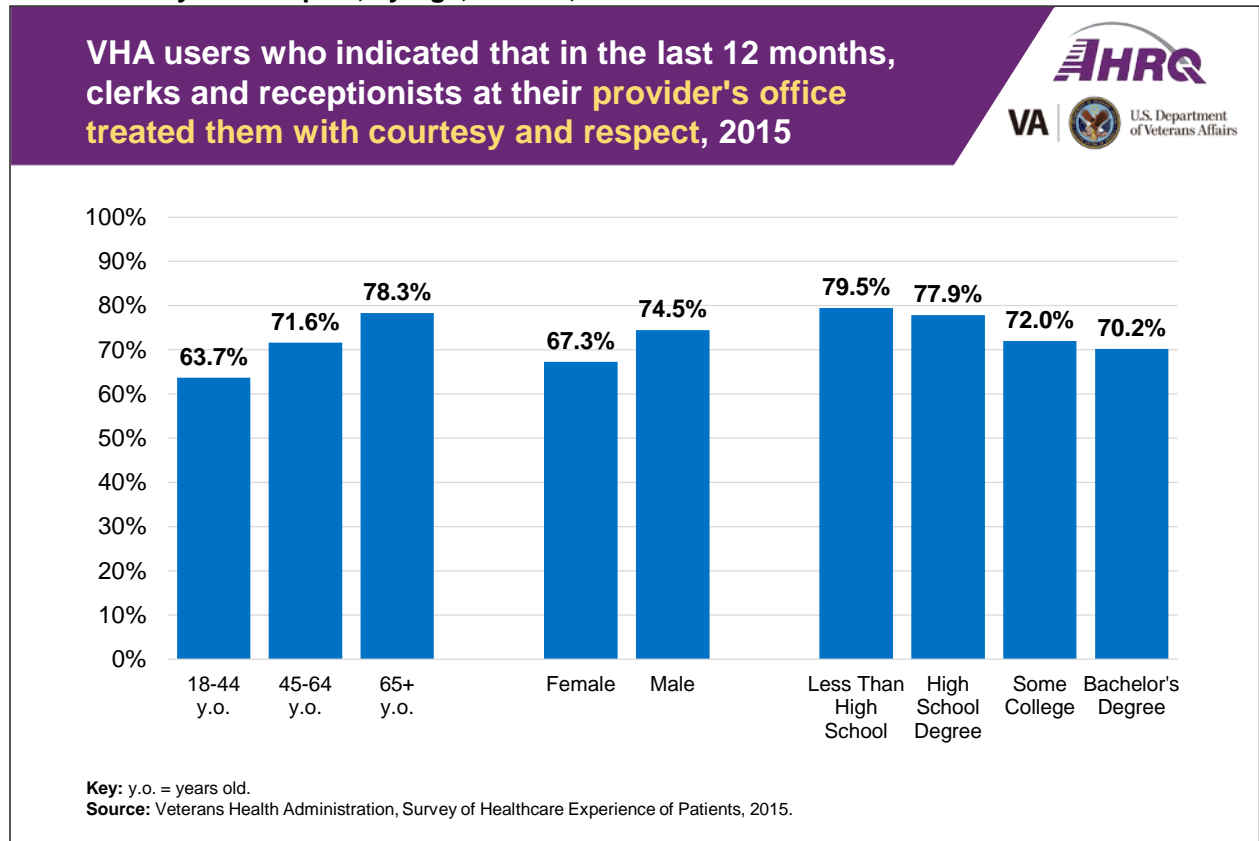
VHA Users Who Indicated That Clerks and Receptionists at Their Provider’s Office Were as Helpful as They Should Be, by Race/Ethnicity



- **Importance:** Courtesy and respect go a long way toward maintaining a positive relationship between staff and patient. The more comfortable patients are, the more likely they are to bring up issues the doctor needs to know about and discuss with them during diagnosis (Advanced Data Systems Corporation, 2019). In a study of patient satisfaction during spine clinic visits, patients’ perception of teamwork between staff and providers along with reliable followup communication were found to be significant determinants of overall patient satisfaction and perceived quality of care (Bible, et al., 2018).
- **Overall Rate:** In 2015, 58.5% of VHA users indicated clerks and receptionists at their provider’s office were as helpful as they should be (data not shown).
- **Groups With Disparities:** In 2015, findings show significant racial/ethnic disparities.
 - Hispanic VHA users were significantly less likely to indicate clerks and receptionists at their provider’s office were as helpful as they should be compared with non-Hispanic White VHA users (53.8% vs. 60.1%).

- There were no statistically significant differences between non-Hispanic American Indian/Alaska Native VHA users and non-Hispanic White VHA users in the percentage who indicated clerks and receptionists at their provider’s office were as helpful as they should be (54.4% vs. 60.1%).
- Non-Hispanic Asian VHA users were significantly less likely to indicate clerks and receptionists at their provider’s office were as helpful as they should be compared with non-Hispanic White VHA users (50.3% vs. 60.1%).
- There were no statistically significant differences between non-Hispanic Black VHA users and non-Hispanic White VHA users in the percentage who indicated clerks and receptionists at their provider’s office were as helpful as they should be (57.0% vs 60.1%).
- Non-Hispanic multirace VHA users were significantly less likely to indicate clerks and receptionists at their provider’s office were as helpful as they should be compared with non-Hispanic White VHA users (53.1% vs. 60.1%).
- Non-Hispanic Native Hawaiian/Other Pacific Islander VHA users were significantly less likely to indicate clerks and receptionists at their provider’s office were as helpful as they should be compared with non-Hispanic White VHA users (49.3% vs. 60.1%).

VHA Users Who Indicated That Clerks and Receptionists at Their Provider’s Office Treated Them With Courtesy and Respect, by Age, Gender, and Education



- **Importance:** Courtesy and respect go a long way toward maintaining a positive relationship between staff and patient. The more comfortable patients are, the more likely they are to bring up issues the doctor needs to know about and discuss with them during diagnosis (Advanced Data Systems Corporation, 2019). In a study of patient satisfaction during spine clinic visits, patients' perception of teamwork between staff and providers along with reliable followup communication were found to be significant determinants of overall patient satisfaction and perceived quality of care (Bible, et al., 2018).
- **Overall Rate:** In 2015, 73.8% of VHA users indicated clerks and receptionists at their provider's office treated them with courtesy and respect (data not shown).
- **Groups With Disparities:** In 2015, findings show significant disparities by age, gender, and education.

■ Age

- ◆ VHA users ages 45-64 were significantly more likely to indicate clerks and receptionists at their provider's office treated them with respect compared with VHA users ages 18-44 (71.6% vs. 63.7%).
- ◆ VHA users age 65+ were significantly more likely to indicate clerks and receptionists at their provider's office treated them with respect compared with VHA users ages 18-44 (78.3% vs. 63.7%).

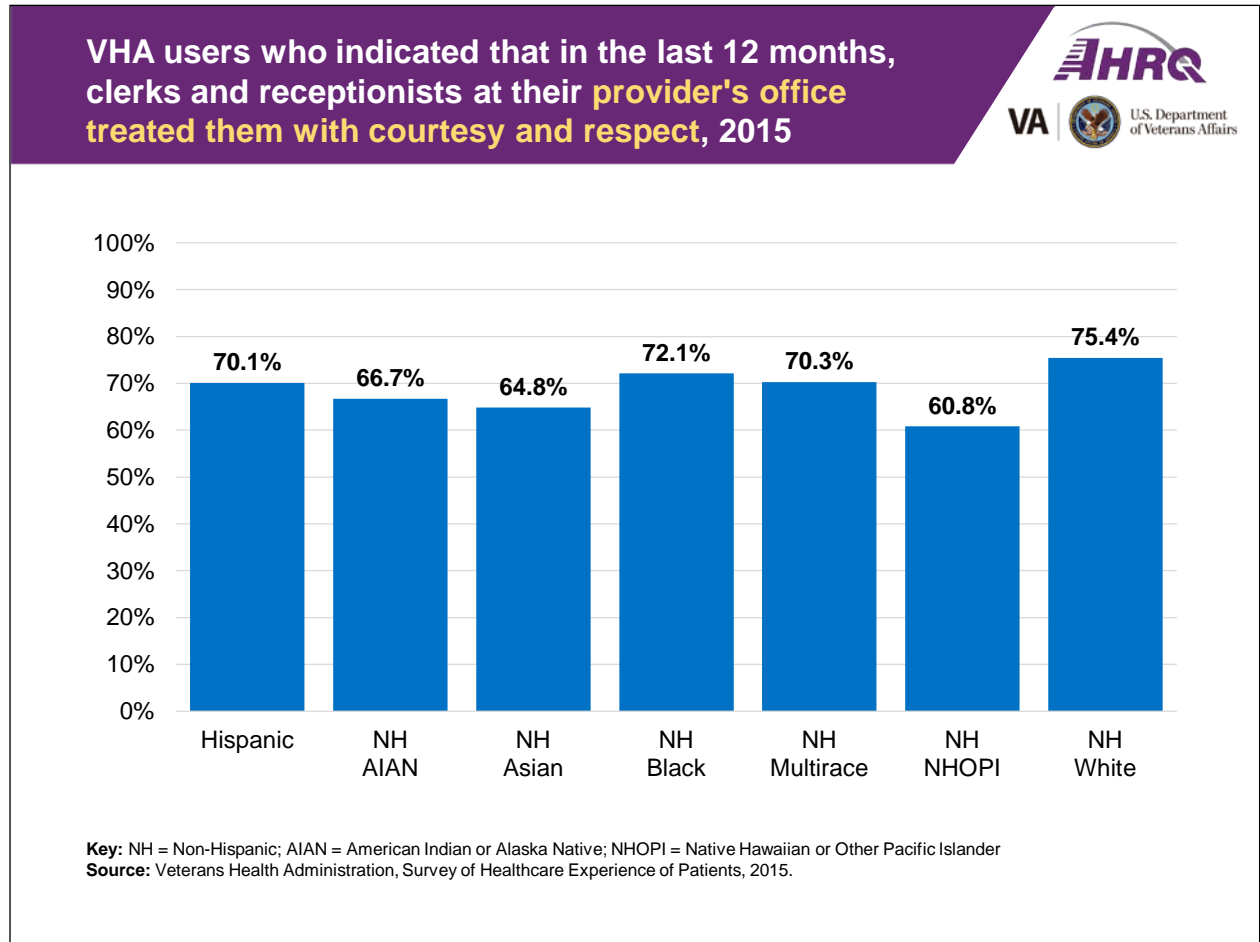
■ Gender

- ◆ Female VHA users were significantly less likely to indicate clerks and receptionists at their provider's office treated them with respect compared with male VHA users (67.3% vs. 74.5%).

■ Education

- ◆ VHA users with less than a high school degree were significantly more likely to indicate clerks and receptionists at their provider's office treated them with respect compared with VHA users with a bachelor's degree (79.5% vs. 70.2%).
- ◆ VHA users with a high school degree were significantly more likely to indicate clerks and receptionists at their provider's office treated them with respect compared with VHA users with a bachelor's degree (77.9% vs. 70.2%).
- ◆ There were no statistically significant differences between VHA users with some college education and VHA users with a bachelor's degree in the percentage who indicated clerks and receptionists at their provider's office treated them with respect (72.0% vs. 70.2%).

VHA Users Who Indicated That Clerks and Receptionists at Their Provider’s Office Treated Them With Courtesy and Respect, by Race/Ethnicity

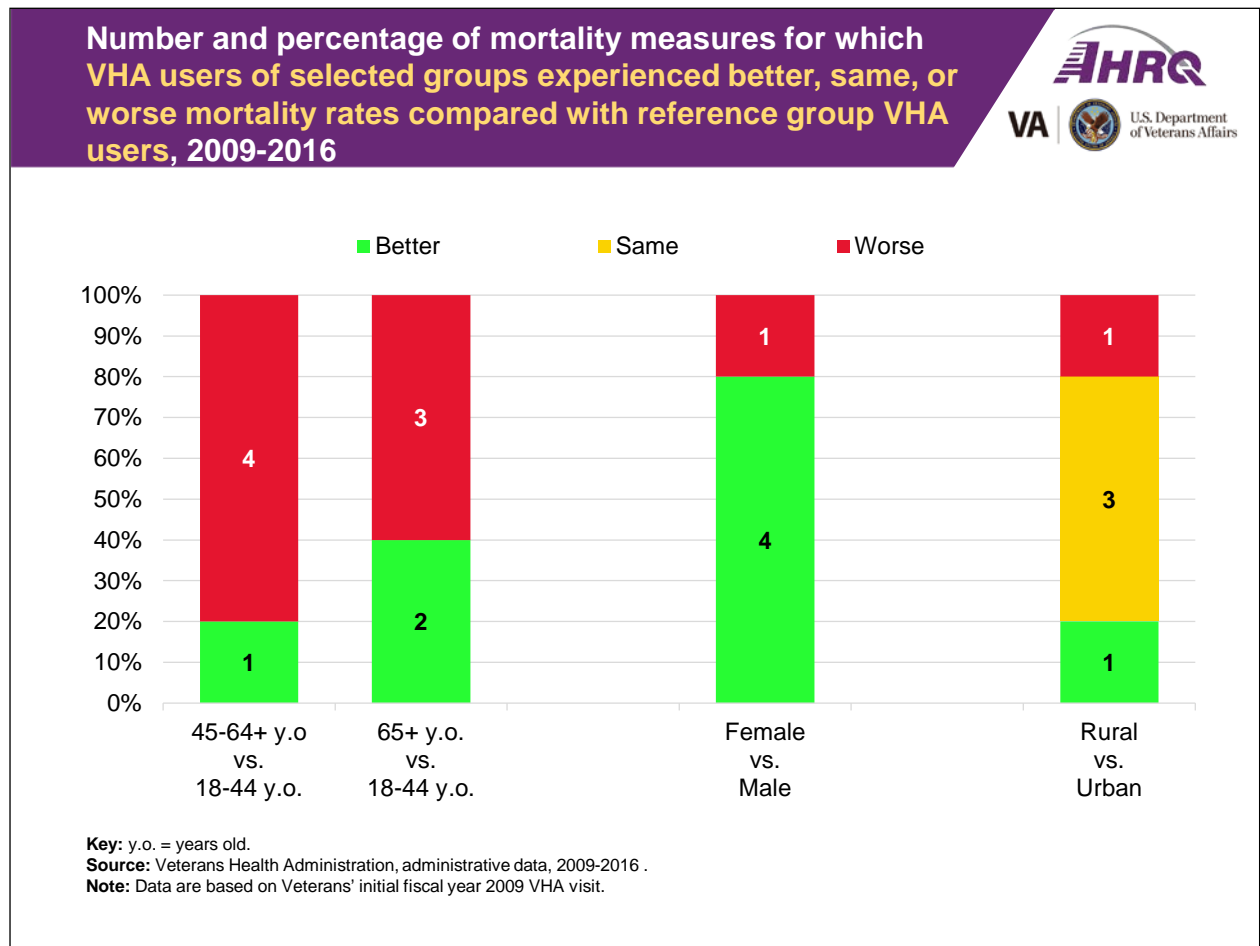


- **Importance:** Courtesy and respect go a long way toward maintaining a positive relationship between staff and patient. The more comfortable patients are, the more likely they are to bring up issues the doctor needs to know about and discuss with them during diagnosis (Advanced Data Systems Corporation, 2019). In a study of patient satisfaction during spine clinic visits, patients’ perception of teamwork between staff and providers along with reliable followup communication were found to be significant determinants of overall patient satisfaction and perceived quality of care (Bible, et al., 2018).
- **Overall Rate:** In 2015, 73.8% of VHA users indicated clerks and receptionists at their provider’s office treated them with courtesy and respect (data not shown).

