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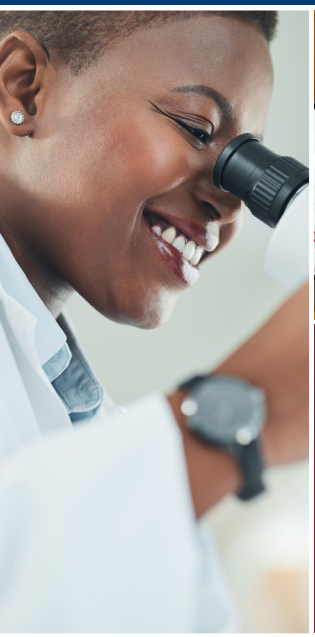



National Veteran Health Equity Report 2021

Focus on Veterans Health Administration Patient Experience and Health Care Quality

U.S. Department of Veterans Affairs
Veterans Health Administration
Office of Health Equity

Health Equity - Quality Enhancement Research Initiative
National Partnered Evaluation Center
VA HSR&D Center for the Study of Healthcare Innovation, Implementation & Policy (CSHIIP),
VA Greater Los Angeles Healthcare System, Los Angeles, CA

September 2022

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Focus on Veterans Health Administration Patient Experience and Health Care Quality

Prepared for:
Office of Health Equity
Veterans Health Administration
Washington, DC

Prepared by:
Health Equity - Quality Enhancement Research Initiative
National Partnered Evaluation Center (OHE-QUERI PEC)
VA HSR&D Center for the Study of Healthcare Innovation, Implementation & Policy,
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Foreword

Dr. Carolyn M. Clancy
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While federal policymakers have increasingly focused on social, economic and health inequities, the past two years have shifted this national conversation into high gear. The COVID-19 pandemic not only amplified the extent and nature of healthcare disparities, but dramatically underscored their impact on healthcare overall. Closing these gaps in care means recognizing the population groups most acutely affected as well as the drivers behind the inequities they face. *The National Veteran Health Equity Report 2021* produced by the VHA Office of Healthcare Equity provides the essential data to accomplish both objectives.

First, by providing data on patient experiences and quality of health care in relation to differential health and healthcare outcomes, the Report sheds light on interventions needed to support the groups most likely to experience disparities. Additionally, these data provide patients, providers, policymakers, and other stakeholders with the "quantitative tools" needed to advocate for a more fair and equitable healthcare system.

Second, the Report's findings affirm the essential role of provider-patient communication. For example, within the Veterans Health Administration (VHA) itself, the most common measures showing disparities are in the domains of Veteran-centered care and preventive services. Notably, these measures capture aspects of care that rely heavily on good provider-patient communication.

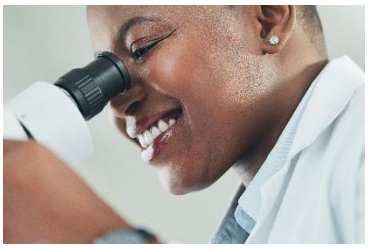
To address these issues, healthcare systems must ensure that provider communications are helpful and respectful, understood by the patient, and supportive of the patient's ability to manage their own health and use best practices for healthy living.

Ensuring equity is consistent with the principles of high-reliability organizations (HRO), which include the five concepts of sensitivity to operations, preoccupation with failure, deference to expertise, resilience, and reluctance to simplify; the presence of disparities is fundamentally inconsistent with high reliability. By focusing on equity, VHA and other delivery systems will be able to eliminate disparities and achieve high quality, safe outcomes for all (particularly in the areas of person-centered care and in clinical preventive services).[1]

The National Veteran Health Equity Report 2021 builds upon the foundational work by the Agency for Healthcare Research and Quality, which has tracked equity issues for decades through its Congressionally mandated *National Healthcare Quality and Disparities Reports*. As such, it enhances the national conversation on health and justice at a unique inflection point in U.S. healthcare history. The Report provides guidance to an integrated system in which Veterans face smaller financial barriers to care and can get support for health-related social needs related to housing, food insecurity, education, and employment. As a result, the Report brings us one step closer toward a more equitable healthcare delivery system where Veterans and all Americans have the opportunity to thrive and reach their highest attainable health.

[1] Moy E, Hausmann LRM, Clancy CM. From HRO to HERO: Making Health Equity a Core System Capability. *Am J Med Qual*. 2022 Jan-Feb 01;37(1):81-83. doi: 10.1097/JMQ.0000000000000020. PMID: 34506333.

Executive Summary



Background

This National Veteran Health Equity Report 2021 provides information regarding disparities in patient experiences and health care quality for Veterans who obtain health care services through the Veterans Health Administration (VHA). Data on disparities are presented by the sociodemographic characteristics of race/ethnicity, gender, age group, rurality of residence, socio-economic status, and service-connected disability rating, and by cardiovascular risk factors of hypertension, hyperlipidemia, and diabetes. Data in this report are from the fiscal year 2016 to fiscal year 2019 Department of Veteran Affairs (VA) Survey of Healthcare Experiences of Patients (SHEP) Patient Centered Medical Home survey instrument, and the fiscal year 2016 to fiscal year 2019 VA External Peer Review Program quality monitoring program.

Key Findings on Comparisons in Patient Experiences

Patient experiences of VHA Care were compared for three domains of patient experience:

- Access – getting timely appointments, care, and information
- Person-centered care
    - Communication – how well providers communicate with patients and how helpful and respectful office staff are
    - Comprehensiveness – providers paying attention to patient's mental or emotional health
    - Self-management support – providers supporting patients in taking care of their own health
- Care Coordination – provider's use of information to coordinate patient care, including discussing medication decisions

Key findings:

- For most groups experiencing disparities in patient experience, there were more frequent gaps in person-centered care and less frequent gaps in access to care and care coordination.
- On average, the greatest gaps in patient experience were for Veterans under age 45 years of age when compared to those age 65 and older.
- In contrast to non-Hispanic White Veterans, disparities in access to care were most often reported by Black, Asian, more than one race, and Hispanic Veteran groups.
- In contrast to non-Hispanic White Veterans, disparities in person-centered care were most often reported by American Indian or Alaska Native, Asian, and more than one race Veteran groups.

- Female Veterans of reproductive age (18-44 years) experienced widespread disparities in person-centered care compared to Male Veterans of the same age group
- Veteran VHA users with low socio-economic status (SES) experienced a wide range of disparities in person-centered care compared with their higher SES counterparts.
- There were no patient experience disparities by rurality of residence.

Key Findings on Comparisons in Health Care Quality

Quality of VHA Care was compared for three domains of quality:

- Effective Treatment
    - Promoting the most effective prevention and treatment practices for the leading causes of mortality, starting with cardiovascular disease
- Healthy Living – Lifestyle Modification
    - Promoting lifestyle changes to address behavioral risk factors for chronic conditions
- Healthy Living – Clinical Preventive Services
    - Promoting wide use of best practices to enable healthy living

Key findings:

- The most frequent disparities in quality of care were for healthy living – clinical preventive services.
- By race/ethnicity, Black and American Indian or Alaska Native Veteran groups had the greatest disparities compared with non-Hispanic White Veterans, with worse care quality on 40% or more measures in at least one domain of care quality.
- Women Veterans age 65 and older had large gaps in quality compared with male Veterans in that age group, whereas gender differences were less apparent for younger age groups.
- Quality gaps were present for Veterans with low socio-economic status in healthy living-clinical preventive services, and in healthy living-lifestyle modification
- Across domains, quality gaps were present for Veterans under age 65 in comparison to those age 65 and older.

Chapter 1

Introduction to the National Veteran Health Equity Report 2021

Donna L. Washington, MD, MPH, FACP

Background

Veterans of the U.S. military are a unique population, who have given selflessly to serve this country. The Veterans Health Administration (VHA) provides health care to eligible Veterans. Of the 19 million U.S. Veterans, over 9 million are enrolled in the VHA healthcare system. With over 1,000 sites of clinical care, VHA is the largest integrated healthcare delivery system in the U.S. Veterans who use VHA care reflect a diversity of backgrounds, identities, and experiences. Similar to the broader U.S. population, Veterans in VHA include those with characteristics that have historically been linked to discrimination or exclusion.

Equitable access to high quality care is a major tenet of the VHA's healthcare mission. Though VHA eligibility and care delivery is structured in a manner that reduces many of the traditional drivers of health disparities, health and health care disparities are still apparent in Veterans' VHA healthcare experiences and for many important health outcomes. The VHA Office of Health Equity was created in 2012 to promote the advancement of health equity and the reduction of health disparities among Veterans. The VHA Health Equity Action Plan, which guides the work of the Office of Health Equity, is a strategic document to achieve health equity for Veterans. It includes a data, research, and evaluation aim (monitoring and reporting) as one of the strategies to achieve health equity.

"If you can't measure it, you can't improve it."

Increasing knowledge and awareness of the state of VHA health equity provides a common foundation and evidence base for elucidating barriers, data needs, and recommended actions for improving health equity systemwide.

Overview of Report Purpose and Content

The National Veteran Health Equity Report (NVHER) 2021 is the fiscal year (FY) 2021 contribution to a growing body of systematic inquiries into differences by sociodemographic and health characteristics in the health and health care of Veterans. This report is designed to provide comparative information on the sociodemographic characteristics, patient experiences, and health care quality of Veterans who use VHA care. An inaugural NVHER, released in 2016, reported on sociodemographic characteristics, VHA health care utilization patterns, and rates

of diagnosed health conditions among FY2013 Veteran VHA users by select characteristics.[1] This NVHER 2021 report builds on those findings by focusing on domains of care that could influence health care utilization and outcomes. Where relevant, we also compare findings to the previous NVHER report.

As noted in an online commentary about VA's Survey of Healthcare Experience of Patients (SHEP), the best information on how well VA serves Veterans comes from Veterans themselves.[2] Therefore, **VHA patient experiences in primary care** is one of the overarching areas of focus for this report. Domains of patient experiences of VHA care that we examine are access to care, person-centered care, and care coordination.

"I've learned that people will forget what you said,
people will forget what you did,
but people will never forget how you made them feel."
– Maya Angelou

Quality measures relate to many significant public health issues, such as heart disease and its risk factors, tobacco use, cancer, and respiratory diseases that are preventable with immunization. Standardized quality measures are designed to provide Veterans and VA health systems with information for comparison of health system performance for different groups. Therefore, **VHA quality of care** is the other overarching area of focus for this report. Domains of health care quality that we examine are effective treatment, healthy living – lifestyle modification, and healthy living – clinical preventive services.

Chapters 2 through 8 describe comparative data on VHA patient experiences and health care quality in subgroups of Veteran VHA patients. This comparative data summarizes 62 measures across six domains of patient experiences and health care quality.

- Chapter 2 focuses on racial/ethnic disparities
- Chapter 3 focuses on gender disparities
- Chapter 4 focuses on disparities among older Veterans, comparing different age groups
- Chapter 5 focuses on disparities among Veterans who reside in rural vs. urban areas
- Chapter 6 focuses on disparities by socio-economic status
- Chapter 7 focuses on disparities by service-connected disability rating
- Chapter 8 focuses on disparities by the presence vs. absence of the cardiovascular disease risk factors hypertension, hyperlipidemia, and diabetes

A Technical Appendix that describes the methods used to generate the figures within our data-focused chapters is included in this report.

Brief Overview of Methods and Guidelines for Interpretation

These chapters rely on centralized analyses of VA administrative data for FY2016 – FY2019 (October 1, 2015 through September 30, 2019). Veteran sociodemographic characteristics and medical diagnoses were derived from the administrative and electronic health record (EHR) data in the Corporate Data Warehouse. Patient experience measures were derived from SHEP-Patient Centered Medical Home surveys for FY2016 – FY2019. Quality measures were obtained from the External Peer Review Program (EPRP).

We created separate SHEP and EPRP cohorts. For each of these cohorts, we linked the 4 fiscal years of data; for individuals with observations in more than 1 year, we retained only the most recent year of data. We next linked Veteran characteristics from the VA administrative data and EHR.

- For time varying measures, e.g., **age**, we used the fiscal year of administrative data that corresponded to the SHEP or EPRP record.
- **Race-ethnicity.** Race and ethnicity data derived from VA administrative data is primarily reported as being based on self-identification. To facilitate comparisons between VHA data and publicly available data representing the U.S. population, we report race and ethnicity groups as mutually exclusive. All individuals with indication of Hispanic ethnicity are included in the "Hispanic" race/ethnicity group regardless of their race. The remaining race/ethnicity categories contain Veteran patients who have identified as "non-Hispanic," but for simplicity, the label identifies only the race. For example, "White" is used as shorthand for non-Hispanic White, and "Black" is used as shorthand for non-Hispanic Black or African American. Records where race/ethnicity were missing, or reported as declined or unknown, were combined into an "unknown" race/ethnicity category.
- **Gender.** Gender in this report is derived from VA administrative data table data fields for sex. Though self-identified gender identity is now available as a data field in VA administrative data, it was not populated for the years covered in this report to the extent required for widespread population comparisons. Therefore, gender comparisons in this report are limited to comparisons between Veteran Women and Men (derived from sex data fields reported as female or male, respectively).
- **Socioeconomic status.** Socioeconomic status (SES) is based on VA enrollment priority and was assessed only for Veterans who were required to complete an enrollment means test. Therefore, SES was assessed for non-service-connected Veterans, and it was not assessed for Veterans with service-connected disability. Veterans whose enrollment means test placed them in a copayment exempt priority group (due to low income) were categorized as having low SES, whereas those who are required to pay a copayment were categorized as having higher SES.
- **Diagnosed conditions.** Cardiovascular disease risk factors are based on ICD-10 diagnosis codes from a 2-year lookback period (e.g., FY2018 and FY2019 for Veterans in the FY2019 cohort). For the FY2016 cohort, the lookback period included FY2015, for which we included ICD-9 codes. To be categorized as having the diagnosis, an individual had to have two or more outpatient diagnoses, or one or more inpatient diagnoses for the condition of interest during the lookback period.

To analyze data, we first aligned metrics so that for all measures, a higher rate indicated better patient experiences or better quality. We next dichotomized responses to the response corresponding to the best care versus all other responses. We stratified all cohorts by age group (18-44 years; 45-64 years; and 65+ years). For the age group comparisons, we also conducted a separate analysis of older (age 65+) Veterans, using age strata of 65-74 years, 75-84 years, and 85+ years. For all chapters except the age comparison chapter, we conducted age-stratified analyses, comparing each priority (comparison) group and reference group within an 18-44

years, 45-64 years, and 65+ years strata. Several of the quality measures only applied to certain age groups, and therefore some groups (generally, the 18–44-year age group) had fewer comparisons. In addition, for sub-populations represented in 1% or less of the population (four of the racial/ethnic sub-populations), there was an insufficient sample in the 18–44-year age group to assess for statistically significant differences for some of the quality measures.

To categorize a difference as a disparity (or an advantage, if the difference favored the priority group), we applied **two criteria for a meaningful difference:** an absolute difference that was statistically significant with a p-value < 0.05 on a two-tailed test, AND a relative difference of at least 10%, where the relative difference is the difference between the priority group gap in care and the reference group gap in care, divided by the reference group gap in care. Both criteria had to be satisfied for a difference to be categorized as a disparity. These criteria are based on the standard applied by the Agency for Healthcare Research and Quality (AHRQ) in their annual National Healthcare Quality and Disparities Report for the U.S. population.[3]

Disparities are meaningful differences between comparison (priority) and reference groups that disadvantage the priority group.