- **Groups With Disparities:** In 2015, findings show significant racial/ethnic disparities.
 - There were no statistically significant differences between Hispanic VHA users and non-Hispanic White VHA users in the percentage who indicated clerks and receptionists at their provider's office treated them with respect (70.1% vs. 75.4%).
 - Non-Hispanic American Indian/Alaska Native VHA users were significantly less likely to indicate clerks and receptionists at their provider's office treated them with respect compared with non-Hispanic White VHA users (66.7% vs. 75.4%).
 - Non-Hispanic Asian VHA users were significantly less likely to indicate clerks and receptionists at their provider's office treated them with respect compared with non-Hispanic White VHA users (64.8% vs. 75.4%).
 - There were no statistically significant differences between non-Hispanic Black VHA users and non-Hispanic White VHA users in the percentage who indicated clerks and receptionists at their provider's office treated them with respect (72.1% vs 75.4%).
 - There were no statistically significant differences between non-Hispanic multirace VHA users and non-Hispanic White VHA users in the percentage who indicated clerks and receptionists at their provider's office treated them with respect (70.3% vs. 75.4%).
 - Non-Hispanic Native Hawaiian/Other Pacific Islander VHA users were significantly less likely to indicate clerks and receptionists at their provider's office treated them with respect compared with non-Hispanic White VHA users (60.8% vs. 75.4%).

Mortality Measures

Number of Mortality Measures With Disparities Within VHA Users, by Age, Gender, and Residence Location



- **Importance:** Many factors, including quality of and access to care, play a role in mortality rates for common conditions (breast cancer, colorectal cancer, HIV, lung cancer, and suicide).
- **Findings:** For VHA users seen in fiscal year 2009 and followed until 2016, findings show that age, gender, and location disparities persist in mortality rates.

■ Age

- ◆ VHA users ages 45-64 experienced a lower mortality rate than VHA users ages 18-44 on 1 measure (20%) and higher rates on 4 measures (80%).
- ◆ VHA users age 65+ experienced lower mortality rates than VHA users ages 18-44 on 2 measures (40%) and higher rates on 3 measures (60%).

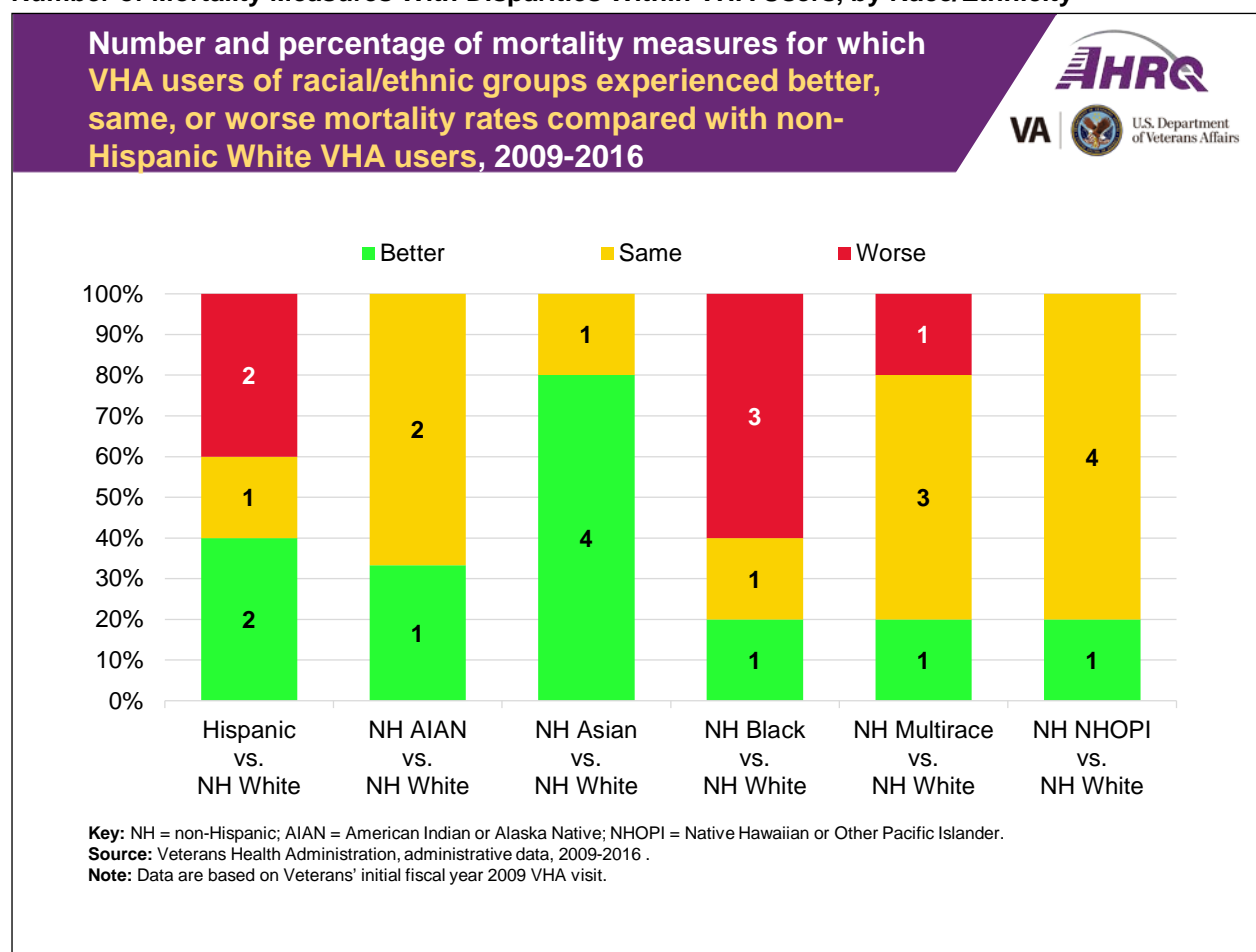
■ Gender

- ◆ Female VHA users experienced lower mortality rates than male VHA users on 4 measures (80%) and a higher rate on 1 measure (20%).

■ Location

- ◆ Rural VHA users experienced a lower mortality rate than urban VHA users on 1 measure (20%), similar rates on 3 measures (60%), and a higher rate on 1 measure (20%).

Number of Mortality Measures With Disparities Within VHA Users, by Race/Ethnicity

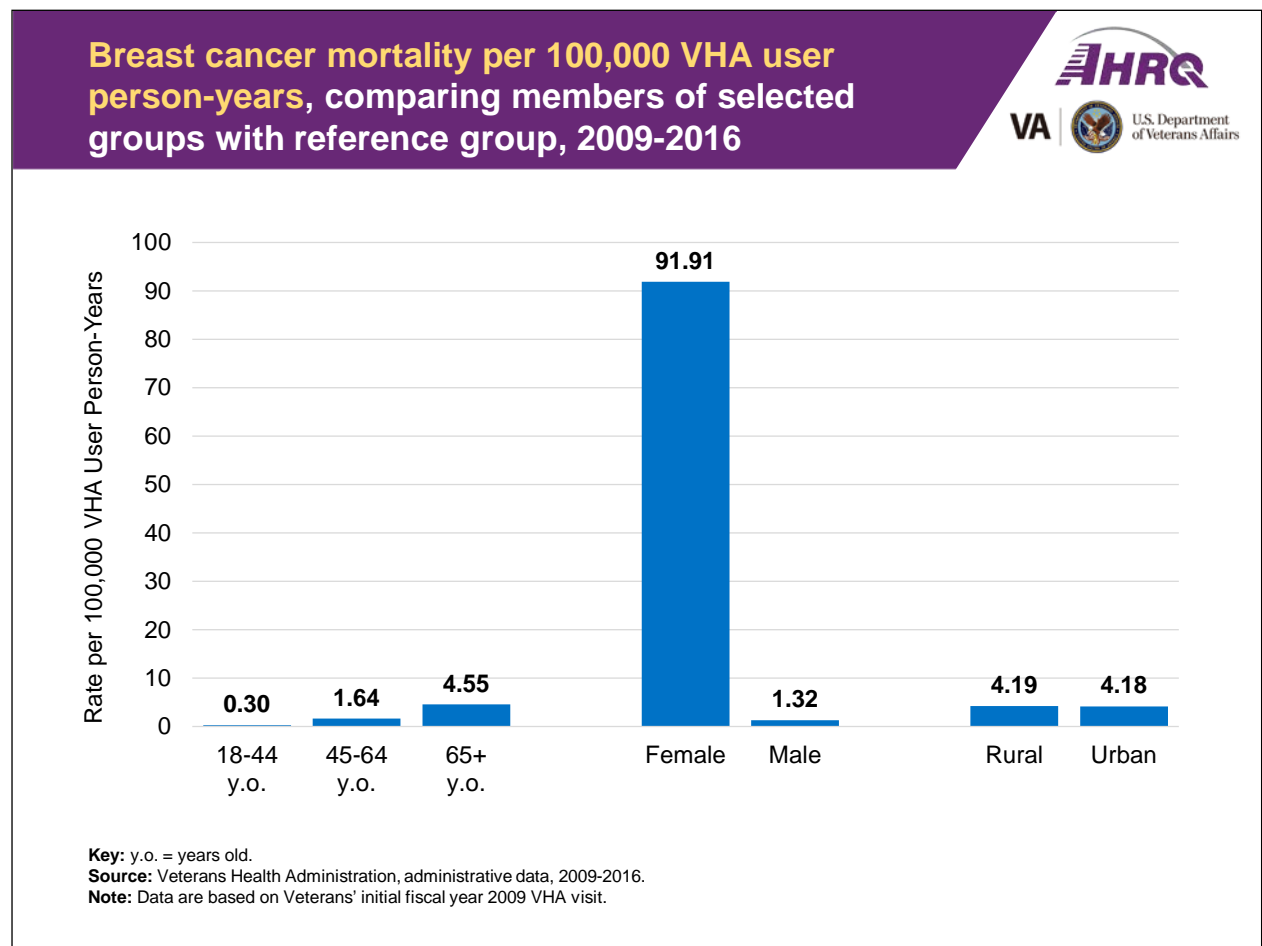


- **Importance:** Many factors, including quality of and access to care, play a role in mortality rates for common conditions (breast cancer, colorectal cancer, HIV, lung cancer, and suicide).

- **Findings:** For VHA users seen in fiscal year 2009 and followed until 2016, findings show that racial/ethnic disparities persist in mortality rates.
 - Hispanic VHA users experienced lower mortality rates than non-Hispanic White VHA users on 2 measures (40%), a similar rate on 1 measure (20%), and higher rates on 2 measures (40%).
 - Non-Hispanic American Indian/Alaska Native VHA users experienced a lower mortality rate than non-Hispanic White VHA users on 1 measure (33%) and similar rates on 2 measures (67%).
 - Non-Hispanic Asian VHA users experienced lower mortality rates than non-Hispanic White VHA users on 4 measures (80%) and a similar rate on 1 measure (20%).
 - Non-Hispanic Black VHA users experienced a lower mortality rate than non-Hispanic White VHA users on 1 measure (20%), a similar rate on 1 measure (20%), and higher rates on 3 measures (60%).
 - Non-Hispanic multirace VHA users experienced a lower mortality rate than non-Hispanic White VHA users on 1 measure (20%), similar rates on 3 measures (60%), and a higher rate on 1 measure (20%).
 - Non-Hispanic Native Hawaiian/Other Pacific Islander VHA users experienced a lower mortality rate than non-Hispanic White VHA users on 1 measure (20%) and similar rates on 4 measures (80%).