The format for presenting comparisons between priority groups and the reference group for each patient experience domain of care or quality domain of care is to use 100% stacked bar graphs. For each domain (e.g., person-centered care) and priority group (e.g., Hispanic Veterans), the number and percent of measures for which the priority group has better, same, or worse outcomes compared to the reference group is summarized in the 100% stacked bar graph. All priority groups for that characteristic (e.g., all race/ethnicity groups) appear on the same plot. The example below illustrates comparisons for a Veteran characteristic where there are two priority groups. In this example, there are 12 measures in the domain.

Exhibit 1-1. Illustration of Domain Summary Figure

[a] 12 measures in this domain

[b] Priority group B has worse outcomes on 2 measures (17% of measures) compared to the reference group (i.e., does better or same on 83% of measures in this domain)

[c] Group B has same outcomes on 8 measures

[d] Group B has better outcomes on 2 measures

Comparison	Priority group A	Priority group B
Worse	6	2
Same	6	8
Better	0	2

Report Team

The VHA Office of Health Equity engaged VA health services researchers in the Health Equity/Quality Enhancement Research Initiative (OHE/QUERI) National Partnered Evaluation Center (PEC). OHE/QUERI PEC team members based at the Health Services Research & Development (HSR&D) Center for the Study of Healthcare Innovation, Implementation and Policy (CSHIIP) at VA Greater Los Angeles participated in the report.

A nationally recognized expert in health equity and disparities in care, **Donna L. Washington, MD, MPH**, is Director of the OHE/QUERI National Partnered Evaluation Center and 2020 recipient of the Under Secretary Award for Outstanding Achievement in Health Services Research. She is also a Core investigator at VA Los Angeles' CSHIIP and Professor of Medicine at the University of California, Los Angeles (UCLA) Geffen School of Medicine. Dr. Washington conceptualized the report, designed its content, secured, and organized chapter author teams, and led editorial oversight for the report chapters. **Anita Yuan, PhD**, the quantitative core lead at CSHIIP, oversaw analyses supporting cohort creation and identification of Veteran characteristics. **Joy A. Toyama, DrPH**, a Research Health Science Specialist at CSHIIP, conducted cohort creation analyses. **W. Neil Steers, PhD**, a biostatistician with CSHIIP, and Adjunct Professor of Medicine at the UCLA Geffen School of Medicine, oversaw comparative analyses supporting report content. **LaShawnta Jackson, DrPH, MPH**, a Research Health Scientist and project director at CSHIIP, supported chapter and report authors, and oversaw report formatting and completion. **Danna R. Kasom**, a program support assistant at CSHIIP, contributed to report formatting and completion. **Mark Canning**, a project manager at CSHIIP, assisted with regulatory oversight for the OHE/QUERI PEC.

The report team depended on the contributions of each chapter authorship team in creating this NVHER 2021 report. We are grateful for the contributions of these authors. The comparative analyses would not have been possible without use of the SHEP-PCMH and EPRP data from the Office of Quality and Patient Safety (QPS)-Analytics and Performance Integration (API). We also gratefully acknowledge the guidance provided by **Ernest Moy, MD, MPH**, Execute Director of the VHA Office of Health Equity, and **Kenneth T. Jones, PhD**, Supervisory Program Analyst in the VHA Office of Health Equity.

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1. United States Department of Veterans Affairs, Office of Health Equity. National Veteran Health Equity Report—FY2013; 2016. http://www.va.gov/healthequity/NVHER.asp. Accessed November 1, 2021.
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3. Agency for Healthcare Research and Quality. National Healthcare Quality and Disparities Report Introduction and Methods. AHRQ Publication No.20(21)-0045-EF; December 2020. https://www.ahrq.gov/sites/default/files/wysiwyg/research/findings/nhqrdr/2019qdr-intro-methods-cx061721.pdf. Accessed November 1, 2021.

Chapter 2

Patient Experiences and Health Care Quality for Veterans in VHA by Race/Ethnicity

Lenny López, MD, MPH, MDiv, FAHA

Section I: Background and Sociodemographic Characteristics

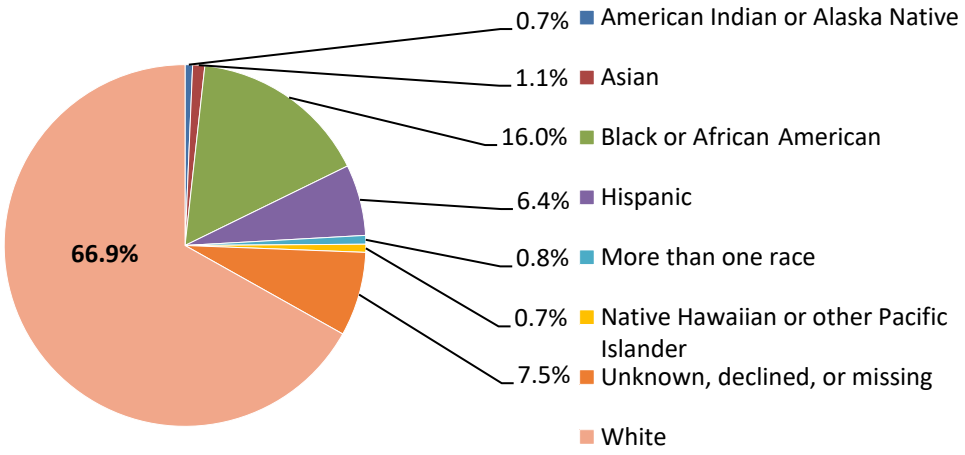
Over the course of its history, the United States has experienced dramatic improvements in overall health and life expectancy, largely as a result of initiatives in public health, health promotion, disease prevention, and chronic care management. Despite interventions that have improved the overall health of the majority of Americans, racial and ethnic minorities (Black, Hispanic/Latino, American Indian or Alaska Native (AI/AN), Asian, Native Hawaiian or other Pacific Islander groups) have benefited less from these advances than non-Hispanic White groups and have suffered poorer health outcomes from many major diseases, including cardiovascular disease, cancer, and diabetes.[1] These differences in quality are *racial and ethnic disparities in health care*. These disparities have occurred even when variations in factors such as insurance status, income, age, comorbid conditions, and symptom expression are taken into account.[2]

Overall, VA has been a leader in the elimination of health and healthcare disparities for Veterans using the VA healthcare system albeit with room for improvement.[3] Recent research has demonstrated that within VA, after adjusting for medical illness, there were few racial/ethnic disparities in all-cause, cancer, and cardiovascular-related mortality.[4] When compared with the U.S. general population, disparities were fewer and attenuated within VA. However, disparities persisted within VA in AI/AN all-cause mortality, and non-Hispanic Black cancer and cardiovascular-related mortality compared with non-Hispanic Whites. By contrast, all-cause and cause-specific mortality disparities among non-Hispanic Black women in the U.S. general population were not present in VHA.

Veterans from diverse racial/ethnic backgrounds are increasing in number in the VA. This chapter provides a view of the patient experiences and health care quality for Veterans who use VHA, and it highlights variation in those experiences and care by race/ethnicity.

Race/Ethnicity in VHA

Exhibit 2-1. Distribution of Race/Ethnicity among Veteran VHA Patients, FY16-FY19



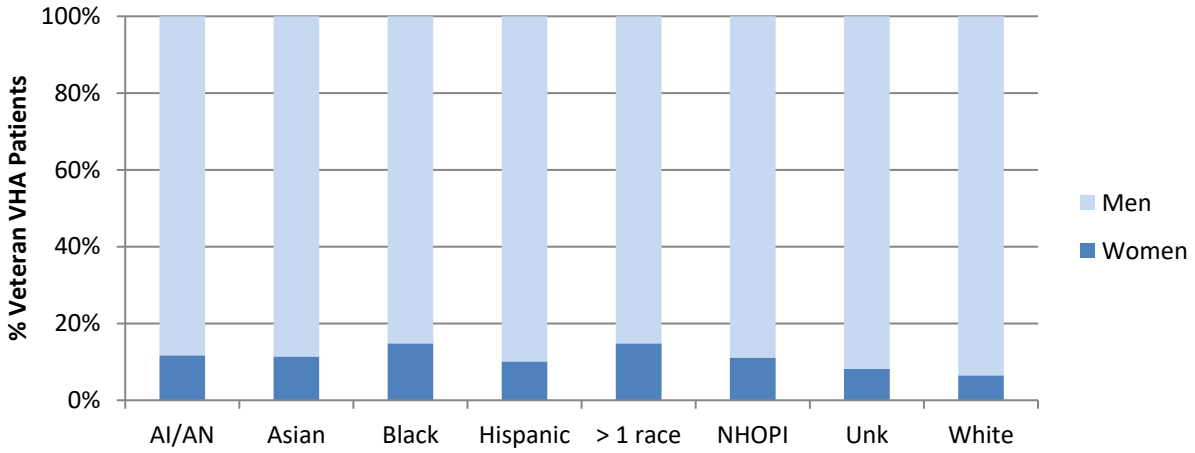
Race/Ethnicity	Percentage
American Indian or Alaska Native	0.7%
Asian	1.1%
Black or African American	16.0%
Hispanic	6.4%
More than one race	0.8%
Native Hawaiian or other Pacific Islander	0.7%
Unknown, declined, or missing	7.5%
Non-Hispanic White (White)	66.9%

Finding:

Most Veterans were non-Hispanic White race (66.9%). Among Veterans from other racial/ethnic groups, 16.0% were Black, 6.4% were Hispanic, 1.1% were Asian, 0.8% were more than one race, 0.7% were American Indian or Alaska Native, 0.7% were Native Hawaiian or other Pacific Islander.

Gender by Race/Ethnicity

Exhibit 2-2. Percent Distribution of Gender by Race/Ethnicity among Veteran VHA Patients, FY16-FY19



Gender	AI/AN	Asian	Black	Hispanic	> 1 race	NHOPI	Unk	White
Men	88.3%	88.6%	85.2%	89.9%	85.2%	88.9%	91.8%	93.5%
Women	11.7%	11.4%	14.8%	10.1%	14.8%	11.1%	8.2%	6.5%

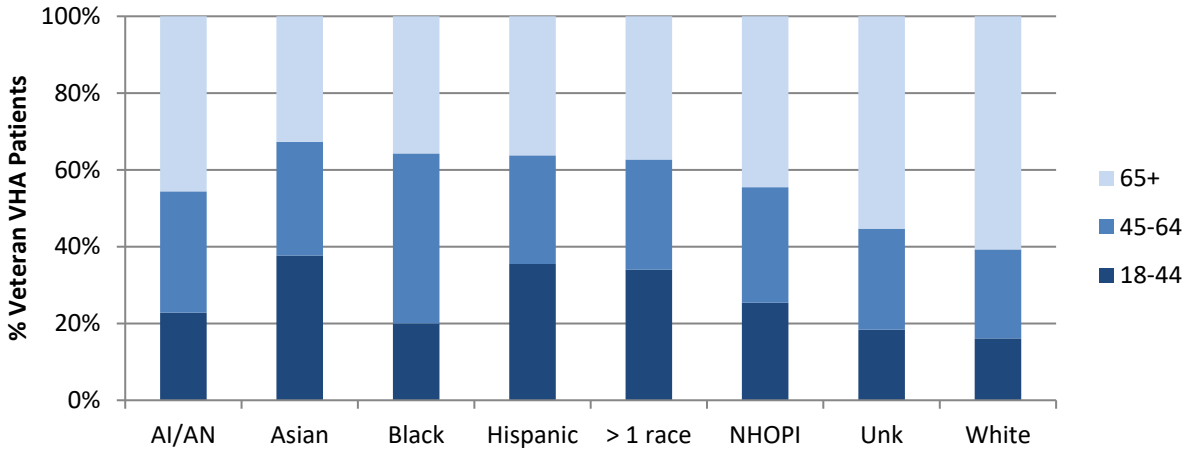
Note: AI/AN denotes American Indian or Alaska Native; NHOPI denotes Native Hawaiian or other Pacific Islander; Unk denotes unknown, declined, or missing race/ethnicity

Finding:

Most Veterans are men across all racial/ethnic groups. Of women Veterans, there are proportionately more Black and more than one race Veterans compared to the other racial/ethnic groups.

Age Group by Race/Ethnicity

Exhibit 2-3. Percent Distribution of Age by Race/Ethnicity among Veteran VHA Patients, FY16-FY19



Age	AI/AN	Asian	Black	Hispanic	> 1 race	NHOPI	Unk	White
65+ years	45.6%	32.7%	35.7%	36.2%	37.3%	44.5%	55.3%	60.7%
45-64 years	31.6%	29.6%	44.3%	28.3%	28.7%	30.1%	26.3%	23.2%
18-44 years	22.8%	37.7%	20.0%	35.5%	34.0%	25.4%	18.4%	16.1%

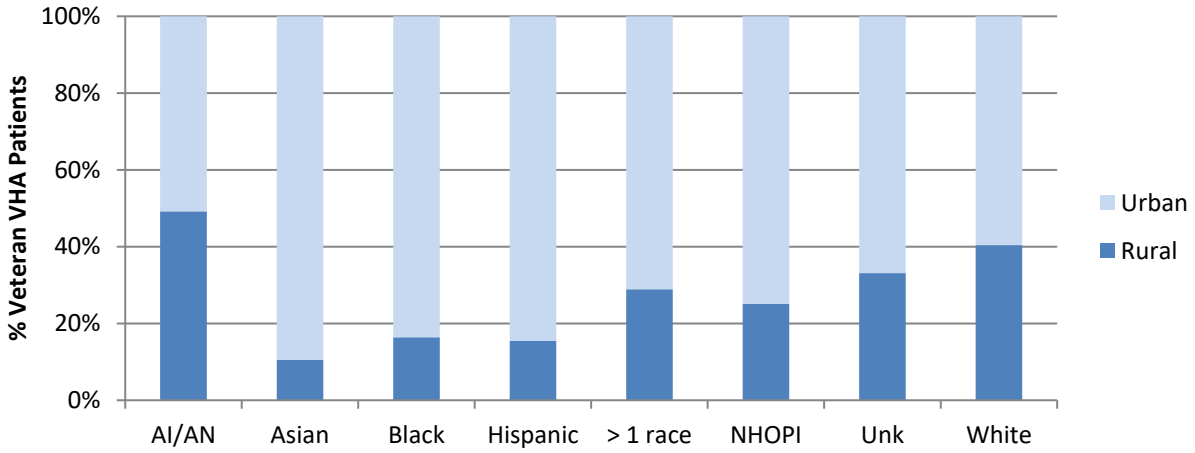
Note: AI/AN denotes American Indian or Alaska Native; NHOPI denotes Native Hawaiian or other Pacific Islander; Unk denotes unknown, declined, or missing race/ethnicity

Finding:

There were a higher proportionate representation of Asian, Hispanic and more than one race Veterans in the 18-44 years age group than in the other racial/ethnic groups. Black Veterans were the racial group with the largest proportionate representation in the 45-64 years age group while non-Hispanic Whites were the largest group in the 65+ years age category.