Breast Cancer Mortality

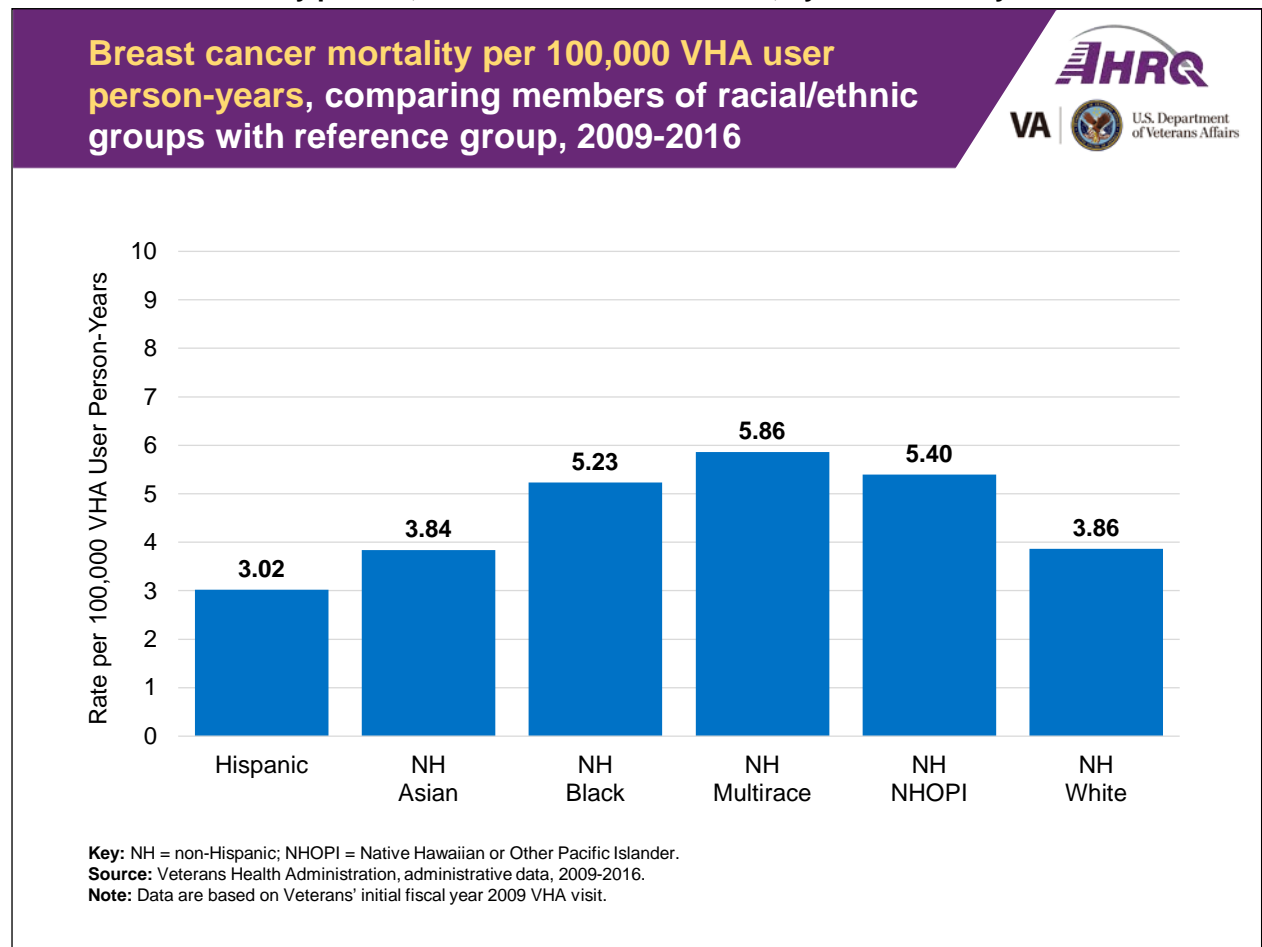
Breast Cancer Mortality per 100,000 VHA User Person-Years, by Age, Gender, and Residence Location



- **Importance:** Breast cancer is the second leading cause of cancer death in women (only lung cancer kills more women each year). The chance that a woman will die from breast cancer is about 1 in 38 (2.6%). It is estimated that in 2020, approximately 42,170 women will die from breast cancer in the United States (NCI, 2020).
- **Overall Rate:** For VHA users seen in fiscal year 2009 and followed until 2016, the breast cancer mortality rate was 4.18 per 100,000 VHA user person-years (data not shown).

- **Groups With Disparities:** For VHA users seen in fiscal year 2009 and followed until 2016, findings show significant disparities by age and gender but not location.
 - **Age**
 - ♦ VHA users ages 45-64 had a significantly higher breast cancer mortality rate compared with VHA users ages 18-44 (1.64 vs. 0.30 per 100,000 VHA person-years).
 - ♦ VHA users age 65+ had a significantly higher breast cancer mortality rate compared with VHA users ages 18-44 (4.55 vs. 0.30 per 100,000 VHA person-years).
 - **Gender**
 - ♦ Female VHA users had a significantly higher breast cancer mortality rate compared with male VHA users (91.91 vs. 1.32 per 100,000 VHA person-years).
 - **Location**
 - ♦ There were no statistically significant differences between rural VHA users and urban VHA users in breast cancer mortality rates (4.19 vs. 4.18 per 100,000 VHA person-years).

Breast Cancer Mortality per 100,000 VHA User Person-Years, by Race/Ethnicity

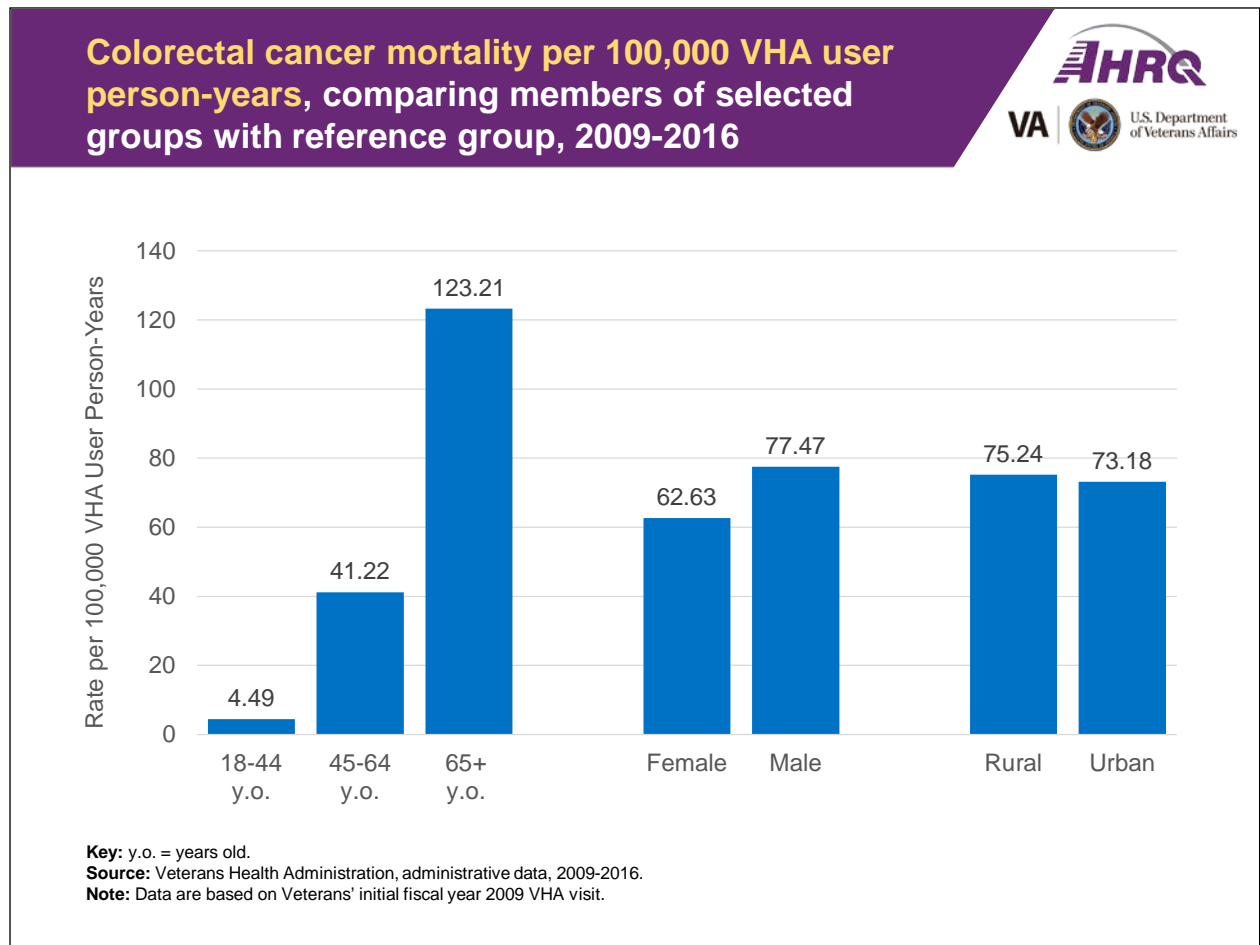


- **Importance:** Breast cancer is the second leading cause of cancer death in women (only lung cancer kills more women each year). The chance that a woman will die from breast cancer is about 1 in 38 (2.6%). It is estimated that in 2020, approximately 42,170 women will die from breast cancer in the United States (NCI, 2020).
- **Overall Rate:** For VHA users seen in fiscal year 2009 and followed until 2016, the breast cancer mortality rate was 4.18 per 100,000 VHA user person-years (data not shown).
- **Groups With Disparities:** For VHA users seen in fiscal year 2009 and followed until 2016, findings show significant racial/ethnic disparities.
 - There were no statistically significant differences between Hispanic VHA users and non-Hispanic White VHA users in breast cancer mortality rates (3.02 vs. 3.86 per 100,000 VHA person-years).
 - There were no statistically significant differences between non-Hispanic Asian VHA users and non-Hispanic White VHA users in breast cancer mortality rates (3.84 vs. 3.86 per 100,000 VHA person-years).

- Non-Hispanic Black VHA users had a significantly higher breast cancer mortality rate compared with non-Hispanic White VHA users (5.23 vs. 3.86 per 100,000 VHA person-years).
- There were no statistically significant differences between non-Hispanic multirace VHA users and non-Hispanic White VHA users in breast cancer mortality rates (5.86 vs. 3.86 per 100,000 VHA person-years).
- There were no statistically significant differences between non-Hispanic Native Hawaiian/Other Pacific Islander VHA users and non-Hispanic White VHA users in breast cancer mortality rates (5.40 vs. 3.86 per 100,000 VHA person-years).

Colorectal Cancer Mortality

Colorectal Cancer Mortality per 100,000 VHA User Person-Years, by Age, Gender, and Residence Location



- **Importance:** Colorectal cancer is more common in men than women and among those of African American descent. It is estimated that in 2020, approximately 53,200 people will die from colorectal cancer in the United States (NCI, 2020).

- **Overall Rate:** For VHA users seen in fiscal year 2009 and followed until 2016, the colorectal cancer mortality rate was 74.06 per 100,000 VHA user person-years (data not shown).
- **Groups With Disparities:** For VHA users seen in fiscal year 2009 and followed until 2016, findings show significant disparities by age and gender but not location.

- Age

- ◆ VHA users ages 45-64 had a significantly higher colorectal cancer mortality rate compared with VHA users ages 18-44 (41.22 vs. 4.49 per 100,000 VHA person-years).
- ◆ VHA users age 65+ had a significantly higher colorectal cancer mortality rate compared with VHA users ages 18-44 (123.21 vs. 4.49 per 100,000 VHA person-years).

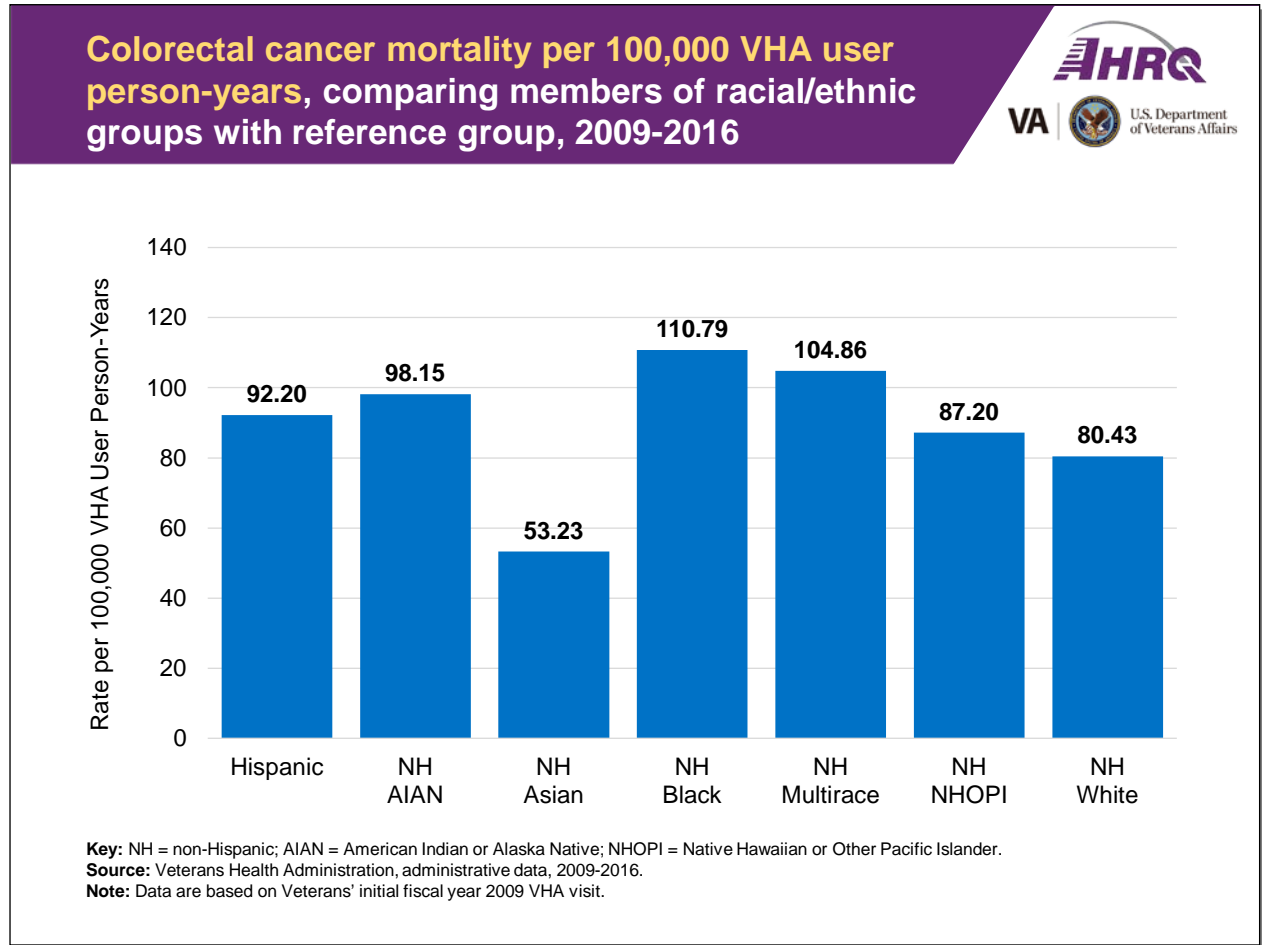
- Gender

- ◆ Female VHA users had a significantly lower colorectal cancer mortality rate compared with male VHA users (62.63 vs. 77.47 per 100,000 VHA person-years).

- Location

- ◆ There were no statistically significant differences between rural VHA users and urban VHA users in colorectal cancer mortality rates (75.24 vs. 73.18 per 100,000 VHA person-years).