Rurality by Race/Ethnicity

Exhibit 2-4. Percent Distribution of Rural/Urban Status by Race/Ethnicity among Veteran VHA Patients, FY16-FY19



Rural/Urban Status	AI/AN	Asian	Black	Hispanic	> 1 race	NHOPI	Unk	White
Urban	50.8%	89.5%	83.6%	84.5%	71.1%	74.9%	66.9%	59.6%
Rural	49.2%	10.5%	16.4%	15.5%	28.9%	25.1%	33.1%	40.4%

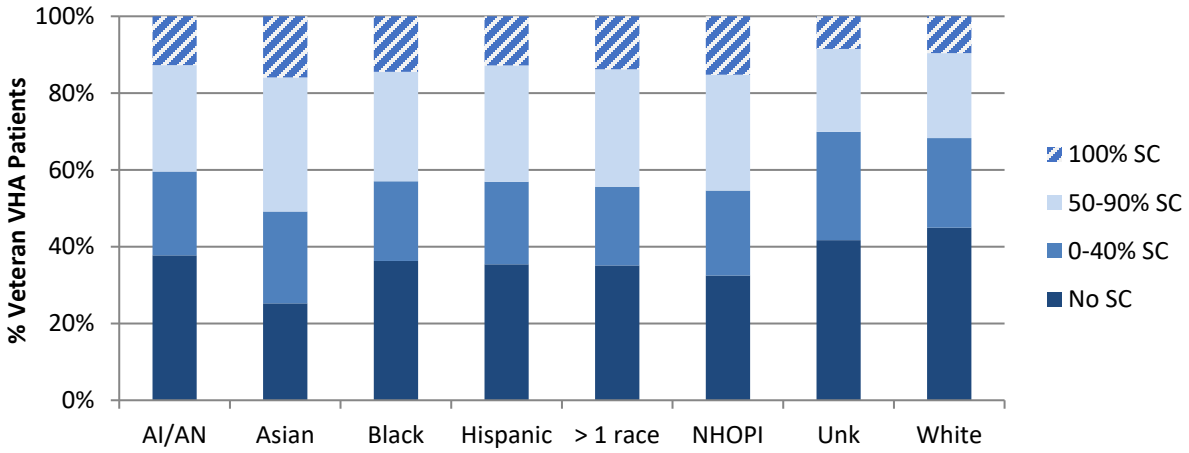
Note: AI/AN denotes American Indian or Alaska Native; NHOPI denotes Native Hawaiian or other Pacific Islander; Unk denotes unknown, declined, or missing race/ethnicity

Finding:

There were proportionately more Asian, Black and Hispanic Veterans from urban areas compared to the other racial/ethnic groups. AI/AN and White Veterans were more likely to be from rural areas compared to the other racial/ethnic groups.

Service-connected Disability Rating by Race/Ethnicity

Exhibit 2-5. Percent Distribution of Service-connected Disability Rating by Race/Ethnicity among Veteran VHA Patients, FY16-FY19



Service-connected Disability Rating	AI/AN	Asian	Black	Hispanic	> 1 race	NHOPI	Unk	White
100% SC	12.7%	15.9%	14.5%	12.8%	13.8%	15.2%	8.5%	9.6%
50-90% SC	27.7%	34.9%	28.5%	30.3%	30.6%	30.2%	21.6%	22.1%
0-40% SC	21.8%	23.9%	20.8%	21.5%	20.5%	22.1%	28.2%	23.3%
No SC	37.7%	25.2%	36.3%	35.4%	35.1%	32.5%	41.7%	44.9%

Note: AI/AN denotes American Indian or Alaska Native; NHOPI denotes Native Hawaiian or other Pacific Islander; Unk denotes unknown, declined, or missing race/ethnicity; SC denotes service-connected disability rating

Finding:

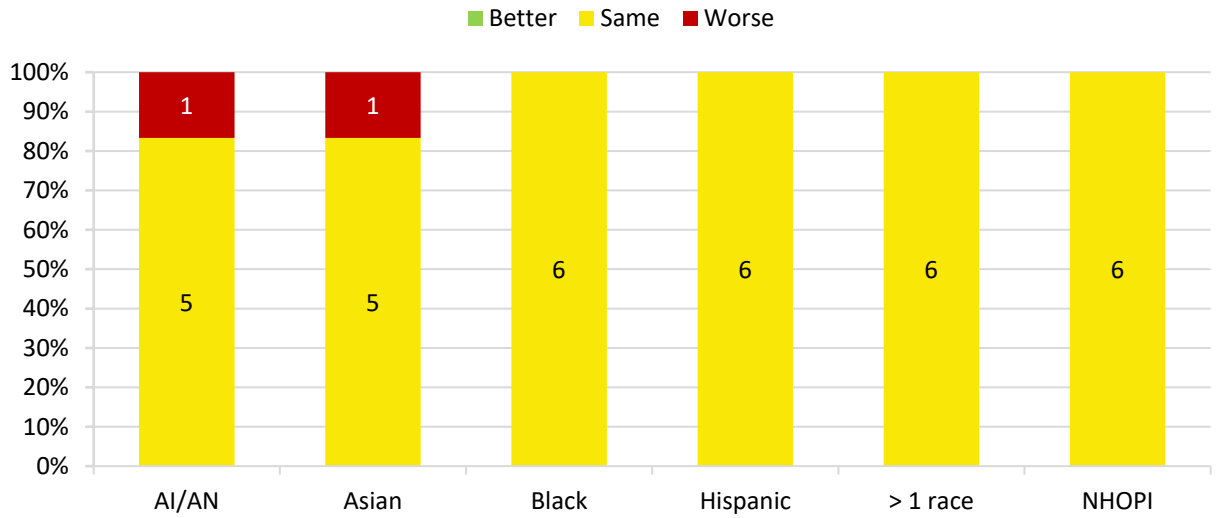
Asian Veterans had the highest rates of service-connected disability compared to the other racial/ethnic groups. White Veterans had the highest rates of no service-connected disability compared to the other racial/ethnic groups.

Section II: Patient Experiences

Variations in VHA Patient Experience of Access to Care by Veteran Race/Ethnicity

Exhibit 2-6. Number and percentage of measures for which racial/ethnic minority Veteran VHA patients of specified age groups experienced better, same, or worse access to care compared with reference group

Exhibit 2-6. Access to Care, 18-44 years



Comparison	AI/AN	Asian	Black	Hispanic	> 1 race	NHOPI
Worse	1	1	0	0	0	0
Same	5	5	6	6	6	6
Better	0	0	0	0	0	0

Reference group: Non-Hispanic White Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

Note: AI/AN denotes American Indian or Alaska Native; NHOPI denotes Native Hawaiian or other Pacific Islander

Importance:

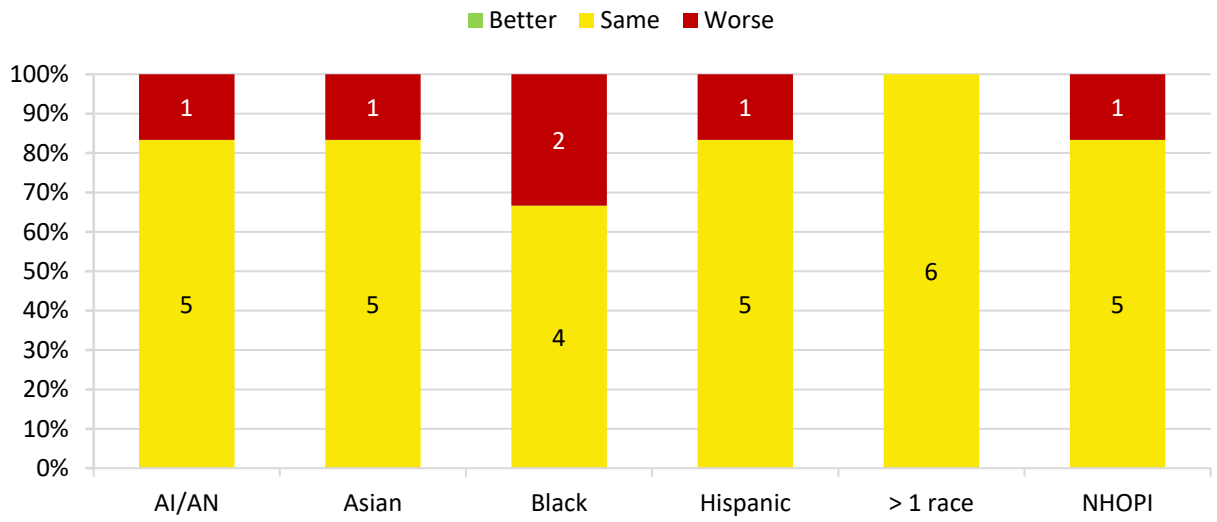
Access to high quality healthcare is the first important step towards improved individual and population health.[5]

Finding:

Compared with non-Hispanic White Veterans, Veterans of racial/ethnic groups ages 18-44 years experienced similar access on all 6 measures except for AI/AN and Asians who had worse access on 1 measure.

Exhibit 2-7. Number and percentage of measures for which racial/ethnic minority Veteran VHA patients of specified age groups experienced better, same, or worse access to care compared with reference group

Exhibit 2-7. Access to Care, 45-64 years



Comparison	AI/AN	Asian	Black	Hispanic	> 1 race	NHOPI
Worse	1	1	2	1	0	1
Same	5	5	4	5	6	5
Better	0	0	0	0	0	0

Reference group: Non-Hispanic White Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

Note: AI/AN denotes American Indian or Alaska Native; NHOPI denotes Native Hawaiian or other Pacific Islander

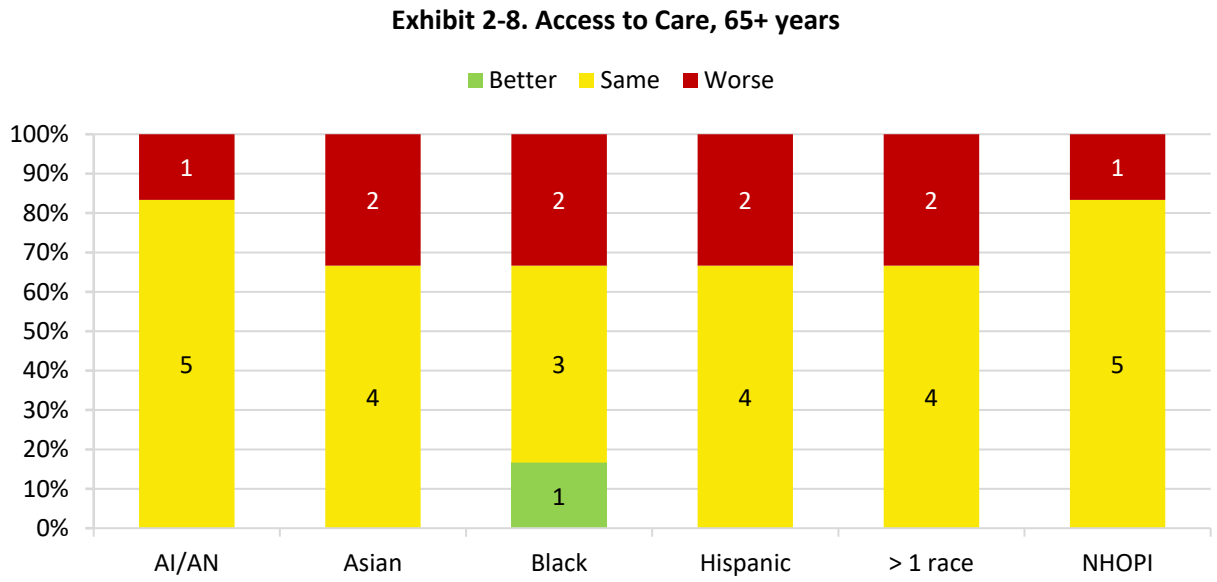
Importance:

Access to high quality healthcare is the first important step towards improved individual and population health.[5]

Findings:

- Veterans across racial/ethnic groups ages 45-64 years had the same experience of access as non-Hispanic White Veterans on most measures.
- AI/AN, Asian, Hispanic and NHOPI Veterans experienced similar access on 5 measures and worse access on 1 measure compared to non-Hispanic White Veterans.
- Black Veterans experienced worse access on 2 measures and similar access on 4 measures compared to non-Hispanic White Veterans.
- More than one race Veterans had similar access on all 6 measures similar to non-Hispanic White Veterans.

Exhibit 2-8. Number and percentage of measures for which racial/ethnic minority Veteran VHA patients of specified age groups experienced better, same, or worse access to care compared with reference group



Comparison	AI/AN	Asian	Black	Hispanic	> 1 race	NHOPI
Worse	1	2	2	2	2	1
Same	5	4	3	4	4	5
Better	0	0	1	0	0	0

Reference group: Non-Hispanic White Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

Note: AI/AN denotes American Indian or Alaska Native; NHOPI denotes Native Hawaiian or other Pacific Islander

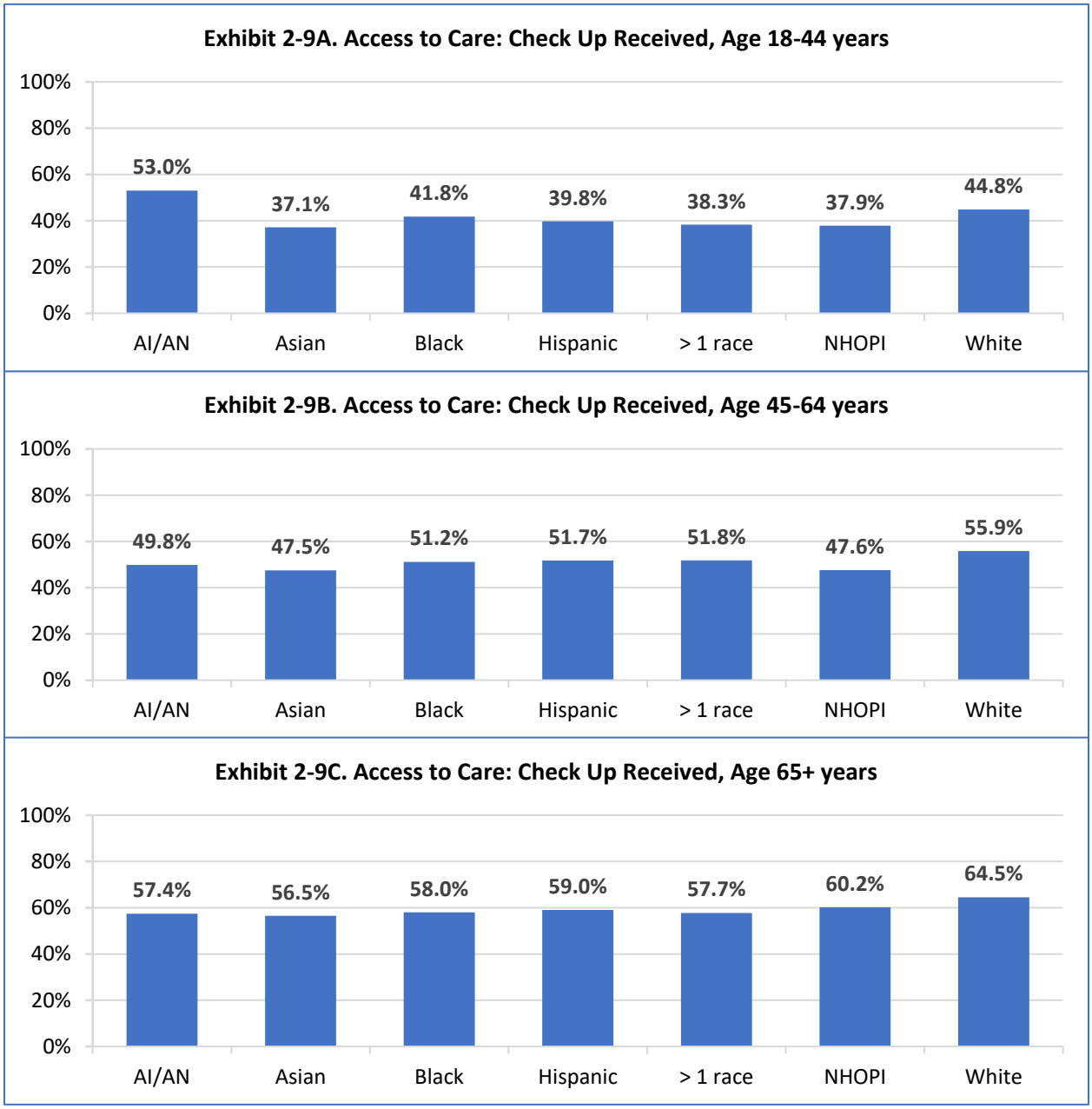
Importance:

Access to high quality healthcare is the first important step towards improved individual and population health.[5]

Findings:

- Veterans across racial/ethnic groups ages 65+ years had the same experience of access as non-Hispanic White Veterans on most measures.
- Compared to non-Hispanic White Veterans, AI/AN and NHOPI Veterans experienced similar access on 5 measures and worse access on 1 measure.
- Asian, Hispanic and more than one race Veterans experienced similar access on 4 measures and worse access on 2 measures compared to non-Hispanic White Veterans.
- Black Veterans experienced similar access on 3 measures, worse access on 2 measures and better access on 1 measure compared to non-Hispanic White Veterans.

Exhibit 2-9. VHA users who indicated, in the last 6 months, when they made an appointment with their provider for a check-up or routine care, they always received an appointment as soon as needed



Reference group: Non-Hispanic White Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP- PCMH FY2016 – FY2-19 data

Note: AI/AN denotes American Indian or Alaska Native; NHOPI denotes Native Hawaiian or other Pacific Islander

Importance:

Timeliness of care is a key aspect of quality and delays in healthcare access contribute to poorer physical and mental health, given that untimely access can exacerbate these conditions.[5-7]

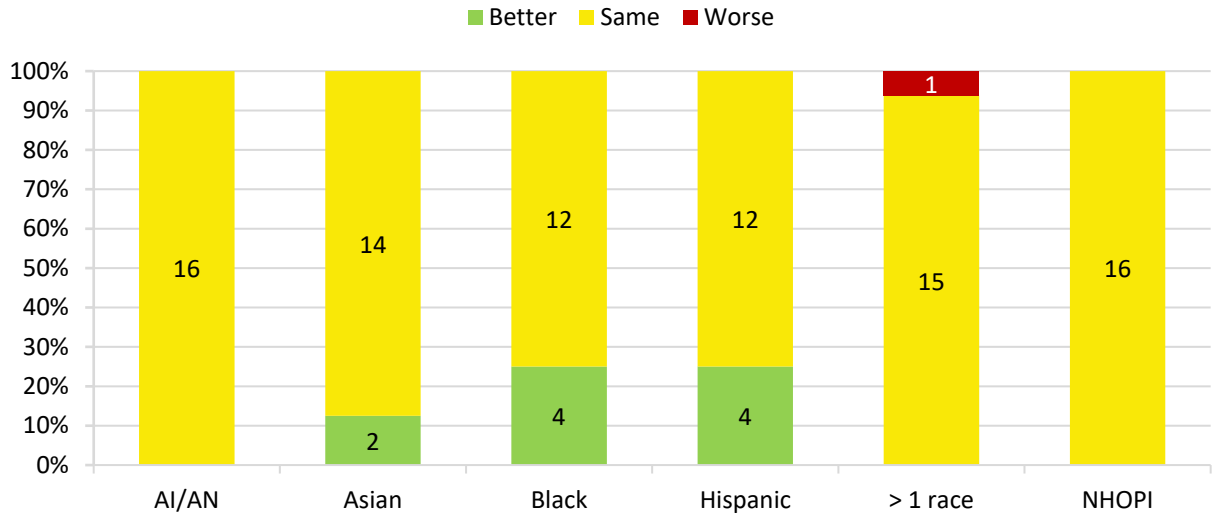
Findings:

- Exhibit 2-9A: Compared with non-Hispanic White Veterans (44.8%), Asian Veterans of racial/ethnic groups ages 18-44 years (37.1%) experienced worse access receiving an appointment as soon as needed for check-up or routine care.
- Exhibit 2-9B: Compared with non-Hispanic White Veterans (55.9%), Veterans of AI/AN (49.8%), Asian (47.5%), Black (51.2%), and NHOPI (47.6%) racial/ethnic groups ages 45-64 years experienced worse access receiving an appointment as soon as needed for check-up or routine care.
- Exhibit 2-9C: Compared with non-Hispanic White Veterans (64.5%), Veterans of all other racial/ethnic groups ages 65+ years experienced worse access receiving an appointment as soon as needed for check-up or routine care.

Variations in VHA Patient Experience of Person-centered Care by Veteran Race/Ethnicity

Exhibit 2-10. Number and percentage of measures for which racial/ethnic minority Veteran VHA patients of specified age groups experienced better, same, or worse person-centered care compared with reference group

Exhibit 2-10. Person-centered Care, 18-44 years



Comparison	AI/AN	Asian	Black	Hispanic	> 1 race	NHOPI
Worse	0	0	0	0	1	0
Same	16	14	12	12	15	16
Better	0	2	4	4	0	0

Reference group: Non-Hispanic White Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

Note: AI/AN denotes American Indian or Alaska Native; NHOPI denotes Native Hawaiian or other Pacific Islander

Importance:

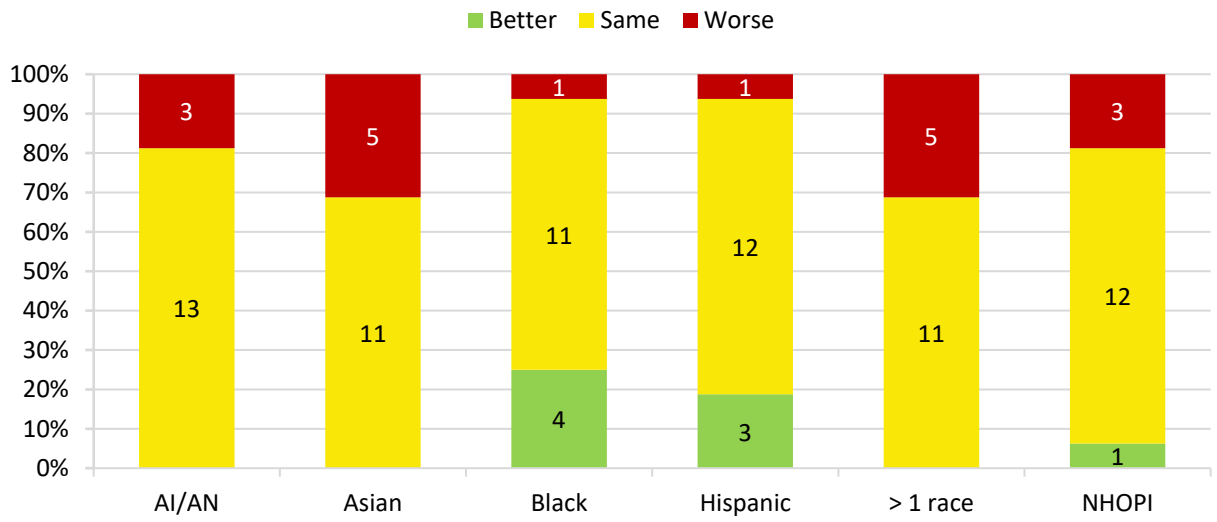
National guidelines define person-centered care as essential for patient engagement and satisfaction in order to ensure patient's desired outcomes.[8]

Findings:

- On most measures of person-centered care, Veterans across racial/ethnic groups ages 18-44 years had the same experience of person-centeredness as non-Hispanic White Veterans.
- AI/AN and NHOPI Veterans ages 18-44 years received the same person-centered care on 16 measures compared to non-Hispanic White Veterans.
- On 15 measures, more than one race Veterans received the same person-centered care and worse care on 1 measure of person-centeredness compared to non-Hispanic White Veterans.
- Black and Hispanic Veterans received better person-centered care on 4 measures and the same care on 12 measures of person-centeredness compared to non-Hispanic White Veterans.
- On 14 measures, Asian Veterans had the same person-centered care and better care on 2 measures of person-centeredness compared to non-Hispanic White Veterans.

Exhibit 2-11. Number and percentage of measures for which racial/ethnic minority Veteran VHA patients of specified age groups experienced better, same, or worse person-centered care compared with reference group

Exhibit 2-11. Person-centered Care, 45-64 years



Comparison	AI/AN	Asian	Black	Hispanic	> 1 race	NHOPI
Worse	3	5	1	1	5	3
Same	13	11	11	12	11	12
Better	0	0	4	3	0	1

Reference group: Non-Hispanic White Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

Note: AI/AN denotes American Indian or Alaska Native; NHOPI denotes Native Hawaiian or other Pacific Islander

Importance:

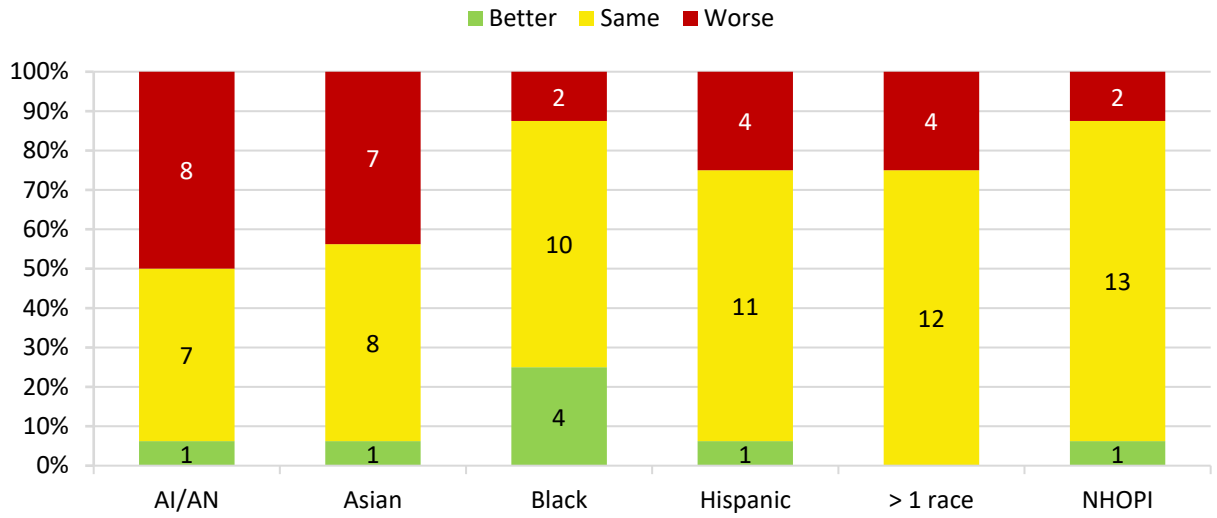
National guidelines define person-centered care as essential for patient engagement and satisfaction in order to ensure patient's desired outcomes.[8]

Findings:

- On most measures of person-centered care, Veterans across racial/ethnic groups age 45-64 years had the same experience of person-centeredness as non-Hispanic White Veterans.
- Compared to non-Hispanic White Veterans, Asian and more than one race Veterans received the same person-centered care on 11 measures and worse care on 5 measures of person-centeredness.
- AI/AN Veterans received the same person-centered care on 13 measures and worse care on 3 measures of person-centeredness compared to non-Hispanic White Veterans.
- On 12 measures, Hispanic Veterans received the same person-centered care, better care on 3 measures and worse care on 1 measure of person-centeredness compared to non-Hispanic White Veterans.
- Black Veterans received the same person-centered care on 11 measures, better care on 4 measures and worse care on 1 measure of person-centeredness compared to non-Hispanic White Veterans.
- NHOPI Veterans received the same person-centered care on 12 measures, better care on 1 measure and worse care on 3 measures of person-centeredness compared to non-Hispanic White Veterans.

Exhibit 2-12. Number and percentage of measures for which racial/ethnic minority Veteran VHA patients of specified age groups experienced better, same, or worse person-centered care compared with reference group

Exhibit 2-12. Person-centered Care, 65+ years



Comparison	AI/AN	Asian	Black	Hispanic	> 1 race	NHOPI
Worse	8	7	2	4	4	2
Same	7	8	10	11	12	13
Better	1	1	4	1	0	1

Reference group: Non-Hispanic White Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

Note: AI/AN denotes American Indian or Alaska Native; NHOPI denotes Native Hawaiian or other Pacific Islander

Importance:

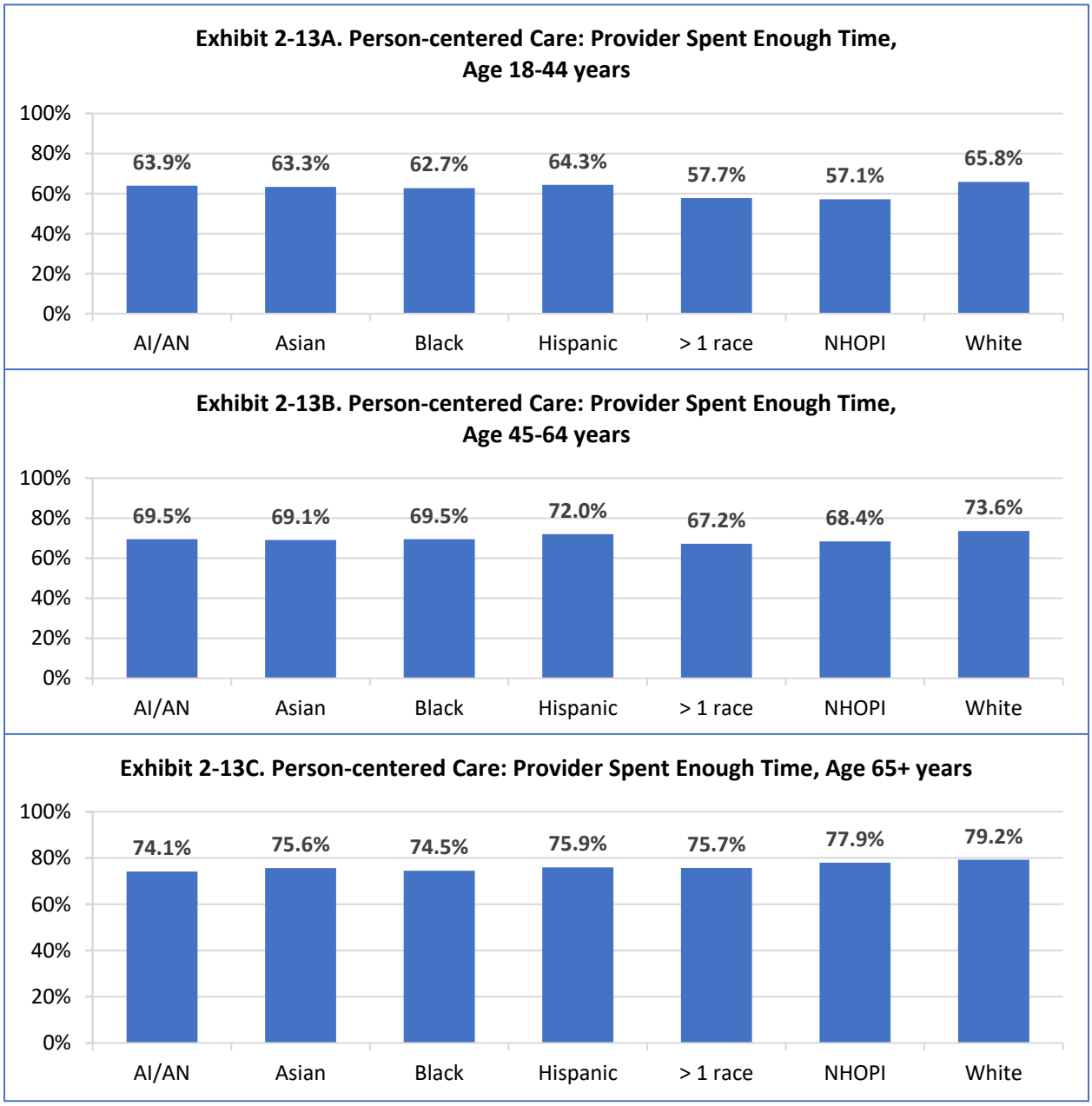
National guidelines define person-centered care as essential for patient engagement and satisfaction in order to ensure patient's desired outcomes.[8]

Findings:

- Compared with non-Hispanic White Veterans age 65+ years, Veterans of other racial/ethnic groups had the same experience of person-centered care on most measures, except for AI/AN Veterans and Asian Veterans, who had worse experiences.
- NHOPI Veterans received the same person-centered care on 13 measures, better care on 1 measure, and worse care on 2 measures of person-centeredness compared to non-Hispanic White Veterans.
- More than one race Veterans received the same person-centered care on 12 measures, and worse care on 4 measures of person-centeredness compared to non-Hispanic White Veterans.
- Hispanic Veterans received the same person-centered care on 11 measures, better care on 1 measure and worse care on 4 measures of person-centeredness compared to non-Hispanic White Veterans.
- Black Veterans received the same person-centered care on 10 measures, better care on 4 measures, and worse care on 2 measures of person-centeredness compared to non-Hispanic White Veterans.