Colorectal Cancer Mortality per 100,000 VHA User Person-Years, by Race/Ethnicity

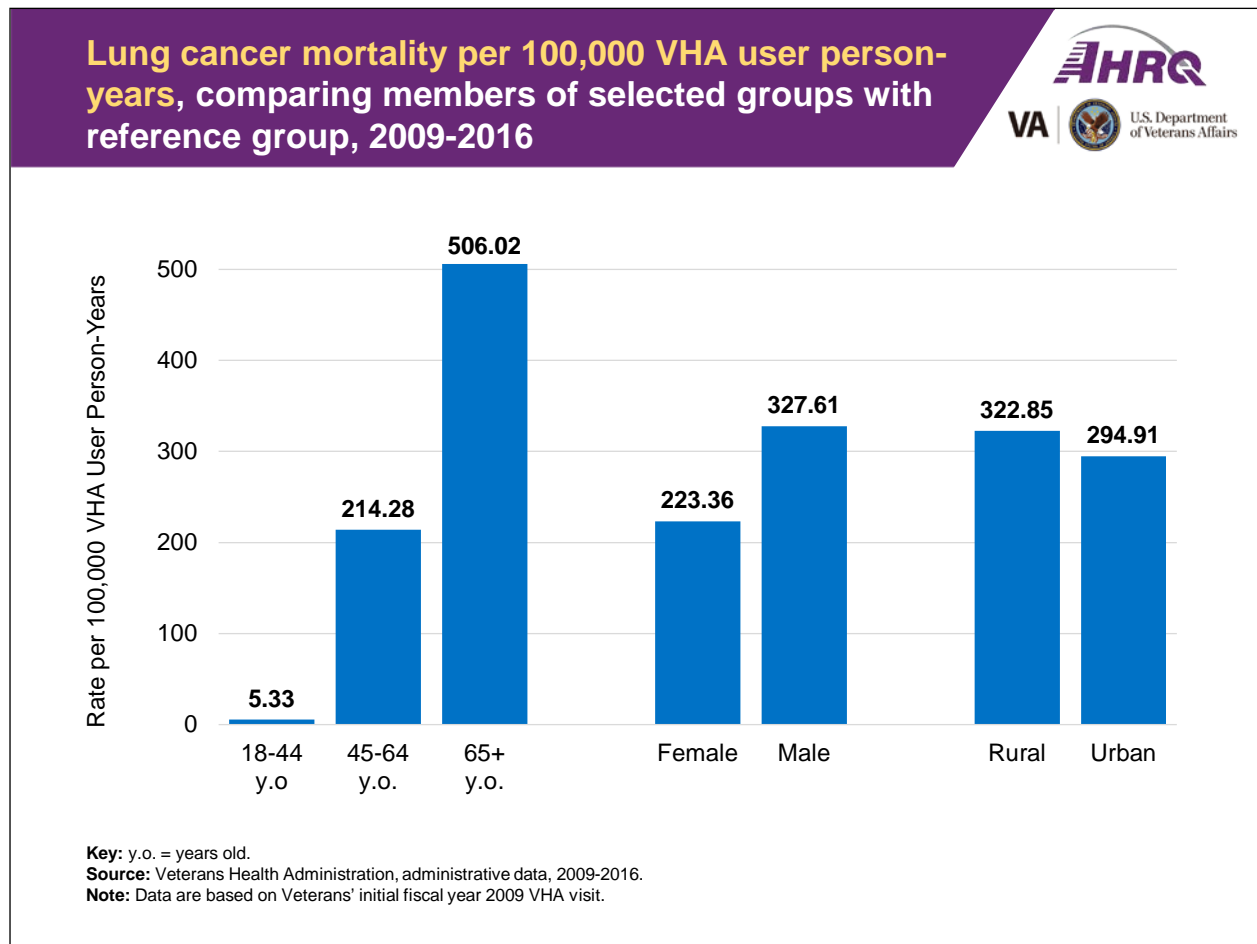


- **Importance:** Colorectal cancer is more common in men than women and among those of African American descent. It is estimated that in 2020, approximately 53,200 people will die from colorectal cancer in the United States (NCI, 2020).
- **Overall Rate:** For VHA users seen in fiscal year 2009 and followed until 2016, the colorectal cancer mortality rate was 74.06 per 100,000 VHA user person-years (data not shown).
- **Groups With Disparities:** For VHA users seen in fiscal year 2009 and followed until 2016, findings show significant racial/ethnic disparities.
 - Hispanic VHA users had a significantly higher colorectal cancer mortality rate compared with non-Hispanic White VHA users (92.20 vs. 80.43 per 100,000 VHA person-years).
 - There were no statistically significant differences between non-Hispanic American Indian/Alaska Native VHA users and non-Hispanic White VHA users in colorectal cancer mortality rates (98.15 vs. 80.43 per 100,000 VHA person-years).

- Non-Hispanic Asian VHA users had a significantly lower colorectal cancer mortality rate compared with non-Hispanic White VHA users (53.23 vs. 80.43 per 100,000 VHA person-years).
- Non-Hispanic Black VHA users had a significantly higher colorectal cancer mortality rate compared with non-Hispanic White VHA users (110.79 vs. 80.43 per 100,000 VHA person-years).
- Non-Hispanic multirace VHA users had a significantly higher colorectal cancer mortality rate compared with non-Hispanic White VHA users (104.86 vs. 80.43 per 100,000 VHA person-years).
- There were no statistically significant differences between non-Hispanic Native Hawaiian/Other Pacific Islander VHA users and non-Hispanic White VHA users in colorectal cancer mortality rates (87.20 vs. 80.43 per 100,000 VHA person-years).

Lung Cancer Mortality

Lung Cancer Mortality per 100,000 VHA User Person-Years, by Age, Gender, and Residence Location



- **Importance:** Lung cancer is more common in men than women, particularly African American men. Smoking is widely recognized as the leading cause of lung cancer. It is estimated that in 2020, approximately 135,720 people will die from lung/bronchus cancer in the United States (NCI, 2020).
- **Overall Rate:** For VHA users seen in fiscal year 2009 and followed until 2016, the lung cancer mortality rate was 306.92 per 100,000 VHA user person-years (data not shown).
- **Groups With Disparities:** For VHA users seen in fiscal year 2009 and followed until 2016, findings show significant disparities by age and gender but not location.

■ Age

- ◆ VHA users ages 45-64 had a significantly higher lung cancer mortality rate compared with VHA users ages 18-44 (214.28 vs. 5.33 per 100,000 VHA person-years).
- ◆ VHA users age 65+ had a significantly higher lung cancer mortality rate compared with VHA users ages 18-44 (506.02 vs. 5.33 per 100,000 VHA person-years).

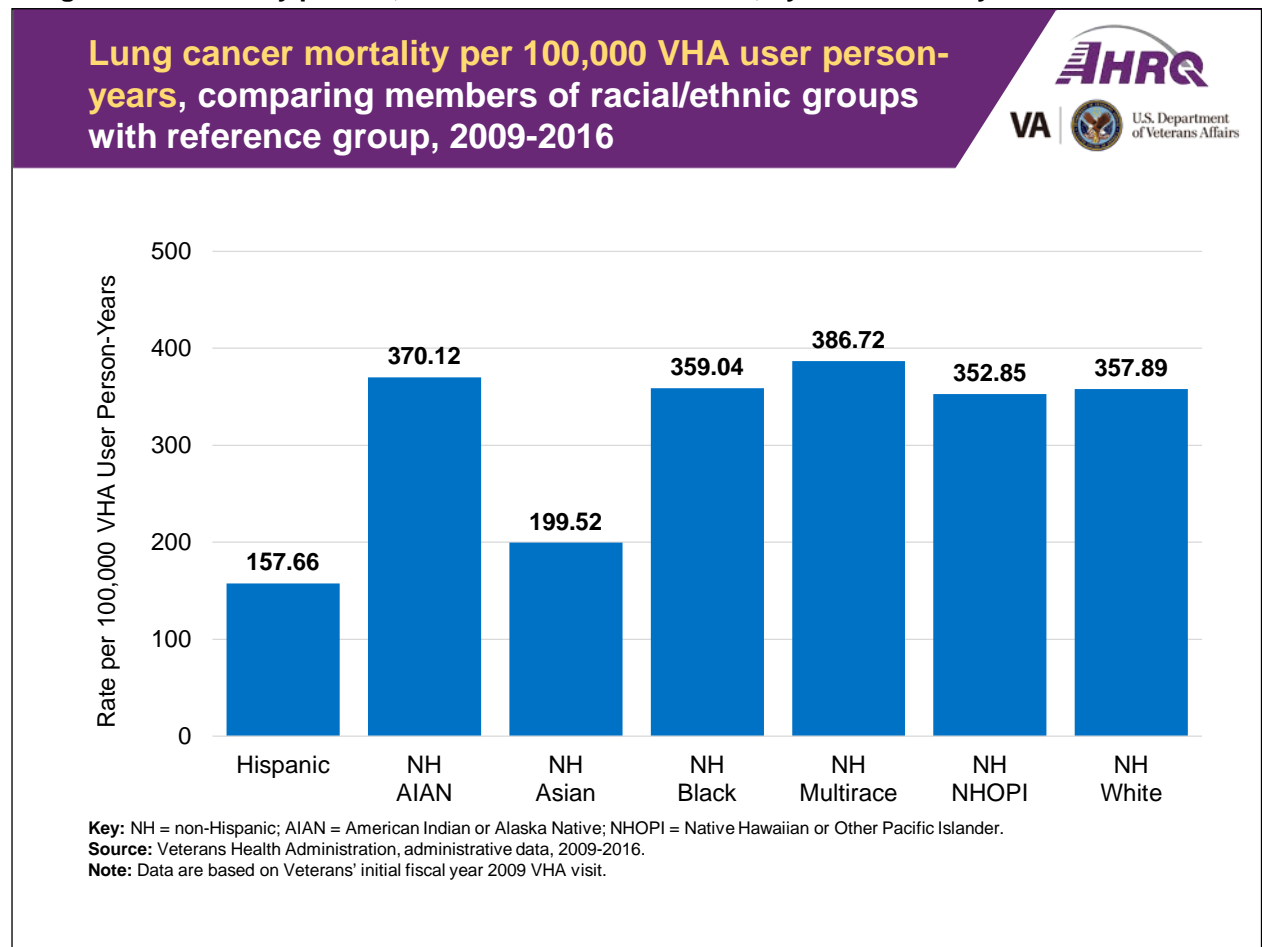
■ Gender

- ◆ Female VHA users had a significantly lower lung cancer mortality rate compared with male VHA users (223.36 vs. 327.61 per 100,000 VHA person-years).

■ Location

- ◆ There were no statistically significant differences between rural VHA users and urban VHA users in lung cancer mortality rates (322.85 vs. 294.91 per 100,000 VHA person-years).

Lung Cancer Mortality per 100,000 VHA User Person-Years, by Race/Ethnicity

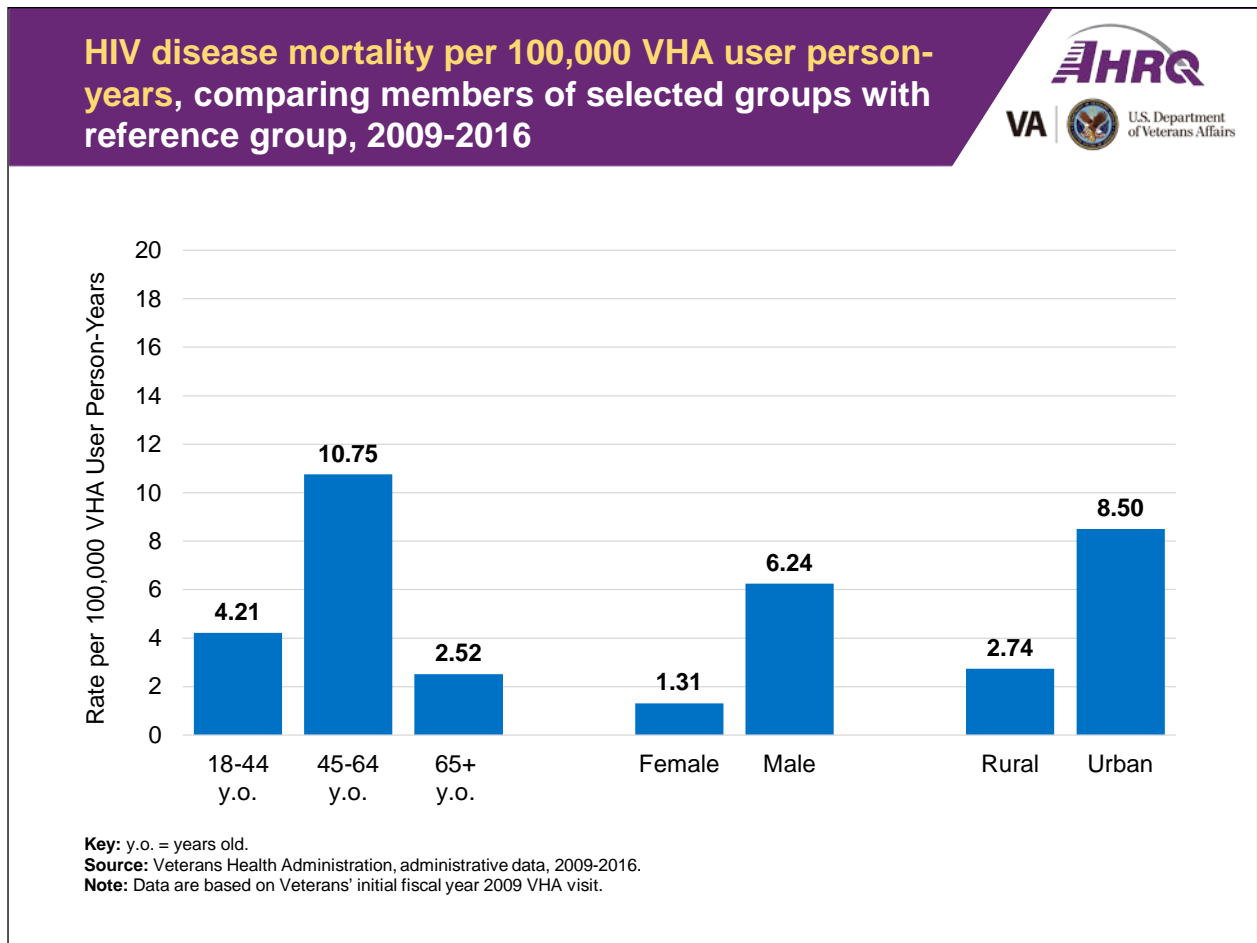


- **Importance:** Lung cancer is more common in men than women, particularly African American men. Smoking is widely recognized as the leading cause of lung cancer. It is estimated that in 2020, approximately 135,720 people will die from lung/bronchus cancer in the United States (NCI, 2020).
- **Overall Rate:** For VHA users seen in fiscal year 2009 and followed until 2016, the lung cancer mortality rate was 306.92 per 100,000 VHA user person-years (data not shown).
- **Groups With Disparities:** For VHA users seen in fiscal year 2009 and followed until 2016, findings show significant racial/ethnic disparities.
 - Hispanic VHA users had a significantly lower lung cancer mortality rate compared with non-Hispanic White VHA users (157.66 vs. 357.89 per 100,000 VHA person-years).
 - There were no statistically significant differences between non-Hispanic American Indian/Alaska Native VHA users and non-Hispanic White VHA users in lung cancer mortality rates (370.12 vs. 357.89 per 100,000 VHA person-years).