- On 8 measures, Asian Veterans received the same person-centered care, better care on 1 measure, and worse care on 7 measures of person-centeredness compared to non-Hispanic White Veterans.
- AI/AN Veterans received worse care on 8 measures of person-centered care, better care on 1 measure, and the same care on 7 measures of person-centeredness compared to non-Hispanic White Veterans.

Exhibit 2-13. VHA users who indicated, in the last 6 months, their provider always spent enough time with them



Reference group: Non-Hispanic White Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

Note: AI/AN denotes American Indian or Alaska Native; NHOPI denotes Native Hawaiian or other Pacific Islander

Importance:

Person-centered communication care involves adequate time for communication with healthcare providers which is associated with higher patient satisfaction.[9,10]

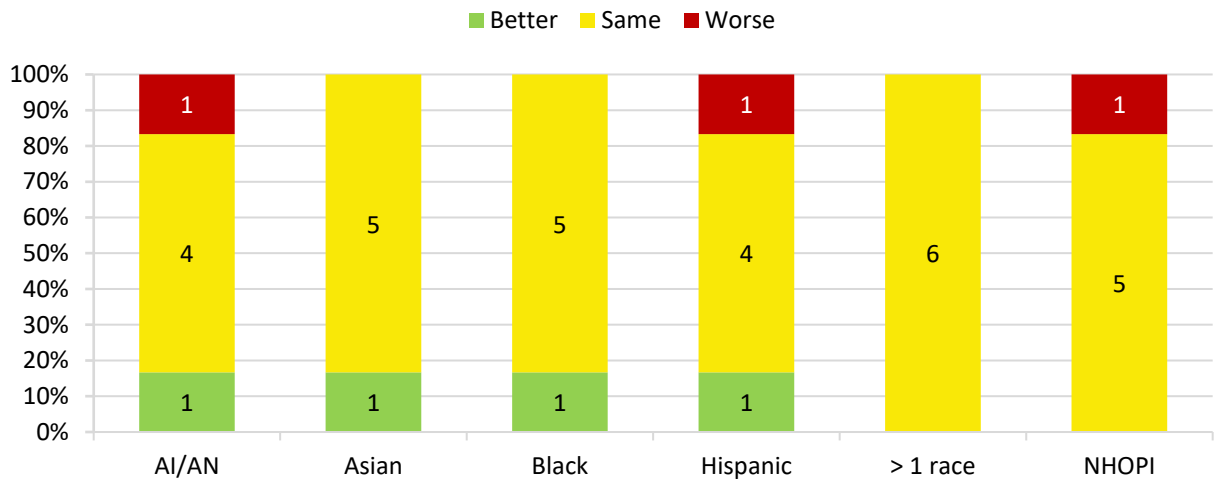
Findings:

- Across all of the measures in the person-centered care domain, provider always spent enough time with them was the measure that exhibited the most widespread racial and ethnic disparities.
- Exhibit 2-13A: Of Veterans ages 18-44 years who identified as more than one race, 57.7% reported the provider always spent enough time with them, in contrast to 65.8% of non-Hispanic White Veterans of that age group.
- Exhibit 2-13B: Among Veterans age 45-64 years, American Indian or Alaska Native (69.5%), Asian (69.1%), Black (69.5%), more than one race (67.2%), and Native Hawaiian or other Pacific Islander Veterans (68.4%), compared with non-Hispanic White Veterans (73.6%), were all less likely to report that the provider always spent enough time with them.
- Exhibit 2-13C: Among Veterans age 65 years and older, Hispanic (75.9%), American Indian or Alaska Native (74.1%), Asian (75.6%), Black (74.5%), and more than one race Veterans (75.7%), compared with non-Hispanic White Veterans (79.2%), were all less likely to report that the provider always spent enough time with them.

Variations in VHA Patient Experience of Care Coordination by Veteran Race/Ethnicity

Exhibit 2-14. Number and percentage of measures for which racial/ethnic minority Veteran VHA patients of specified age groups experienced better, same, or worse care coordination compared with reference group

Exhibit 2-14. Care Coordination, 18-44 years



Comparison	AI/AN	Asian	Black	Hispanic	> 1 race	NHOPI
Worse	1	0	0	1	0	1
Same	4	5	5	4	6	5
Better	1	1	1	1	0	0

Reference group: Non-Hispanic White Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

Note: AI/AN denotes American Indian or Alaska Native; NHOPI denotes Native Hawaiian or other Pacific Islander

Importance:

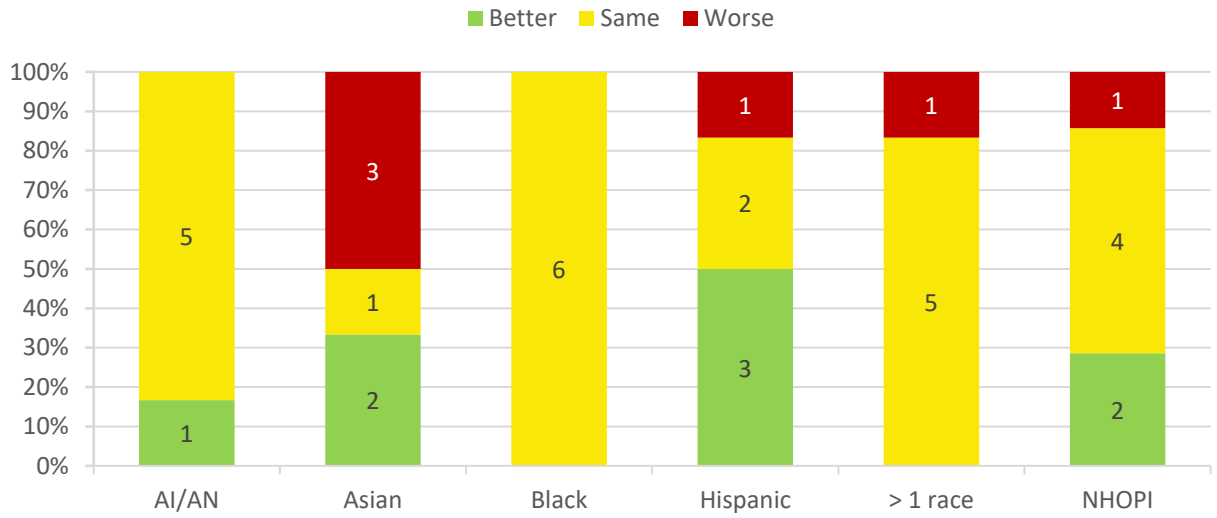
Excellent care coordination prevents fragmentation of communication, information and clinical services in order to ensure high quality care.[11]

Findings:

- On most measures of care coordination, Veterans across racial/ethnic groups ages 18-44 years had the same experience of care coordination as non-Hispanic White Veterans.
- More than one race Veterans reported similar care coordination on all 6 measures as non-Hispanic White Veterans.
- Asian and Black Veterans had the same experience on 5 measures of care coordination and better coordination on 1 measure compared to non-Hispanic White Veterans.
- AI/AN and Hispanic Veterans had the same experience on 4 measures of care coordination, better on 1 measure and worse on 1 measure of coordination compared to non-Hispanic White Veterans.
- NHOPI Veterans had the same experience as non-Hispanic White Veterans on 5 measures of coordination, and worse experience on 1 measure.

Exhibit 2-15. Number and percentage of measures for which racial/ethnic minority Veteran VHA patients of specified age groups experienced better, same, or worse care coordination compared with reference group

Exhibit 2-15. Care Coordination, 45-64 years



Comparison	AI/AN	Asian	Black	Hispanic	> 1 race	NHOPI
Worse	0	3	0	1	1	1
Same	5	1	6	2	5	4
Better	1	2	0	3	0	1

Reference group: Non-Hispanic White Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

Note: AI/AN denotes American Indian or Alaska Native; NHOPI denotes Native Hawaiian or other Pacific Islander

Importance:

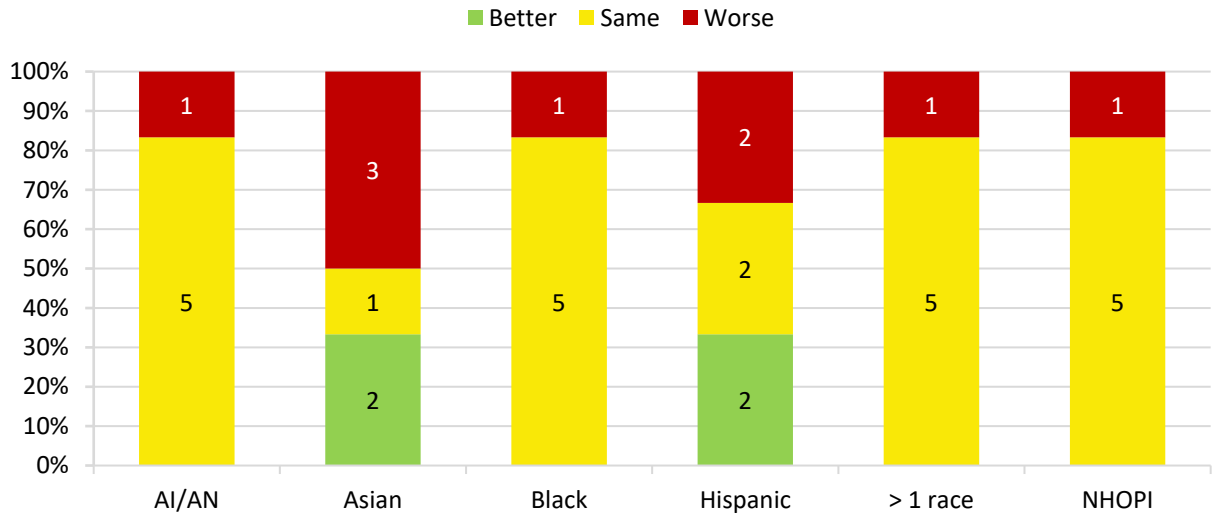
Excellent care coordination prevents fragmentation of communication, information and clinical services in order to ensure high quality care.[11]

Findings:

- On most measures of care coordination, Veterans across racial/ethnic groups ages 45-64 had the same experience of care coordination as non-Hispanic White Veterans except for Asian Veterans who had worse care coordination experiences for 3 measures.
- On all measures, AI/AN and Black Veterans reported the same or better care coordination as non-Hispanic White Veterans.
- Hispanic, NHOPI, and more than one race Veterans had a mix of better, same, and worse care coordination experiences across measures, compared to non-Hispanic White Veterans.
- Asian Veterans reported worse care experience on 3 of 6 measures compared with non-Hispanic White Veterans, whereas they reported better care experience on 2 measures, and the same experience on 1 measure.

Exhibit 2-16. Number and percentage of measures for which racial/ethnic minority Veteran VHA patients of specified age groups experienced better, same, or worse care coordination compared with reference group

Exhibit 2-16. Care Coordination, 65+ years



Comparison	AI/AN	Asian	Black	Hispanic	> 1 race	NHOPI
Worse	1	3	1	2	1	1
Same	5	1	5	2	5	5
Better	0	2	0	2	0	0

Reference group: Non-Hispanic White Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

Note: AI/AN denotes American Indian or Alaska Native; NHOPI denotes Native Hawaiian or other Pacific Islander

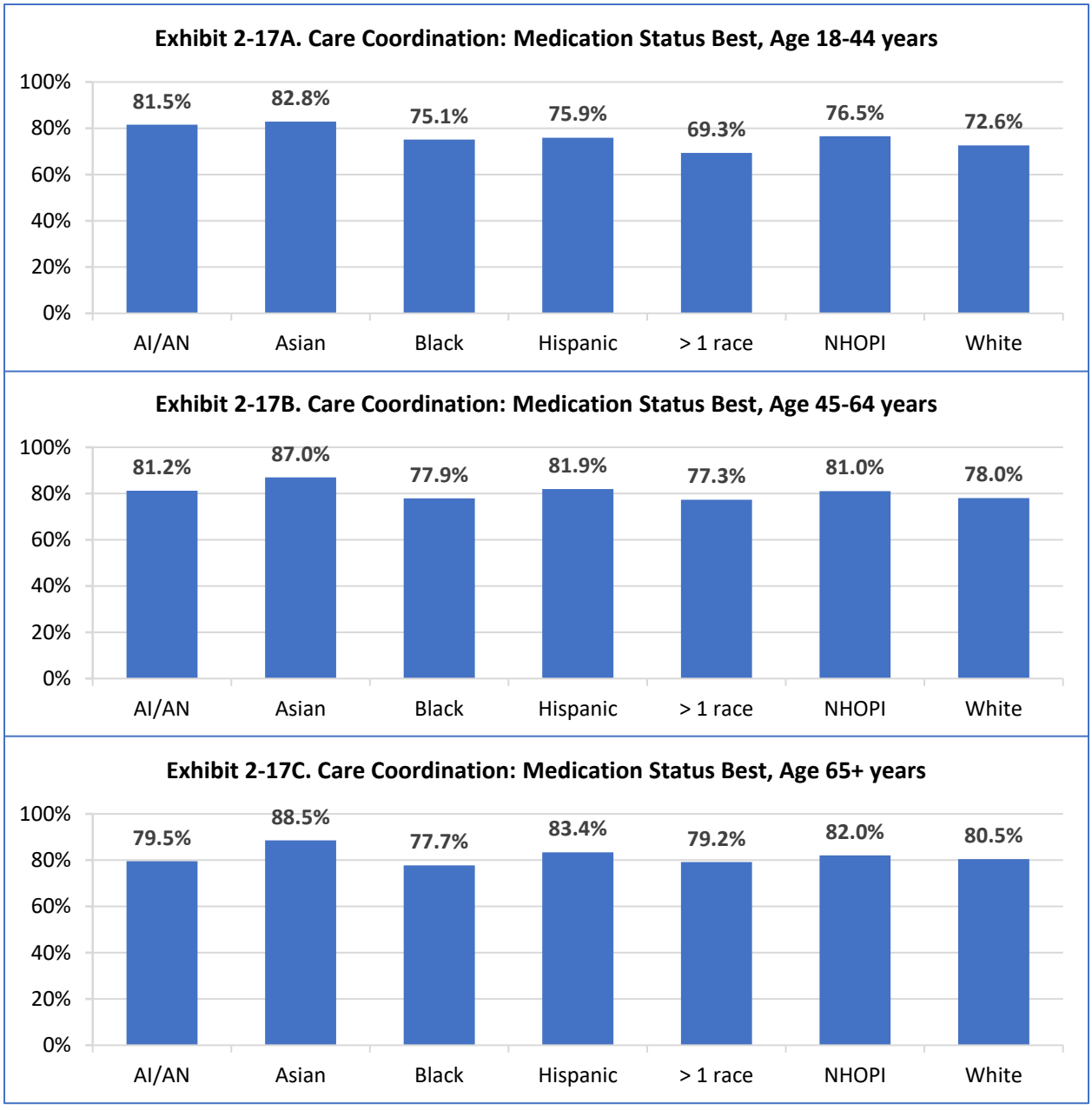
Importance:

Excellent care coordination prevents fragmentation of communication, information and clinical services in order to ensure high quality care.[11]

Findings:

- On most measures of care coordination, Veterans across all racial/ethnic groups ages 65+ years had the same experience of care coordination as non-Hispanic White Veterans except for Asian Veterans and Hispanic Veterans.
- AI/AN, Black, more than one race and NHOPI Veterans had the same experience of care coordination on 5 measures and worse on 1 measure of coordination compared to non-Hispanic White Veterans.
- Asian Veterans and Hispanic Veterans each had better experience of care coordination on 2 measures compared to non-Hispanic White Veterans. However, Asian Veterans had worse experience on 3 measures, and Hispanic Veterans had worse experience on 2 measures compared to non-Hispanic White Veterans.

Exhibit 2-17. VHA users who indicated that when they talked about starting or stopping a prescription medication, the provider asked them what they thought was best for them



Reference group: Non-Hispanic White Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

Note: AI/AN denotes American Indian or Alaska Native; NHOPI denotes Native Hawaiian or other Pacific Islander

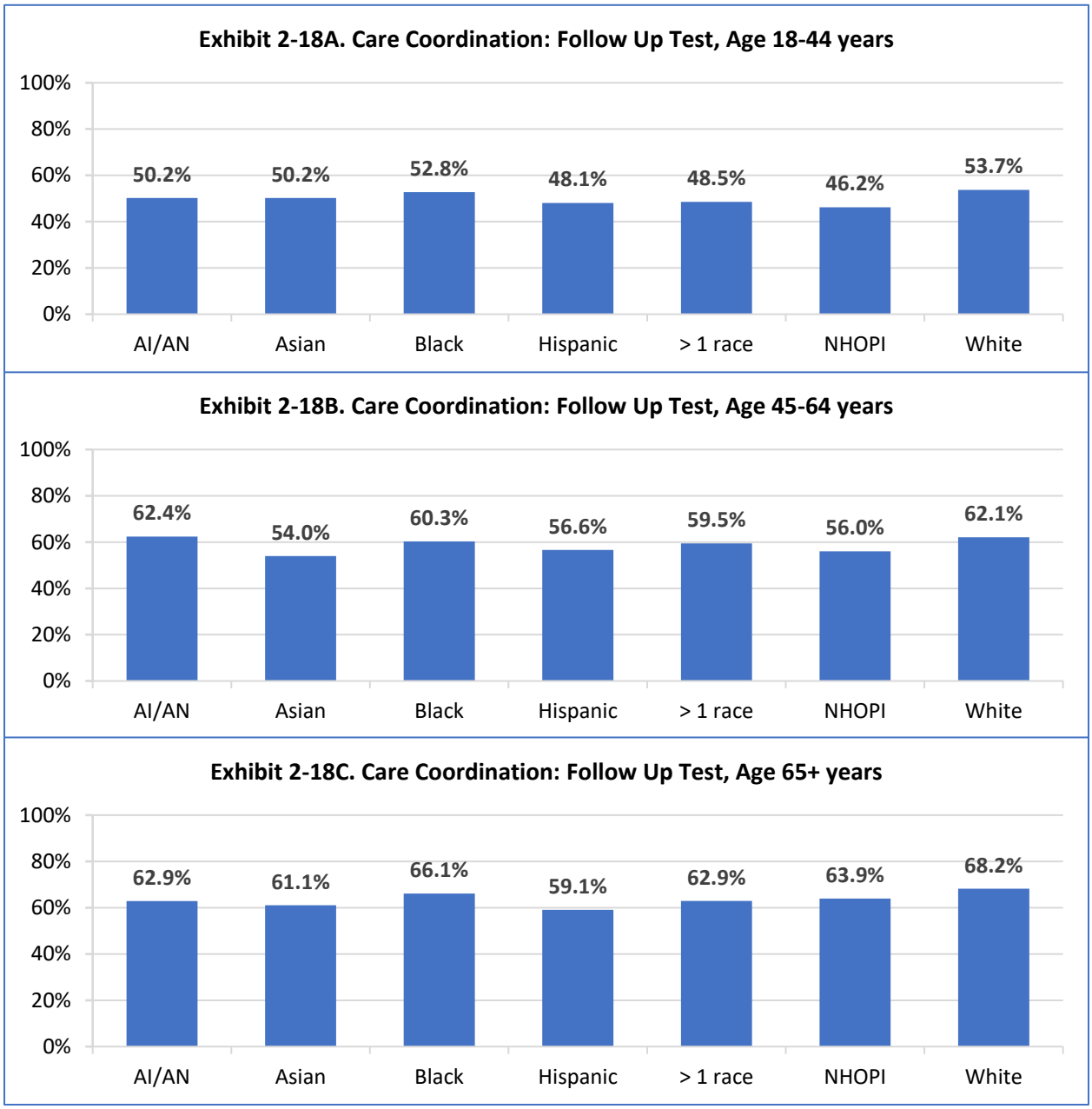
Importance:

High quality person-centered doctor communication is associated with high overall patient satisfaction which improves health behaviors, treatment adherence and health status.[10, 12]

Findings:

- Exhibit 2-17A: Among Veterans ages 18-44 years, Asian (82.8%), AI/AN (81.5%), and Hispanic (75.9%) Veterans reported higher rates than White Veterans (72.6%) of being asked by their provider what they thought was best for them when they talked about starting or stopping a prescription medication.
- Exhibit 2-17B: Among Veterans ages 45-64 years, Asian (87.0%), Hispanic (81.9%), and AI/AN (81.2%) Veterans reported higher rates than White Veterans (78.0%) of being asked by their provider what they thought was best for them when they talked about starting or stopping a prescription medication.
- Exhibit 2-17C: Among Veterans ages 65+ years, Asian (88.5%) and Hispanic (83.4%) Veterans reported higher rates than White Veterans (80.5%) of being asked by their provider what they thought was best for them when they talked about starting or stopping a prescription medication, whereas Black Veterans (77.7%) had lower rates.

Exhibit 2-18. VHA users who indicated, in the last 6 months, that when their provider ordered a blood test, x-ray, or other test for them, someone in their provider's office always followed up to give them the results



Reference group: Non-Hispanic White Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

Note: AI/AN denotes American Indian or Alaska Native; NHOPI denotes Native Hawaiian or other Pacific Islander

Importance:

Failure to follow up on test results is associated with worse health outcomes due to loss of timely diagnosis and workup of serious medical conditions.[11,13]

Findings:

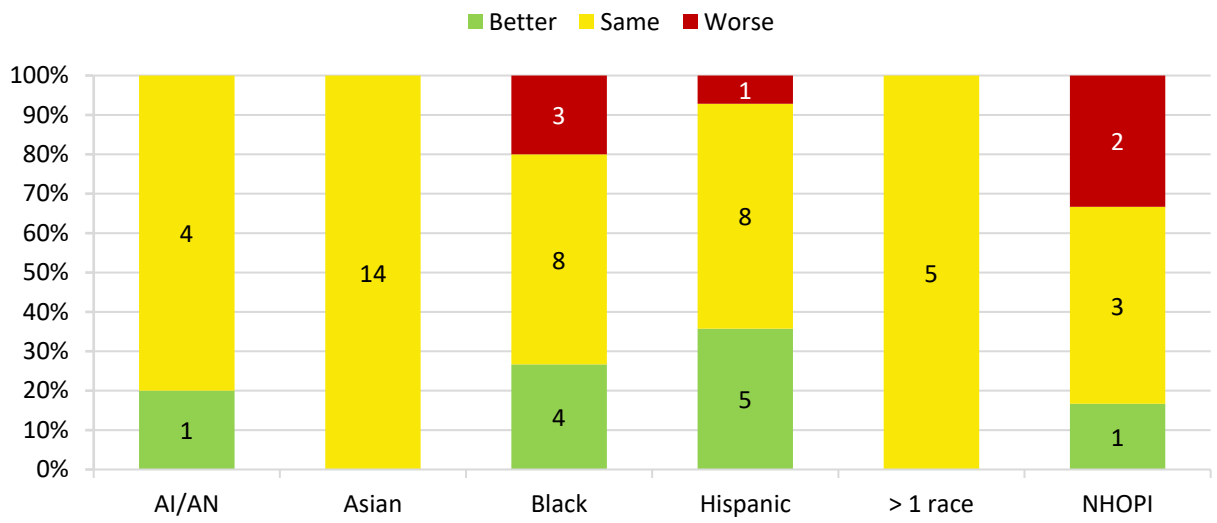
- Exhibit 2-18A: Compared with non-Hispanic White Veterans ages 18-44 years (53.7%), Hispanic Veterans (48.1%) experienced lower rates of having someone in their provider's office always follow up to give them the results of provider ordered blood tests, x-rays, or other tests.
- Exhibit 2-18B: Compared with non-Hispanic White Veterans ages 45-64 years (62.1%), Asian (54.0%), Hispanic (56.6%), and NHOPI (56.0%) Veterans reported lower rates of having someone in their provider's office always follow up to give them the results of provider ordered blood tests, x-rays, or other tests.
- Exhibit 2-18C: Compared with non-Hispanic White Veterans ages 65+ years (68.2%), AI/AN (62.9%), Asian (61.1%), Hispanic (59.1%), more than one race (62.9%), and NHOPI (63.9%) Veterans reported lower rates of having someone in their provider's office always follow up to give them the results of provider ordered blood tests, x-rays.

Section III: Health Care Quality

Variations in VHA Health Care Quality of Effective Treatment by Veteran Race/Ethnicity

Exhibit 2-19. Number and percentage of measures for which racial/ethnic minority Veteran VHA patients of specified age groups experienced better, same, or worse effective treatment compared with reference group

Exhibit 2-19. Effective Treatment, 18-44 years



Comparison	AI/AN	Asian	Black	Hispanic	> 1 race	NHOPI
Worse	0	0	3	1	0	2
Same	4	14	8	8	5	3
Better	1	0	4	5	0	1

Reference group: Non-Hispanic White Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

Note: AI/AN denotes American Indian or Alaska Native; NHOPI denotes Native Hawaiian or other Pacific Islander

Importance:

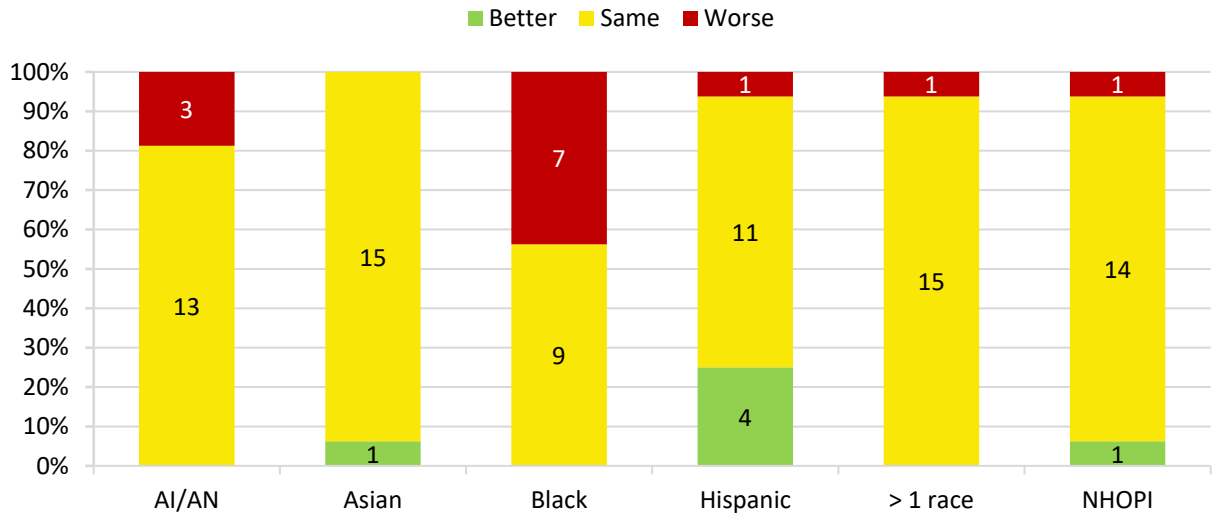
Effective treatment is essential to ensuring high quality care with good patient outcomes.[8]

Findings:

- On all measures of effective treatment, AI/AN, Asian and more than one race Veterans ages 18-44 years received the same or better effective treatment compared to non-Hispanic White Veterans (better on 1 measure for AI/AN Veterans).
- For some measures, Black, Hispanic and NHOPI Veterans ages 18-44 years each received worse effective treatment compared with non-Hispanic White Veterans (for 3, 1, and 2 measures, respectively). However, each of these groups also received better effective treatment compared with non-Hispanic White Veterans for some measures, with better effective treatment for 4, 5, and 1 measure, respectively.

Exhibit 2-20. Number and percentage of measures for which racial/ethnic minority Veteran VHA patients of specified age groups experienced better, same, or worse effective treatment compared with reference group

Exhibit 2-20. Effective Treatment, 45-64 years



Comparison	AI/AN	Asian	Black	Hispanic	> 1 race	NHOPI
Worse	3	0	7	1	1	1
Same	13	15	9	11	15	14
Better	0	1	0	4	0	1

Reference group: Non-Hispanic White Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

Note: AI/AN denotes American Indian or Alaska Native; NHOPI denotes Native Hawaiian or other Pacific Islander

Importance:

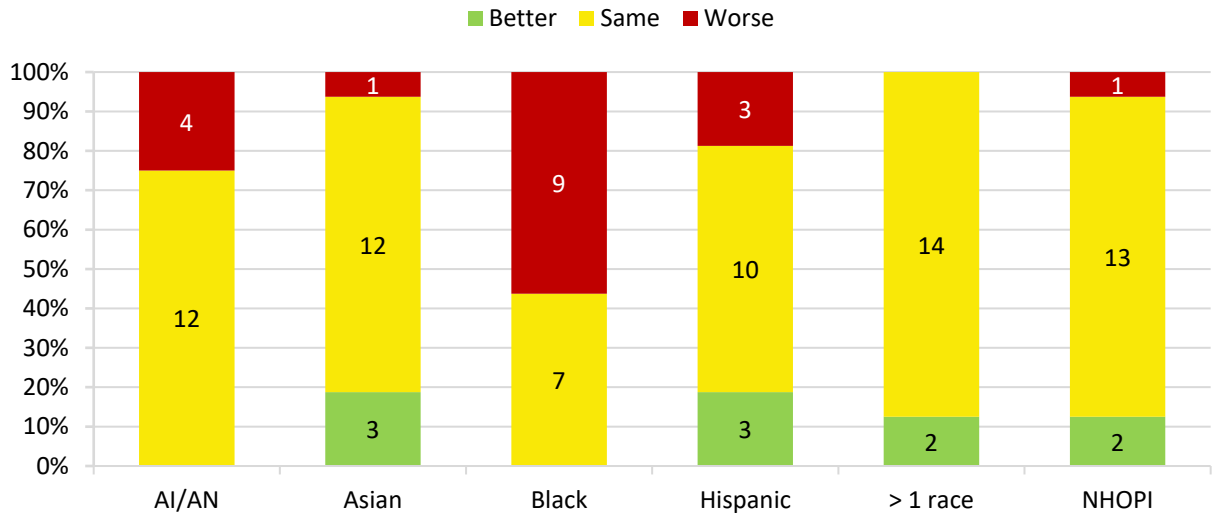
Effective treatment is essential to ensuring high quality care with good patient outcomes.[8]

Findings:

- On most measures of effective treatment, Asian and more than one race (15 measures), NHOPI (14 measures), AI/AN (13 measures), Hispanic (11 measures) and Black (9 measures) Veterans ages 45-64 years received the same effective treatment as non-Hispanic White Veterans.
- Black (7 measures), AI/AN (3 measures), Hispanic (1 measure), more than one race (1 measure), and NHOPI (1 measure) Veterans all received worse effective treatment compared to non-Hispanic White Veterans for some measures.
- Hispanic (4 measures), Asian and NHOPI (1 measure each) Veterans received better effective treatment compared to non-Hispanic White Veterans for some measures.