- Non-Hispanic Asian VHA users had a significantly lower lung cancer mortality rate compared with non-Hispanic White VHA users (199.52 vs. 357.89 per 100,000 VHA person-years).
- There were no statistically significant differences between non-Hispanic Black VHA users and non-Hispanic White VHA users in lung cancer mortality rates (359.04 vs. 357.89 per 100,000 VHA person-years).
- There were no statistically significant differences between non-Hispanic multirace VHA users and non-Hispanic White VHA users in lung cancer mortality rates (386.72 vs. 357.89 per 100,000 VHA person-years).
- There were no statistically significant differences between non-Hispanic Native Hawaiian/Other Pacific Islander VHA users and non-Hispanic White VHA users in lung cancer mortality rates (352.85 vs. 357.89 per 100,000 VHA person-years).

HIV Disease Mortality

HIV Disease Mortality per 100,000 VHA User Person-Years, by Age, Gender, and Residence Location



- **Importance:** People with HIV who get and stay virally suppressed or undetectable can stay healthy and have a significantly low risk of transmitting HIV. Taking HIV medicine as prescribed can make the level of virus in their body very low or even undetectable. People with HIV need to know they are HIV positive so they can take medicine to treat HIV (CDC, 2019, 2019).
- **Overall Rate:** For VHA users seen in fiscal year 2009 and followed until 2016, the HIV disease mortality rate was 6.02 per 100,000 VHA user person-years (data not shown).
- **Groups With Disparities:** For VHA users seen in fiscal year 2009 and followed until 2016, findings show significant disparities by age, gender, and location.

■ Age

- ♦ VHA users ages 45-64 had a significantly higher HIV disease mortality rate compared with VHA users ages 18-44 (10.75 vs. 4.21 per 100,000 VHA person-years).
- ♦ VHA users age 65+ had a significantly lower HIV disease mortality rate compared with VHA users ages 18-44 (2.52 vs. 4.21 per 100,000 VHA person-years).

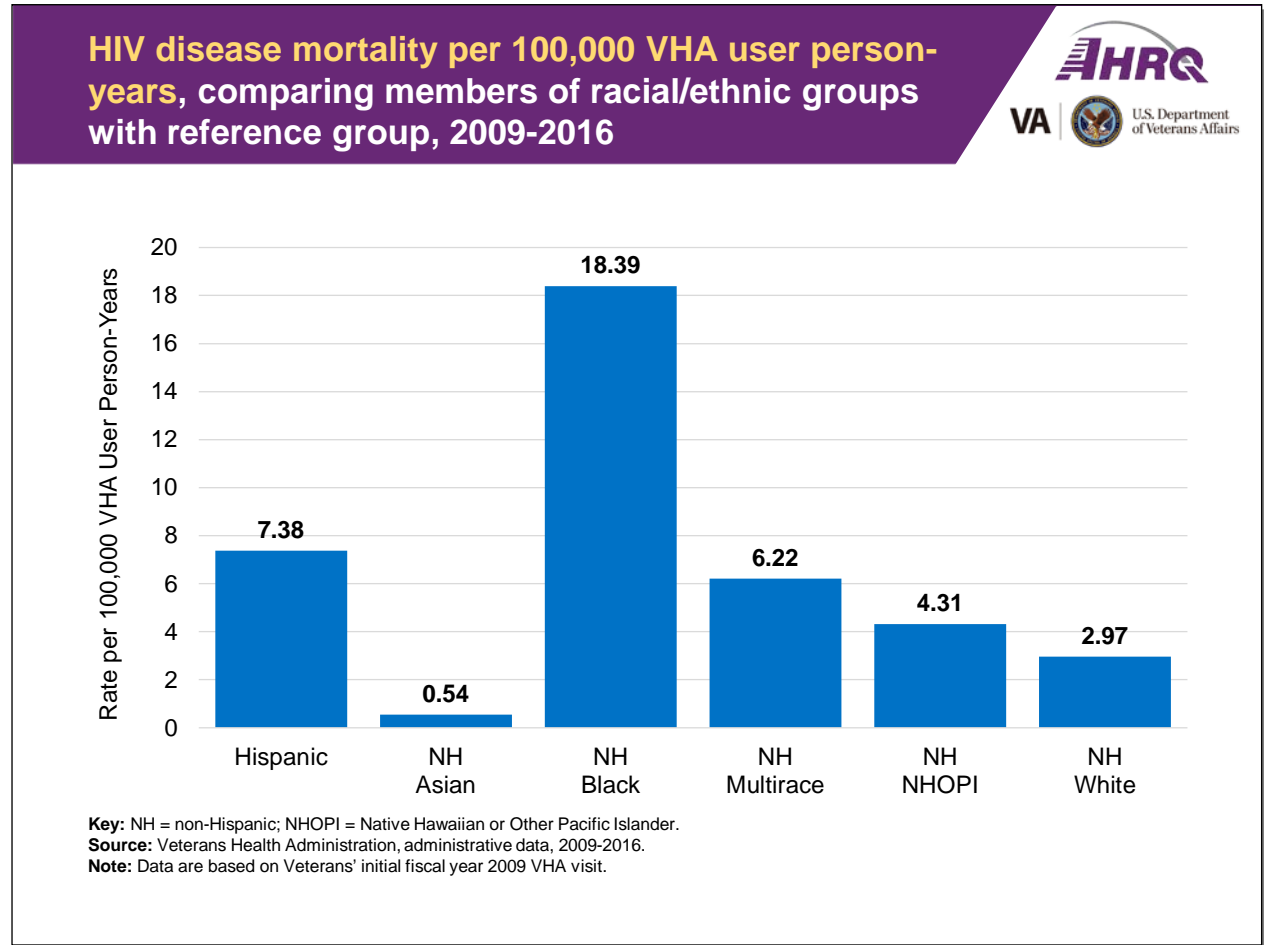
■ Gender

- ♦ Female VHA users had a significantly lower HIV disease mortality rate compared with male VHA users (1.31 vs. 6.24 per 100,000 VHA person-years).

■ Location

- ♦ Rural VHA users had a significantly lower HIV disease mortality rate compared with urban VHA users (2.74 vs. 8.50 per 100,000 VHA person-years).

HIV Disease Mortality per 100,000 VHA User Person-Years, by Race/Ethnicity

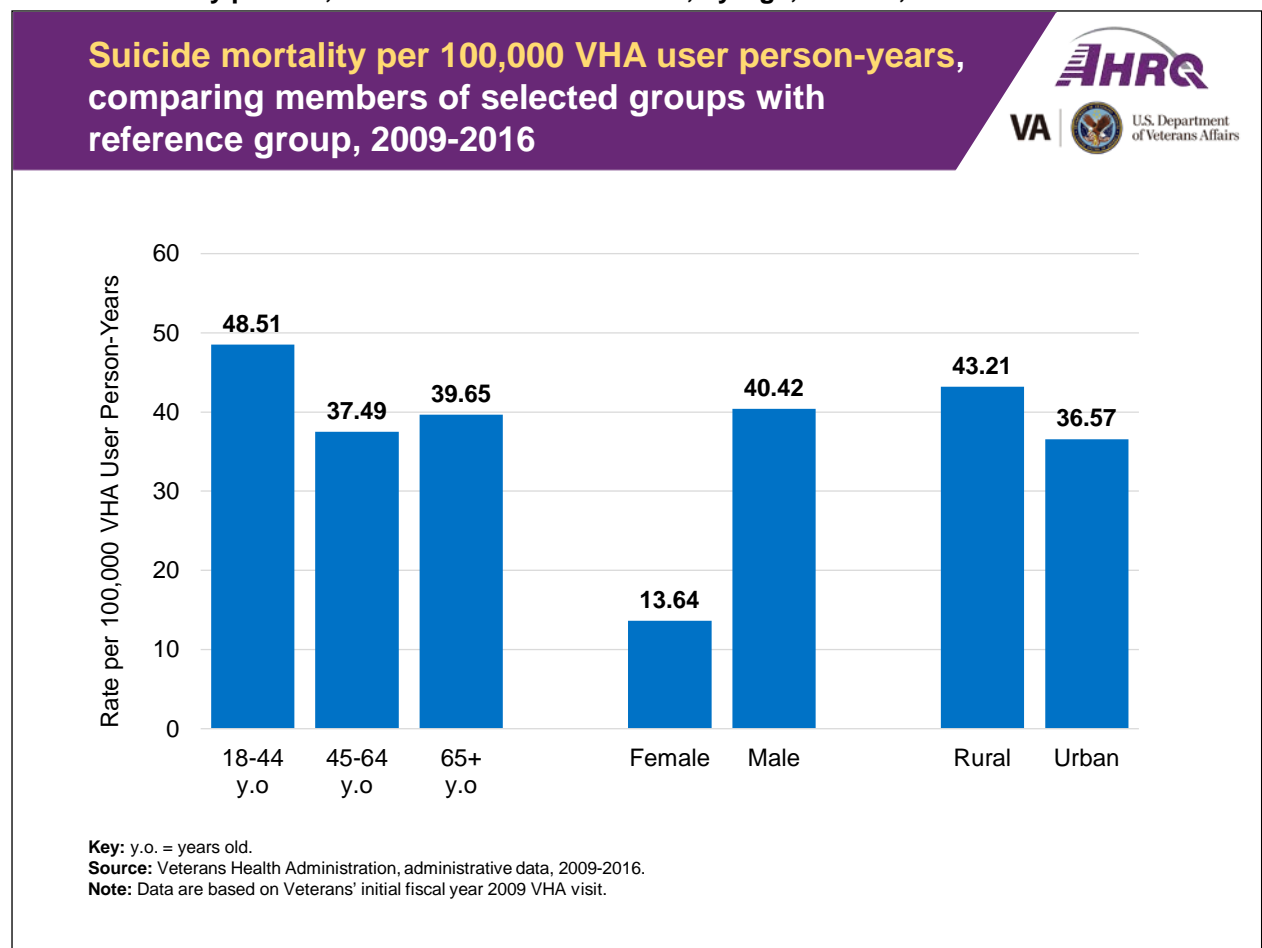


- **Importance:** People with HIV who get and stay virally suppressed or undetectable can stay healthy and have a significantly low risk of transmitting HIV. Taking HIV medicine as prescribed can make the level of virus in their body very low or even undetectable. People with HIV need to know they are HIV positive so they can take medicine to treat HIV (CDC, 2019, 2019).
- **Overall Rate:** For VHA users seen in fiscal year 2009 and followed until 2016, the HIV disease mortality rate was 6.02 per 100,000 VHA user person-years (data not shown).
- **Groups With Disparities:** For VHA users seen in fiscal year 2009 and followed until 2016, findings show significant racial/ethnic disparities.
 - Hispanic VHA users had a significantly higher HIV disease mortality rate compared with non-Hispanic White VHA users (7.38 vs. 2.97 per 100,000 VHA person-years).

- Non-Hispanic Asian VHA users had a significantly lower HIV disease mortality rate compared with non-Hispanic White VHA users (0.54 vs. 2.97 per 100,000 VHA person-years).
- Non-Hispanic Black VHA users had a significantly higher HIV disease mortality rate compared with non-Hispanic White VHA users (18.39 vs. 2.97 per 100,000 VHA person-years).
- There were no statistically significant differences between non-Hispanic multirace VHA users and non-Hispanic White VHA users in HIV disease mortality rates (6.22 vs. 2.97 per 100,000 VHA person-years).
- There were no statistically significant differences between non-Hispanic Native Hawaiian/Other Pacific Islander VHA users and non-Hispanic White VHA users in HIV disease mortality rates (4.31 vs. 2.97 per 100,000 VHA person-years).

Suicide Mortality

Suicide Mortality per 100,000 VHA User Person-Years, by Age, Gender, and Residence Location



- **Importance:** Suicide is the 10th leading cause of death in the United States. It was responsible for more than 48,000 deaths in 2018, resulting in one death every 11 minutes. Suicide death rates vary by race/ethnicity, age, and other population characteristics, with the highest rates across the lifespan occurring among non-Hispanic American Indian/Alaska Native and non-Hispanic White populations (CDC, 2020).
- **Overall Rate:** For VHA users seen in fiscal year 2009 and followed until 2016, the suicide mortality rate was 39.42 per 100,000 VHA user person-years (data not shown).
- **Groups With Disparities:** For VHA users seen in fiscal year 2009 and followed until 2016, findings show significant disparities by age, gender, and location.

■ Age

- ♦ VHA users ages 45-64 had a significantly lower suicide mortality rate compared with VHA users ages 18-44 (37.49 vs. 48.51 per 100,000 VHA person-years).
- ♦ VHA users age 65+ had a significantly lower suicide mortality rate compared with VHA users ages 18-44 (39.65 vs. 48.51 per 100,000 VHA person-years).