Exhibit 2-21. Number and percentage of measures for which racial/ethnic minority Veteran VHA patients of specified age groups experienced better, same, or worse effective treatment compared with reference group

Exhibit 2-21. Effective Treatment, 65+ years



Comparison	AI/AN	Asian	Black	Hispanic	> 1 race	NHOPI
Worse	4	1	9	3	0	1
Same	12	12	7	10	14	13
Better	0	3	0	3	2	2

Reference group: Non-Hispanic White Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

Note: AI/AN denotes American Indian or Alaska Native; NHOPI denotes Native Hawaiian or other Pacific Islander

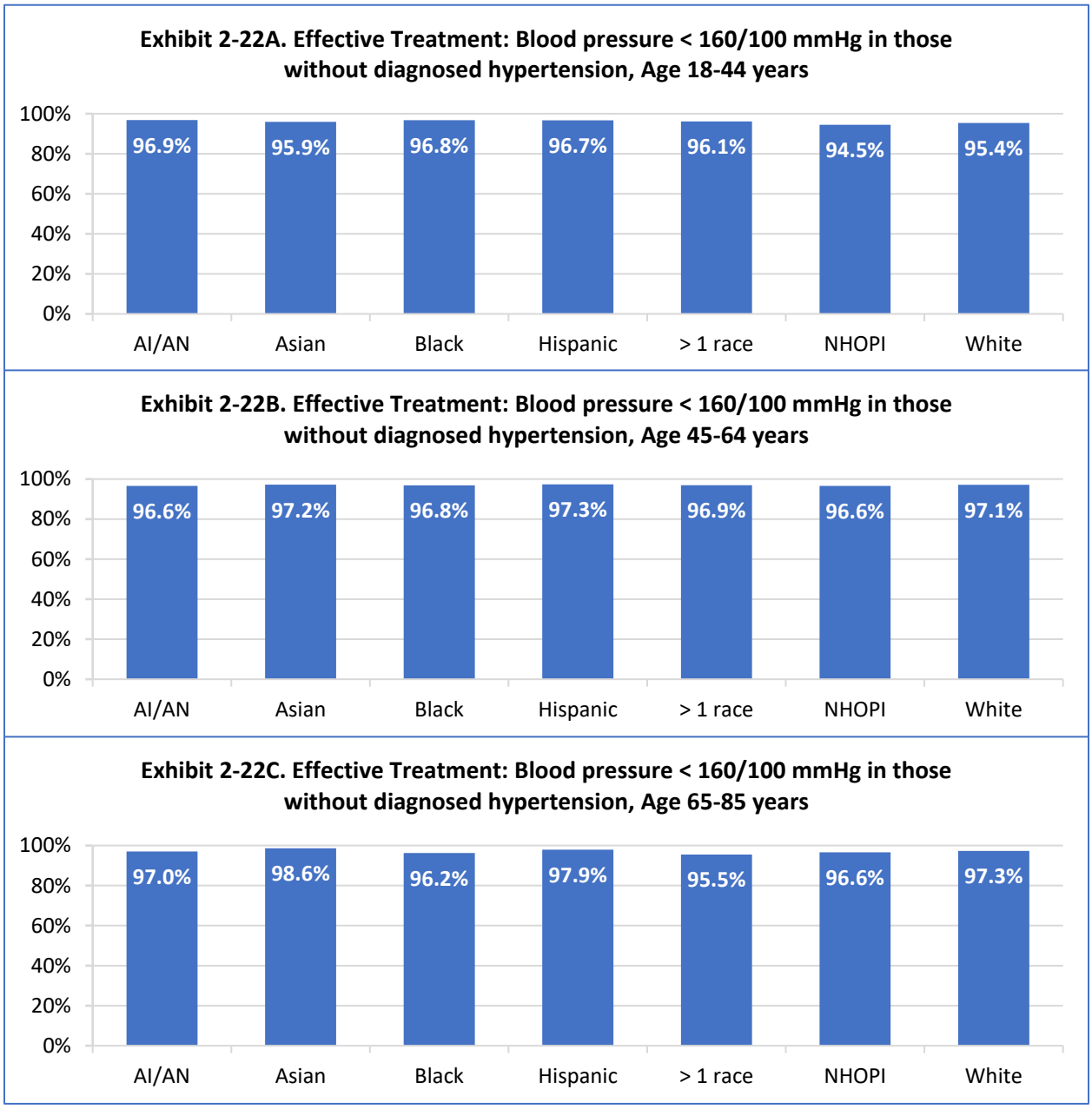
Importance:

Effective treatment is essential to ensuring high quality care with good patient outcomes.[8]

Findings:

- On most measures of effective treatment, more than one race (14 measures), NHOPI (13 measures), Asian and AI/AN (12 measures), Hispanic (10 measures) and Black (7 measures) Veterans ages 65+ years received the same effective treatment as non-Hispanic White Veterans. However, Black (9 measures), AI/AN (4 measures), Hispanic (3 measures), Asian and NHOPI (1 measure) Veterans received worse effective treatment than non-Hispanic White Veterans.
- Compared to non-Hispanic White Veterans, Hispanic (3 measures), Asian (3 measures), and more than one race and NHOPI (2 measures each) Veterans received better effective treatment.

Exhibit 2-22. VHA patients without a diagnosis of hypertension whose most recent blood pressure was measured in the last 12 months, and was less than 160/100 mmHg



Reference group: Non-Hispanic White Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

Note: AI/AN denotes American Indian or Alaska Native; NHOPI denotes Native Hawaiian or other Pacific Islander

Importance:

High blood pressure increases the risk for heart disease and stroke, two leading causes of death for Americans.[14]

Finding:

Compared with non-Hispanic White Veterans, Veterans across most racial/ethnic and age groups had similar rates of BP < 160/100.

Exhibit 2-23. VHA patients with diagnosed diabetes whose most recent blood pressure was measured in the last 12 months, and was less than 160/100 mmHg
[Note: This measure was assessed through FY2016 only]

Reference group: Non-Hispanic White Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

Note: AI/AN denotes American Indian or Alaska Native; NHOPI denotes Native Hawaiian or other Pacific Islander

Importance:

Blood pressure measurement in patients with diabetes is important because they are at a higher risk for heart disease, stroke and renal disease.[15]

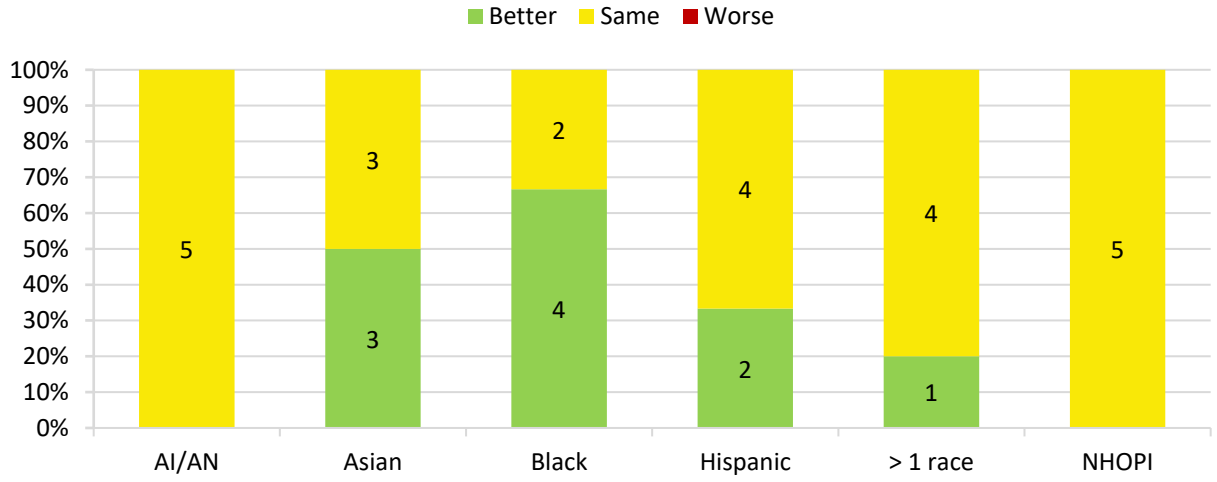
Findings:

- Among Veterans with diagnosed diabetes in the 18–64-years age range, compared with non-Hispanic White Veterans, most Veterans across all racial/ethnic groups had blood pressure < 160/100 mmHg (i.e., their blood pressure was not poorly controlled).
- Black Veterans age 45-64 years (93.7%) and those age 65+ years (93.0%) each had lower rates of blood pressure < 160/100 mmHg compared with non-Hispanic White Veterans in those respective age groups (95.7% and 95.4%, respectively).

Variations in VHA Health Care Quality of Healthy Living – Lifestyle Modification by Veteran Race/Ethnicity

Exhibit 2-24. Number and percentage of measures for which racial/ethnic minority Veteran VHA patients of specified age groups experienced better, same, or worse healthy living – lifestyle modification compared with reference group

Exhibit 2-24. Healthy Living – Lifestyle Modification, 18-44 years



Comparison	AI/AN	Asian	Black	Hispanic	> 1 race	NHOPI
Worse	0	0	0	0	0	0
Same	5	3	2	4	4	5
Better	0	3	4	2	1	0

Reference group: Non-Hispanic White Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

Note: AI/AN denotes American Indian or Alaska Native; NHOPI denotes Native Hawaiian or other Pacific Islander

Importance:

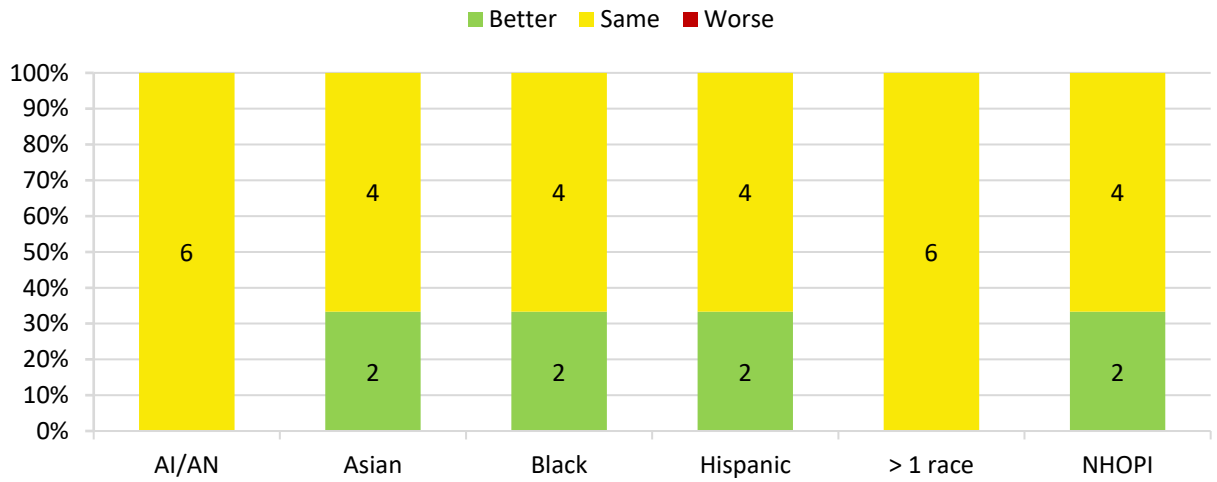
Lifestyle modification is an important part of the prevention and treatment of disease.[16]

Findings:

- On most measures of lifestyle modification for healthy living, Veterans across racial/ethnic groups ages 18-44 years had the same experience as non-Hispanic White Veterans.
- NHOPI and AI/AN (5 measures), Hispanic and more than one race (4 measures), Asian (3 measures), and Black (2 measures) reported the same lifestyle modification experience as non-Hispanic White Veterans for some measures.

Exhibit 2-25. Number and percentage of measures for which racial/ethnic minority Veteran VHA patients of specified age groups experienced better, same, or worse healthy living – lifestyle modification compared with reference group

Exhibit 2-25. Healthy Living – Lifestyle Modification, 45-64 years



Comparison	AI/AN	Asian	Black	Hispanic	> 1 race	NHOPI
Worse	0	0	0	0	0	0
Same	6	4	4	4	6	4
Better	0	2	2	2	0	2

Reference group: Non-Hispanic White Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

Note: AI/AN denotes American Indian or Alaska Native; NHOPI denotes Native Hawaiian or other Pacific Islander

Importance:

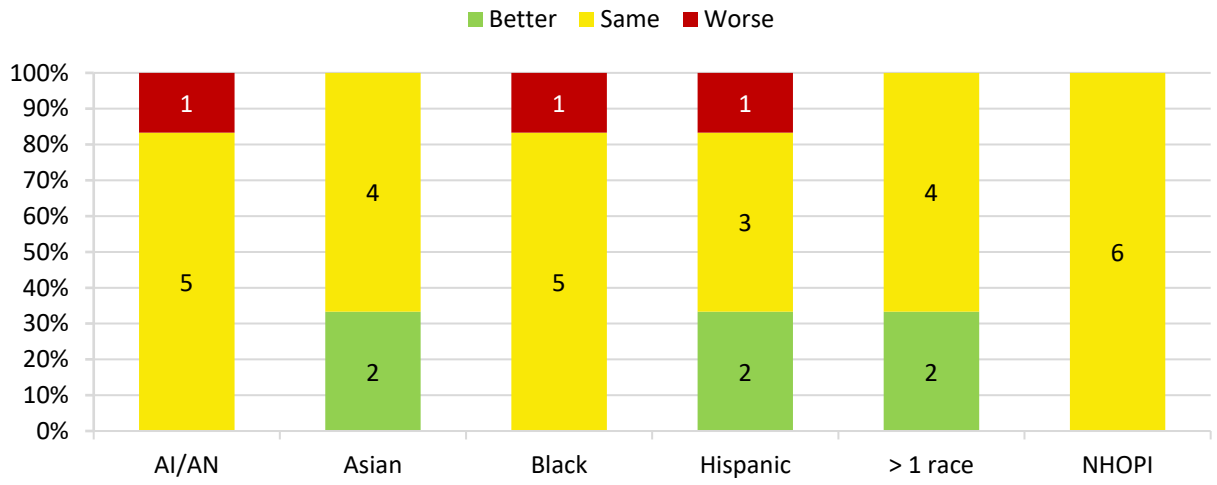
Lifestyle modification is an important part of the prevention and treatment of disease.[16]

Findings:

- On most measures of lifestyle modification for healthy living, Veterans ages 45-64 years had the same experiences irrespective of racial/ethnic group.
- Asian, Black, Hispanic and NHOPI Veterans reported better lifestyle modification experiences across 2 measures compared to non-Hispanic White Veterans.