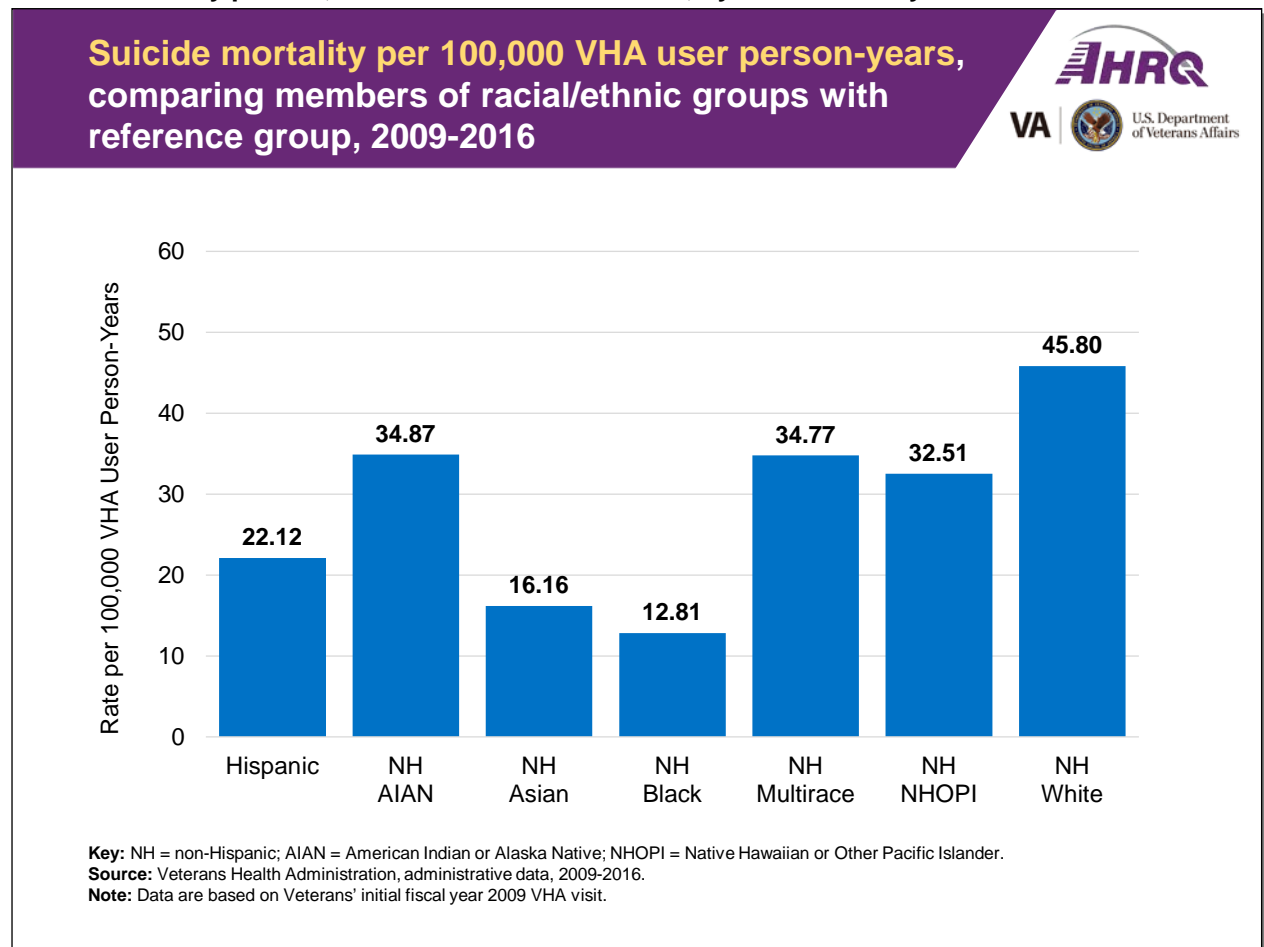
■ Gender

- ♦ Female VHA users had a significantly lower suicide mortality rate compared with male VHA users (13.64 vs. 40.42 per 100,000 VHA person-years).

■ Location

- ♦ Rural VHA users had a significantly higher suicide mortality rate compared with urban VHA users (43.21 vs. 36.57 per 100,000 VHA person-years).

Suicide Mortality per 100,000 VHA User Person-Years, by Race/Ethnicity



- **Importance:** Suicide is the 10th leading cause of death in the United States. It was responsible for more than 48,000 deaths in 2018, resulting in one death every 11 minutes. Suicide death rates vary by race/ethnicity, age, and other population characteristics, with the highest rates across the lifespan occurring among non-Hispanic American Indian/Alaska Native and non-Hispanic White populations (CDC, 2020).
- **Overall Rate:** For VHA users seen in fiscal year 2009 and followed until 2016, the suicide mortality rate was 39.42 per 100,000 VHA user person-years (data not shown).
- **Groups With Disparities:** For VHA users seen in fiscal year 2009 and followed until 2016, findings show significant racial/ethnic disparities.
 - Hispanic VHA users had a significantly lower suicide mortality rate compared with non-Hispanic White VHA users (22.12 vs. 45.80 per 100,000 VHA person-years).

- **Non-Hispanic American Indian/Alaska Native VHA users had a significantly lower suicide mortality rate compared with non-Hispanic White VHA users (34.87 vs. 45.80 per 100,000 VHA person-years).**
- **Non-Hispanic Asian VHA users had a significantly lower suicide mortality rate compared with non-Hispanic White VHA users (16.16 vs. 45.80 per 100,000 VHA person-years).**
- **Non-Hispanic Black VHA users had a significantly lower suicide mortality rate compared with non-Hispanic White VHA users (12.81 vs. 45.80 per 100,000 VHA person-years).**
- **Non-Hispanic multirace VHA users had a significantly lower suicide mortality rate compared with non-Hispanic White VHA users (34.77 vs. 45.80 per 100,000 VHA person-years).**
- **Non-Hispanic Native Hawaiian/Other Pacific Islander VHA users had a significantly lower suicide mortality rate compared with non-Hispanic White VHA users (32.51 vs. 45.80 per 100,000 VHA person-years).**

RESOURCES AND REFERENCES

Resources

- The **National Healthcare Quality and Disparities Reports** website features annual reports on healthcare quality and disparities and chartbooks on multiple quality topics. <https://nhqrnet.ahrq.gov/inhqrdr/>
- The **VA Office of Health Equity** aims to increase access to high-quality healthcare for all Veterans by creating reports and tools to assess health conditions and provide comparative information. <https://www.va.gov/healthequity/>
- The **VA Office of Research and Development** conducts research and provides analytics on topics such as reducing inequality in healthcare for Veterans. https://www.research.va.gov/topics/health_equity.cfm

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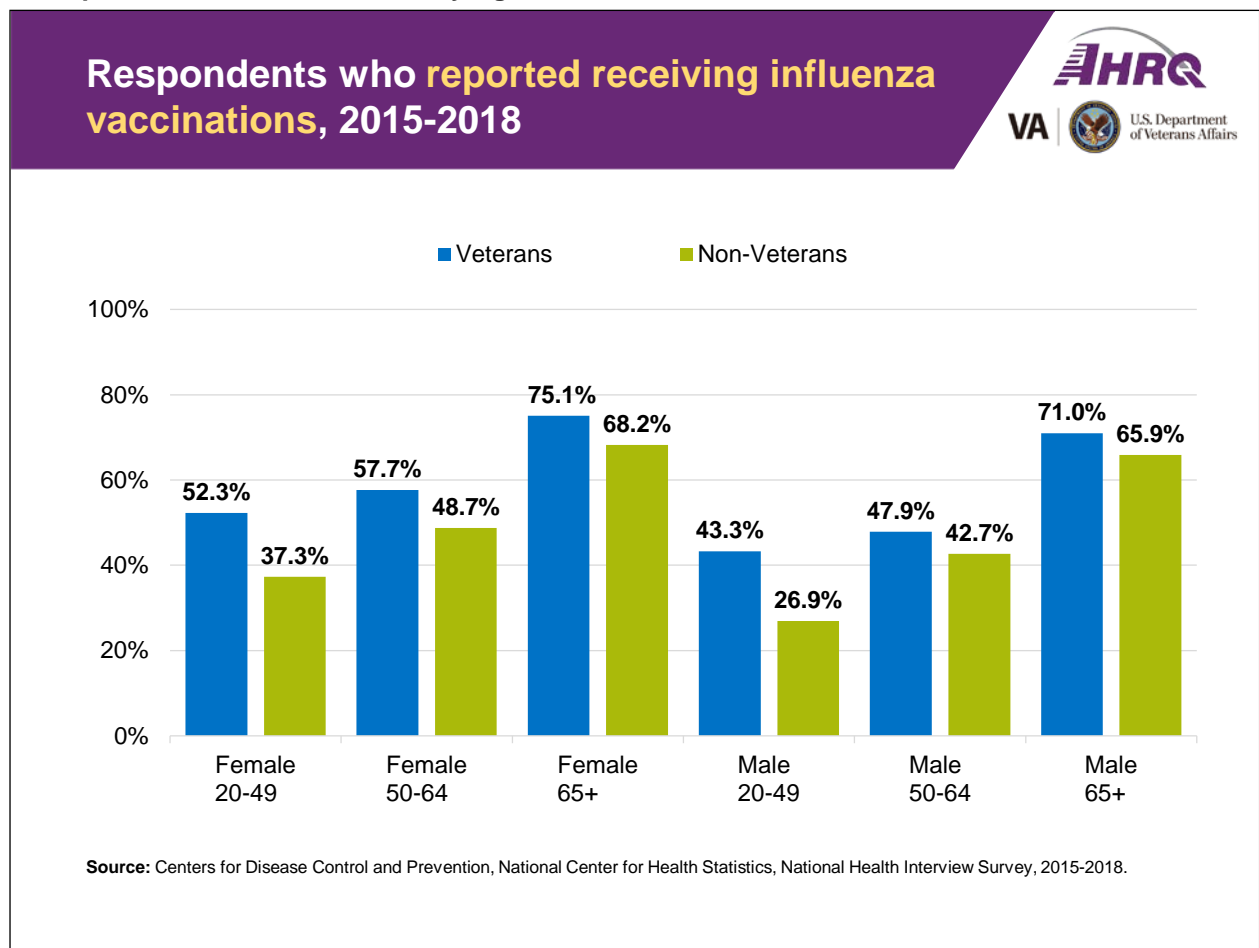
APPENDIX

Appendix Slides

- The Contrast 1 data show age-adjusted gender strata percentages to compare Veterans and non-Veterans.
- The following data provide percentages by age and gender strata for the same measures, which allows comparisons of specific age-gender groups among Veterans and non-Veterans.
- Sources for the data are the Medical Expenditure Panel Survey (MEPS), 2014-2017; National Health Interview Survey (NHIS), 2015-2018; Survey of Healthcare Experience of Patients (SHEP), 2015; and Veterans Health Administration (VHA) Administrative Fiscal year (FY) 2009-2016.

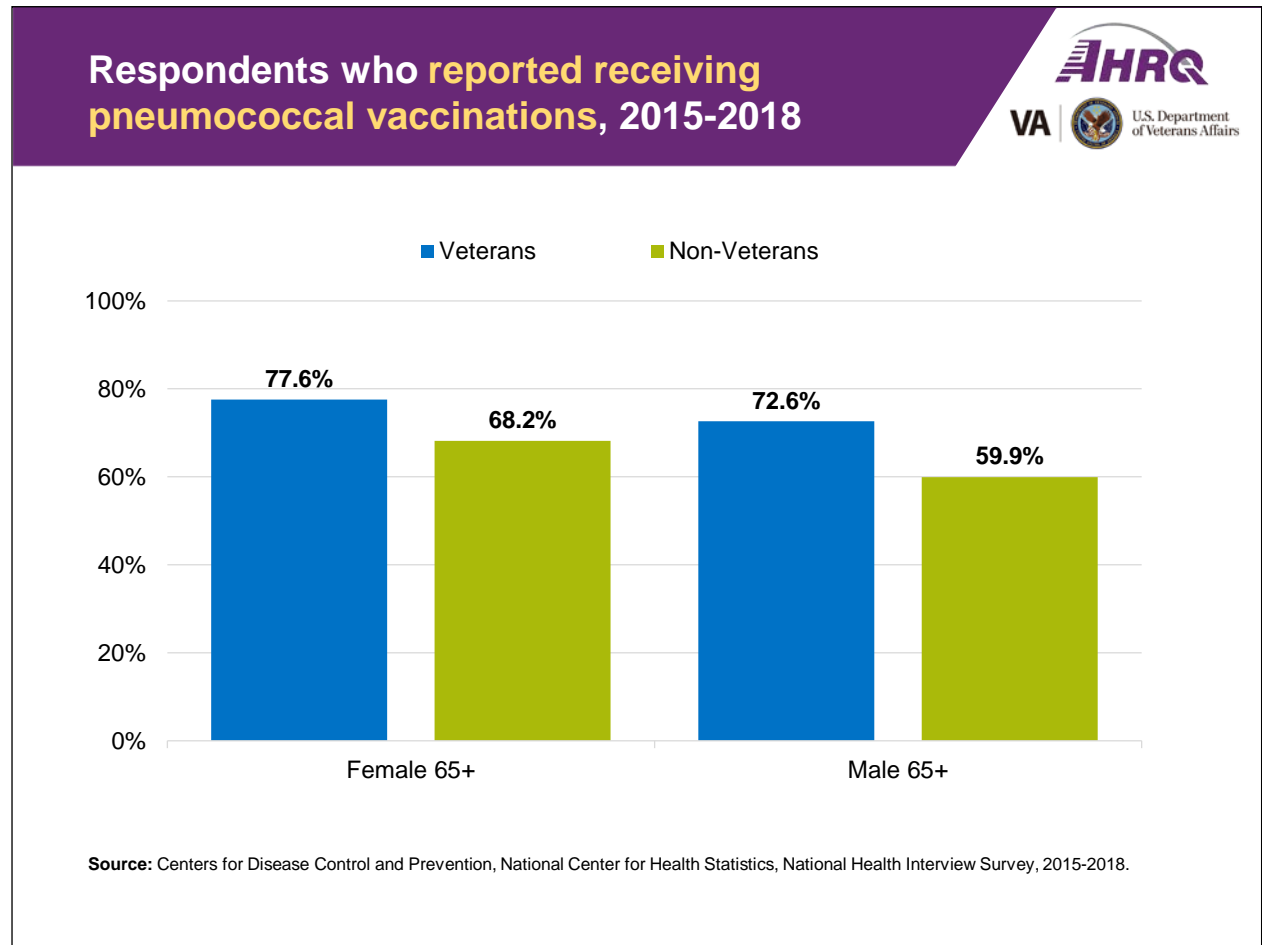
Vaccinations

Receipt of Influenza Vaccination, by Age and Gender



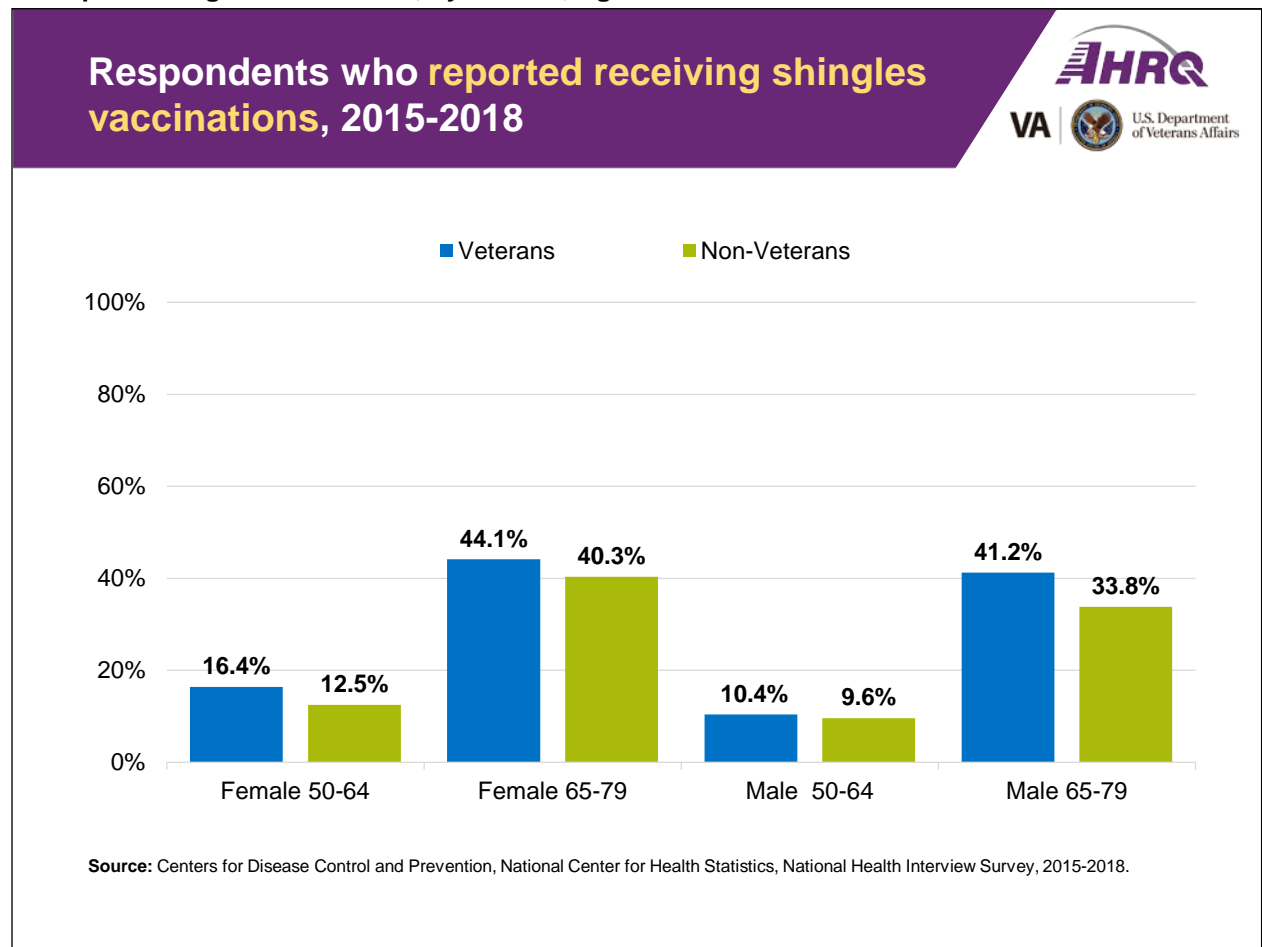
- **Importance:** Each year, millions of Americans get sick with influenza. Sometimes it causes mild illness but it can also be serious or even deadly, especially for people over 65, newborn babies, and people with certain chronic illnesses (NLM, 2020). Vaccination can prevent influenza and reduce influenza-related morbidity and mortality (CDC, 2019).
- **Overall Rate:** In 2015-2018, 50.2% of Veterans and 41.7% of non-Veterans received an influenza vaccination (data not shown).
- **Groups With Disparities:** In 2015-2018, among adults age 20 years and over:
 - Female Veterans ages 20-49 were significantly more likely to receive an influenza vaccination compared with female non-Veterans ages 20-49 (52.3% vs. 37.3%).
 - Female Veterans ages 50-64 were significantly more likely to receive an influenza vaccination compared with female non-Veterans ages 50-64 (57.7% vs. 48.7%).
 - There were no statistically significant differences between female Veterans age 65+ and female non-Veterans age 65+ in the percentage who received an influenza vaccination (75.1% vs. 68.2%).
 - Male Veterans ages 20-49 were significantly more likely to receive an influenza vaccination compared with male non-Veterans ages 20-49 (43.3% vs. 26.9%).
 - Male Veterans ages 50-64 were significantly more likely to receive an influenza vaccination compared with male non-Veterans ages 50-64 (47.9% vs. 42.7%).
 - There were no statistically significant differences between male Veterans age 65+ and male non-Veterans age 65+ in the percentage who received an influenza vaccination (71.0% vs. 65.9%).

Receipt of Pneumococcal Vaccination, by Gender, Age 65+



- **Importance:** Pneumococcal disease is caused by bacteria and can result in a range of ailments, from mild ear infection to meningitis, sepsis, and fatal pneumonia (NIAID, 2014). Adults over age 65 and individuals of any age with chronic illness are at increased risk for pneumococcal disease and death. The best way to prevent pneumococcal disease is by getting vaccinated (CDC, 2019).
- **Overall Rate:** In 2015-2018, 73.4% of Veterans and 65.8% of non-Veterans age 65 years and over received pneumococcal vaccination (data not shown).
- **Groups With Disparities:** In 2015-2018, among adults age 65 years and over:
 - There were no statistically significant differences between female Veterans and female non-Veterans in the percentage who received a pneumococcal vaccination (77.6% vs. 68.2%).
 - Male Veterans were significantly more likely to receive a pneumococcal vaccination compared with male non-Veterans (72.6% vs. 59.9%).

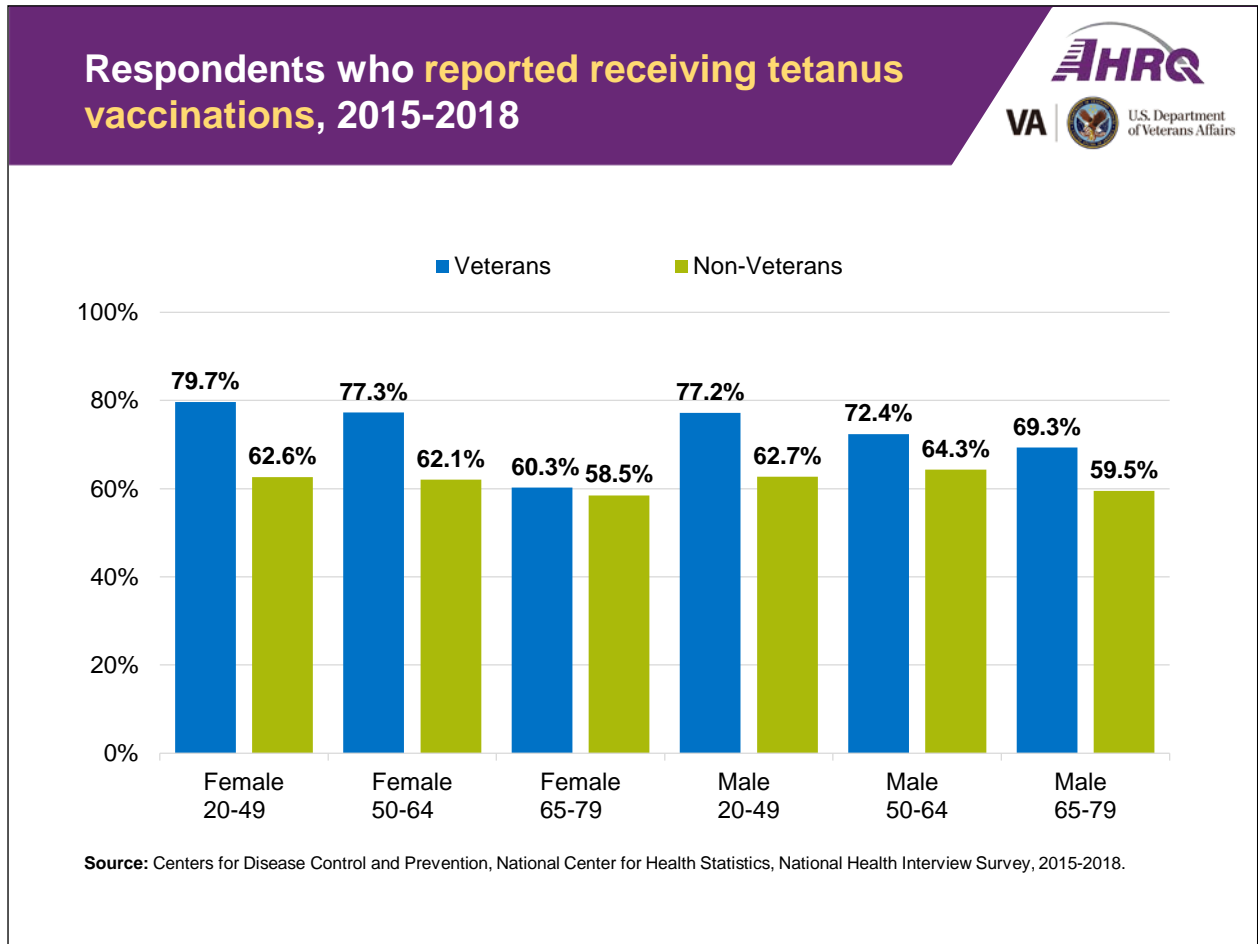
Receipt of Shingles Vaccination, by Gender, Ages 50-79



- **Importance:** Shingles is a painful rash that usually develops on one side of the body, often the face or torso. For some people, long-lasting pain, which can last for months or even years after the rash goes away, is the most common complication of shingles. The risk of getting shingles increases with age (CDC, 2016) but decreases with vaccination (CDC, 2018).
- **Overall Rate:** In 2015-2018, 24.8% of Veterans and 22.9% of non-Veterans received a shingles vaccination (data not shown).
- **Groups With Disparities:** In 2015-2018, among adults age 50 years and over:
 - There were no statistically significant differences between female Veterans ages 50-64 and female non-Veterans ages 50-64 in the percentage who received a shingles vaccination (16.4% vs. 12.5%).
 - There were no statistically significant differences between female Veterans age 65+ and female non-Veterans age 65+ in the percentage who received a shingles vaccination (44.1% vs. 40.3%).

- There were no statistically significant differences between male Veterans ages 50-64 and male non-Veterans ages 50-64 in the percentage who received a shingles vaccination (10.4% vs. 9.6%).
- Male Veterans age 65+ were significantly more likely to receive a shingles vaccination compared with male non-Veterans age 65+ (41.2% vs. 33.8%).

Receipt of Tetanus Vaccinations, by Age and Gender

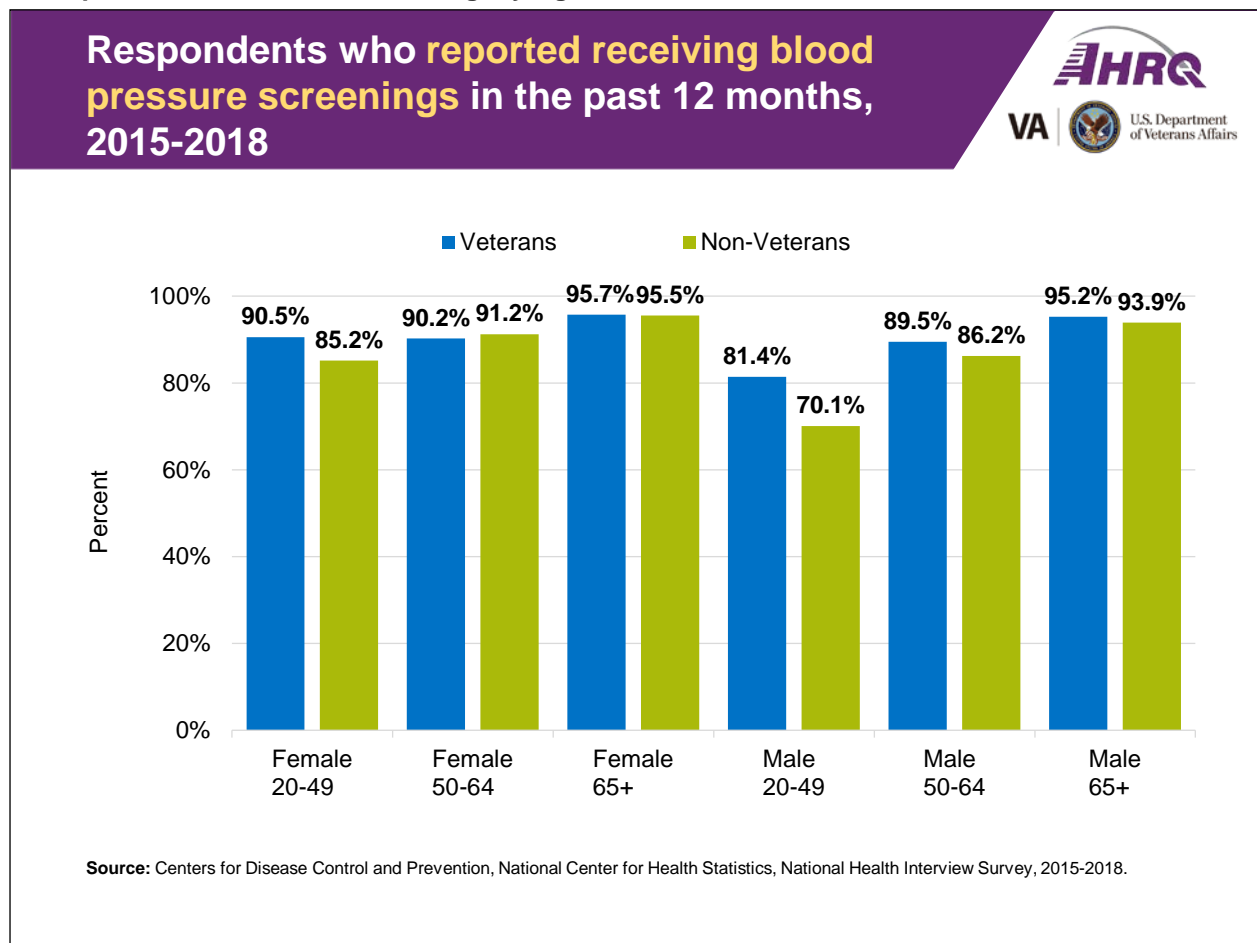


- **Importance:** Tetanus is an infection caused by tetanus bacteria spores that get into the body through broken skin, usually through injuries from contaminated objects. Tetanus infection can lead to serious health problems, including being unable to open the mouth and having trouble swallowing and breathing (CDC, 2019). Nearly all cases of tetanus are in people who never got a tetanus vaccine or did not receive a complete course of tetanus vaccines, or adults who did not stay up to date on their 10-year booster shots (CDC, 2020).
- **Overall Rate:** In 2015-2018, 74.6% of Veterans and 61.4% of non-Veterans received a tetanus vaccination in the past 10 years (data not shown).

- Groups With Disparities:** In 2015-2018, among adults age 20 years and over:
 - Female Veterans ages 20-49 were significantly more likely to receive a tetanus vaccination compared with female non-Veterans ages 20-49 (79.7% vs. 62.6%).
 - Female Veterans ages 50-64 were significantly more likely to receive a tetanus vaccination compared with female non-Veterans ages 50-64 (77.3% vs. 62.1%).
 - There were no statistically significant differences between female Veterans age 65+ and female non-Veterans age 65+ in the percentage who received a tetanus vaccination (60.3% vs. 58.5%).
 - Male Veterans ages 20-49 were significantly more likely to receive a tetanus vaccination compared with male non-Veterans ages 20-49 (77.2% vs. 62.7%).
 - Male Veterans ages 50-64 were significantly more likely to receive a tetanus vaccination compared with male non-Veterans ages 50-64 (72.4% vs. 64.3%).
 - Male Veterans age 65+ were significantly more likely to receive a tetanus vaccination compared with male non-Veterans age 65+ (69.3% vs. 59.5%).

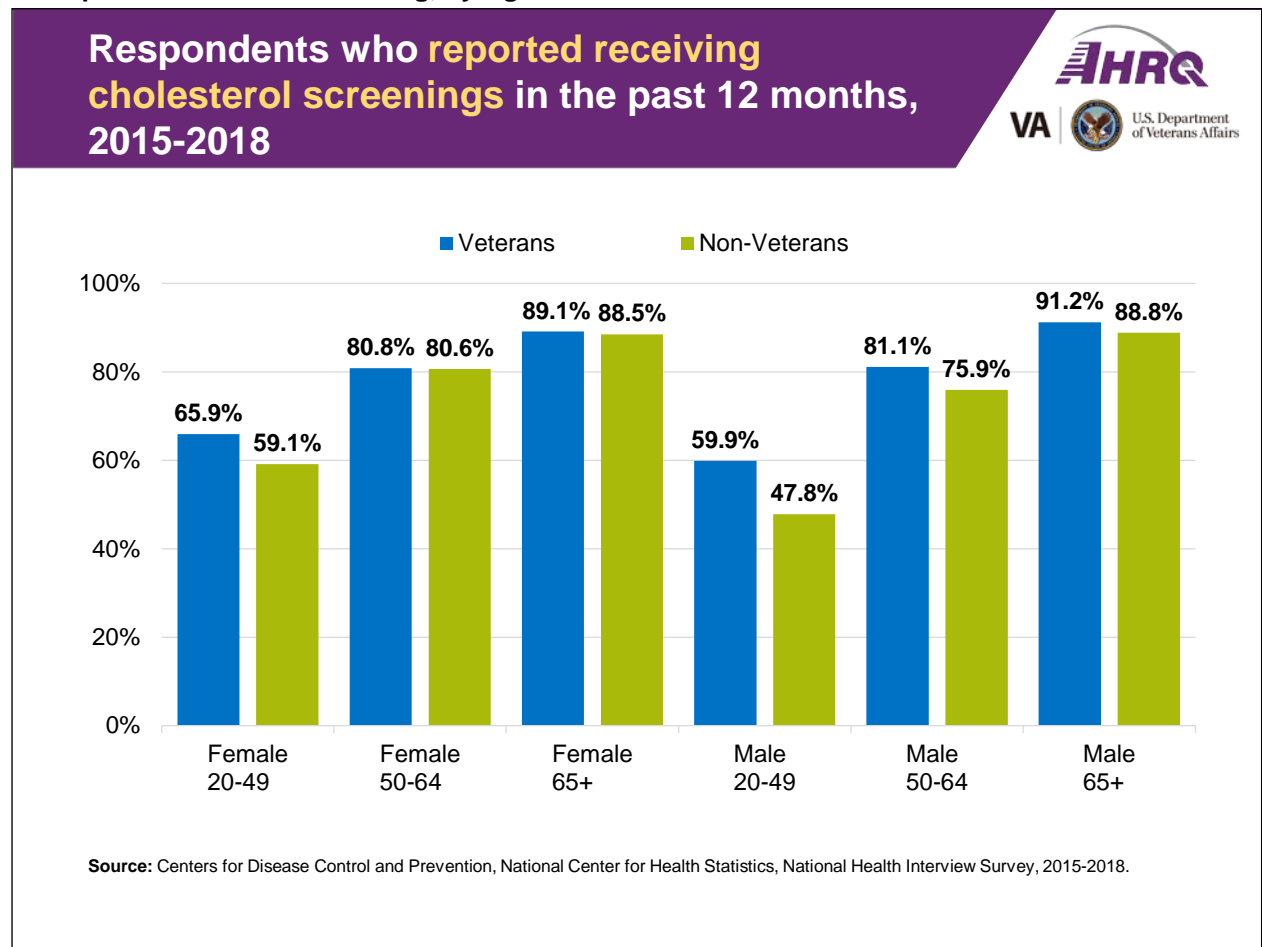
Screenings

Receipt of Blood Pressure Screening, by Age and Gender



- **Importance:** Nearly half of all adults in the United States, about 103 million people, have high blood pressure (AHA, 2018). High blood pressure increases the risk for heart disease and stroke, two leading causes of death for Americans (CDC, 2020).
- **Overall Rate:** In 2015-2018, 86.9% of Veterans and 83.5% of non-Veterans received a blood pressure screening (data not shown).
- **Groups With Disparities:** In 2015-2018, among adults age 20 years and over:
 - There were no statistically significant differences between female Veterans ages 20-49 and female non-Veterans ages 20-49 in the percentage who received a blood pressure screening (90.5% vs. 85.2%).
 - There were no statistically significant differences between female Veterans ages 50-64 and female non-Veterans ages 50-64 in the percentage who received a blood pressure screening (90.2% vs. 91.2%).
 - There were no statistically significant differences between female Veterans age 65+ and female non-Veterans age 65+ in the percentage who received a blood pressure screening (95.7% vs. 95.5%).
 - Male Veterans ages 20-49 were significantly more likely to receive a blood pressure screening compared with male non-Veterans ages 20-49 (81.4% vs. 70.1%).
 - There were no statistically significant differences between male Veterans ages 50-64 and male non-Veterans ages 50-64 in the percentage who received a blood pressure screening (89.5% vs. 86.2%).
 - There were no statistically significant differences between male Veterans age 65+ and male non-Veterans age 65+ in the percentage who received a blood pressure screening (95.2% vs. 93.9%).

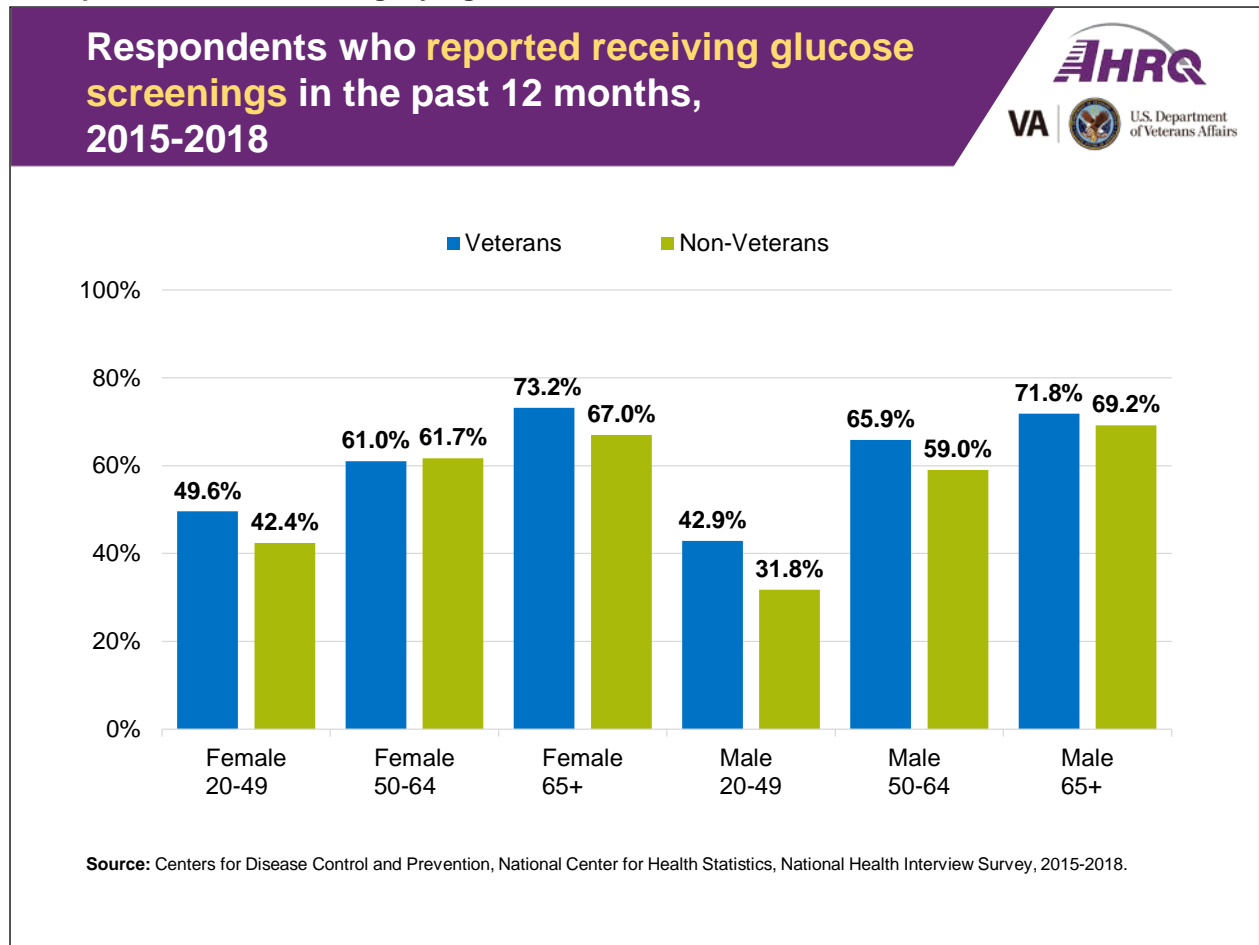
Receipt of Cholesterol Screening, by Age and Gender



- **Importance:** About 95 million Americans age 20 and older have total cholesterol levels higher than 200 mg/dL and nearly 29 million have total cholesterol levels higher than 240 mg/dL. High cholesterol raises the risk of heart disease, the leading cause of death, and stroke, the fifth leading cause of death (CDC, 2020).
- **Overall Rate:** In 2015-2018, 71.3% of Veterans and 65.8% of non-Veterans received a cholesterol screening (data not shown).
- **Groups With Disparities:** In 2015-2018, among adults age 20 years and over:
 - There were no statistically significant differences between female Veterans ages 20-49 and female non-Veterans ages 20-49 in the percentage who received a cholesterol screening (65.9% vs. 59.1%).
 - There were no statistically significant differences between female Veterans ages 50-64 and female non-Veterans ages 50-64 in the percentage who received a cholesterol screening (80.8% vs. 80.6%).

- There were no statistically significant differences between female Veterans age 65+ and female non-Veterans age 65+ in the percentage who received a cholesterol screening (89.1% vs. 88.5%).
- Male Veterans ages 20-49 were significantly more likely to receive a cholesterol screening compared with male non-Veterans ages 20-49 (59.9% vs. 47.8%).
- There were no statistically significant differences between male Veterans ages 50-64 and male non-Veterans ages 50-64 in the percentage who received a cholesterol screening (81.1% vs. 75.9%).
- There were no statistically significant differences between male Veterans age 65+ and male non-Veterans age 65+ in the percentage who received a cholesterol screening (91.2% vs. 88.8%).

Receipt of Glucose Screening, by Age and Gender



- **Importance:** Glucose screening is a test used to diagnose prediabetes and type 1, type 2, or gestational diabetes. Diabetes is a chronic health condition in which the body either does not make enough insulin or cannot use the insulin it makes as well as it should. Diabetes is a leading cause of morbidity and mortality in the United States (CDC, 2019, 2020).
- **Overall Rate:** In 2015-2018, 54.3% of Veterans and 48.1% of non-Veterans received a glucose screening (data not shown).
- **Groups With Disparities:** In 2015-2018, among adults age 20 years and over:
 - There were no statistically significant differences between female Veterans ages 20-49 and female non-Veterans ages 20-49 in the percentage who received a glucose screening (49.6% vs. 42.4%).
 - There were no statistically significant differences between female Veterans ages 50-64 and female non-Veterans ages 50-64 in the percentage who received a glucose screening (61.0% vs. 61.7%).
 - There were no statistically significant differences between female Veterans age 65+ and female non-Veterans age 65+ in the percentage who received a glucose screening (73.2% vs. 67.0%).
 - Male Veterans ages 20-49 were significantly more likely to receive a glucose screening compared with male non-Veterans ages 20-49 (42.9% vs. 31.8%).
 - Male Veterans ages 50-64 were significantly more likely to receive a glucose screening compared with male non-Veterans ages 50-64 (65.9% vs. 59.0%).
 - There were no statistically significant differences between male Veterans age 65+ and male non-Veterans age 65+ in the percentage who received a glucose screening (71.8% vs. 69.2%).