Exhibit 2-26. Number and percentage of measures for which racial/ethnic minority Veteran VHA patients of specified age groups experienced better, same, or worse healthy living – lifestyle modification compared with reference group

Exhibit 2-26. Healthy Living – Lifestyle Modification, 65+ years



Comparison	AI/AN	Asian	Black	Hispanic	> 1 race	NHOPI
Worse	1	0	1	1	0	0
Same	5	4	5	3	4	6
Better	0	2	0	2	2	0

Reference group: Non-Hispanic White Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

Note: AI/AN denotes American Indian or Alaska Native; NHOPI denotes Native Hawaiian or other Pacific Islander

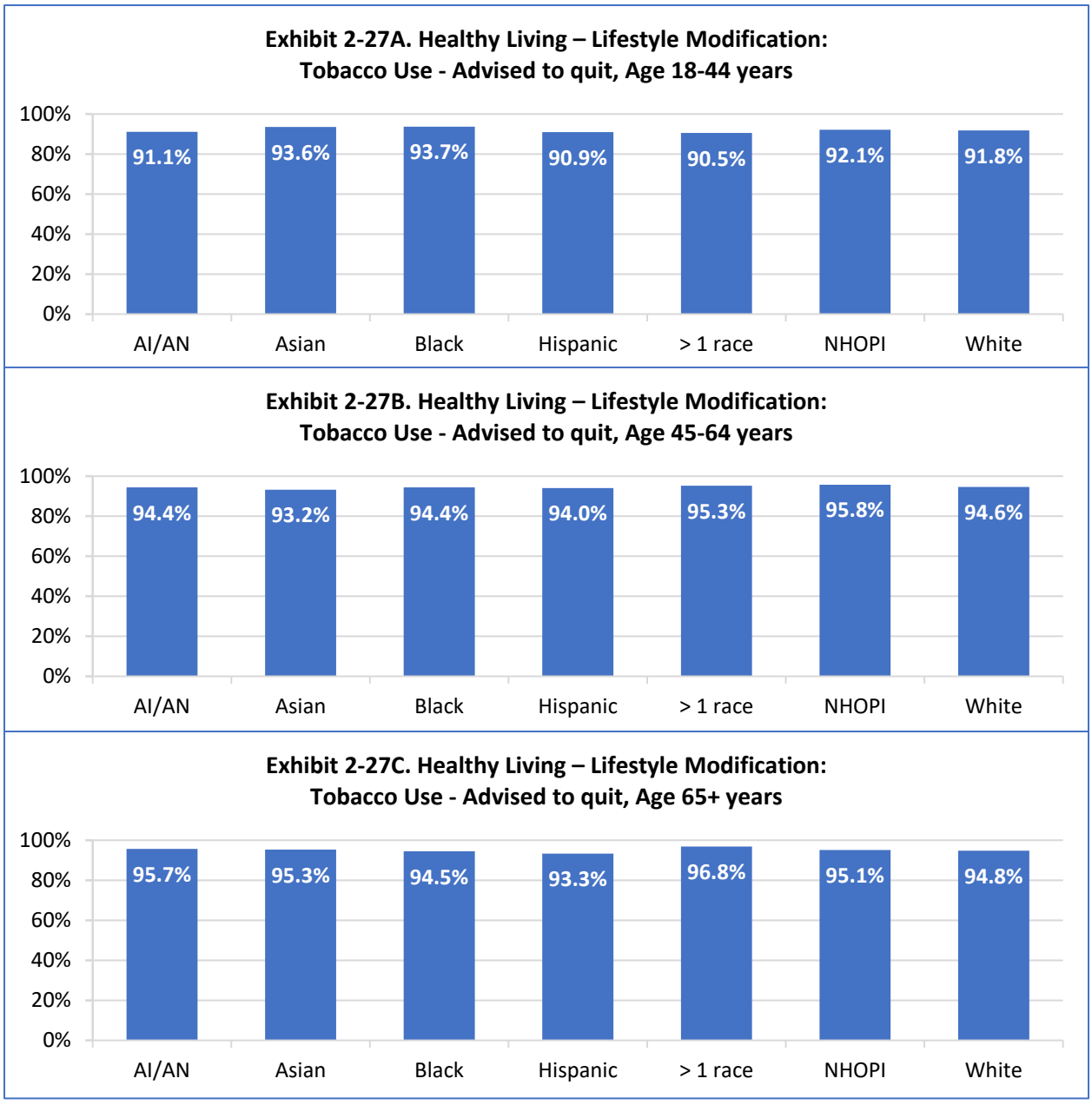
Importance:

Lifestyle modification is an important part of the prevention and treatment of disease.[16]

Findings:

- On all measures of healthy living – lifestyle modification, Asian, more than one race and NHOPI Veterans ages 65+ reported the same or better levels compared to non-Hispanic White Veterans.
- AI/AN, Black and Hispanic Veterans ages 65+ each reported worse healthy living – lifestyle modification for 1 measure compared with non-Hispanic White Veterans. For all other healthy living – lifestyle modification measures, AI/AN and Black Veterans reported the same levels as non-Hispanic White Veterans, whereas for 2 measures, Hispanic Veterans reported better healthy living – lifestyle modification.

Exhibit 2-27. VHA patients who are current tobacco users (any tobacco use in the past 12 months) who in the past 12 months have been advised to quit



Reference group: Non-Hispanic White Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

Note: AI/AN denotes American Indian or Alaska Native; NHOPI denotes Native Hawaiian or other Pacific Islander

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.[17]

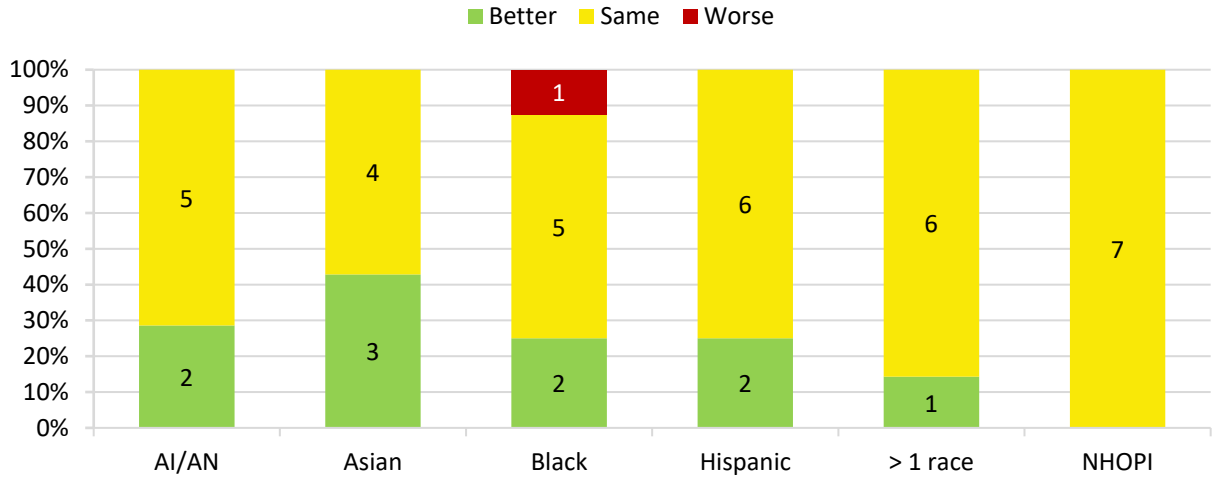
Findings:

- Among Veterans age 18-44 years who were current tobacco users, Black Veterans (93.7%) compared with non-Hispanic White Veterans (91.8%) were proportionately more likely to be advised to quit smoking.
- Among Veterans age 65+ years who were current tobacco users, a higher percentage of more than one race Veterans (96.8%) and a lower percentage of Hispanic Veterans (93.3%) were advised to quit compared to non-Hispanic White Veterans (94.8%).

Variations in VHA Health Care Quality of Healthy Living – Clinical Preventive Services by Veteran Race/Ethnicity

Exhibit 2-28. Number and percentage of measures for which racial/ethnic minority Veteran VHA patients of specified age groups experienced better, same, or worse healthy living – clinical preventive services compared with reference group

Exhibit 2-28. Healthy Living – Clinical Preventive Services, 18-44 years



Comparison	AI/AN	Asian	Black	Hispanic	> 1 race	NHOPI
Worse	0	0	1	0	0	0
Same	5	4	5	6	6	7
Better	2	3	2	2	1	0

Reference group: Non-Hispanic White Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

Note: AI/AN denotes American Indian or Alaska Native; NHOPI denotes Native Hawaiian or other Pacific Islander

Importance:

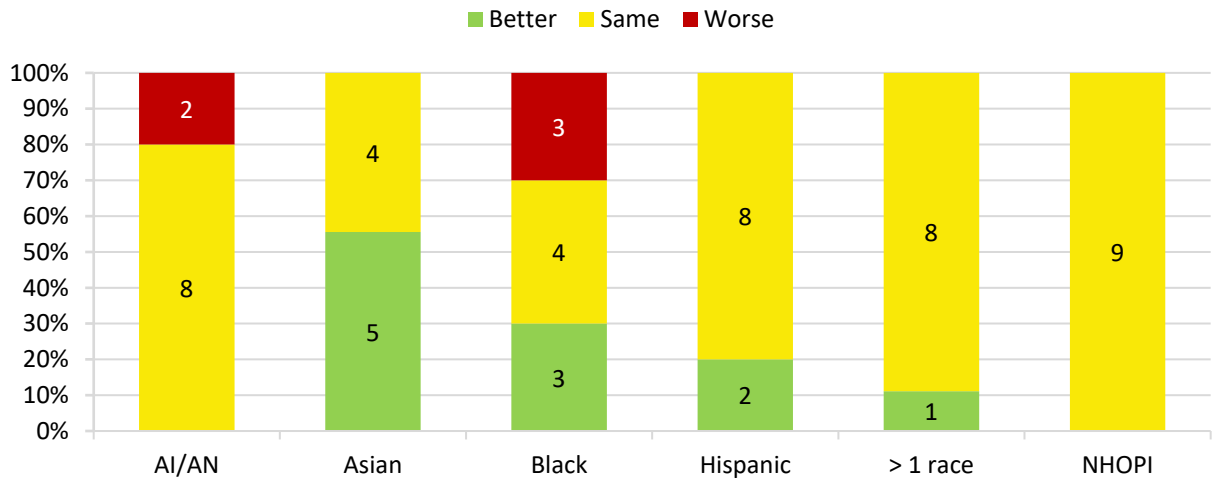
Clinical preventive services are an essential part of maintaining health and preventing disease.[16,18]

Findings:

- On most measures of clinical preventive services, Veterans across racial/ethnic groups ages 18-44 years received the same preventive services as non-Hispanic White Veterans.
- NHOPI (7 measures), more than one race and Hispanic (6 measures each), AI/AN and Black (5 measures each) and Asian (4 measures) Veterans received the same preventive services as non-Hispanic White Veterans.
- Asian (3 measures), Hispanic, AI/AN and Black (2 measures each) and more than one race (1 measure) Veterans received more preventive services compared to non-Hispanic White Veterans.
- Black Veterans received less preventive services on 1 measure compared to non-Hispanic White Veterans.

Exhibit 2-29. Number and percentage of measures for which racial/ethnic minority Veteran VHA patients of specified age groups experienced better, same, or worse healthy living – clinical preventive services compared with reference group

Exhibit 2-29. Healthy Living – Clinical Preventive Services, 45-64 years



Comparison	AI/AN	Asian	Black	Hispanic	> 1 race	NHOPI
Worse	2	0	3	0	0	0
Same	8	4	4	8	8	9
Better	0	5	3	2	1	0

Reference group: Non-Hispanic White Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

Note: AI/AN denotes American Indian or Alaska Native; NHOPI denotes Native Hawaiian or other Pacific Islander

Importance:

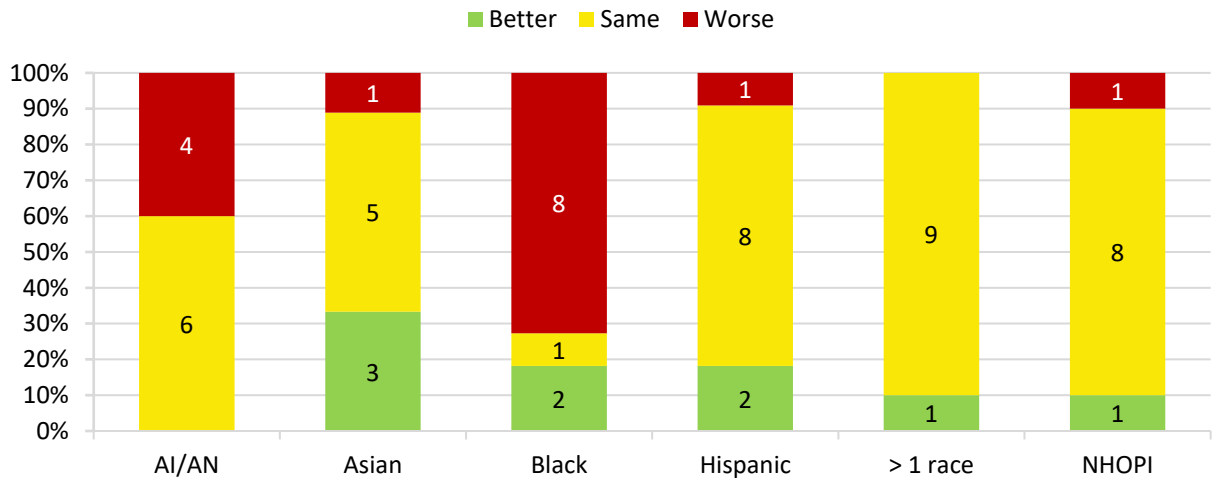
Clinical preventive services are an essential part of maintaining health and preventing disease.[16,18]

Findings:

- On most measures of clinical preventive services, Veterans across racial/ethnic groups ages 45-64 years received the same preventive services as non-Hispanic White Veterans.
- NHOPI (9 measures), more than one race, Hispanic and AI/AN (8 measures each), Asian and Black (4 measures each) Veterans received the same preventive services as non-Hispanic White Veterans.
- Asian (5 measures), Black (3 measures), Hispanic (2 measures) and more than one race (1 measure) Veterans received more preventive services compared to non-Hispanic White Veterans.
- Black (3 measures) and AI/AN (2 measures) Veterans received less preventive services compared to non-Hispanic White Veterans.

Exhibit 2-30. Number and percentage of measures for which racial/ethnic minority Veteran VHA patients of specified age groups experienced better, same, or worse healthy living – clinical preventive services compared with reference group

Exhibit 2-30. Healthy Living – Clinical Preventive Services, 65+ years



Comparison	AI/AN	Asian	Black	Hispanic	> 1 race	NHOPI
Worse	4	1	8	1	0	1
Same	6	5	1	8	9	8
Better	0	3	2	2	1	1

Reference group: Non-Hispanic White Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

Note: AI/AN denotes American Indian or Alaska Native; NHOPI denotes Native Hawaiian or other Pacific Islander

Importance:

Clinical preventive services are an essential part of maintaining health and preventing disease.[16, 18]

Findings:

- On most measures of clinical preventive services, Veterans across racial/ethnic groups ages 65+ received the same preventive services as non-Hispanic White Veterans except for Black Veterans who received less preventive services across 8 measures.
- AI/AN (4 measures), Hispanic, Asian and NHOPI (1 measure each) Veterans received less preventive services compared to non-Hispanic White Veterans.
- More than one race (9 measures), NHOPI and Hispanic (8 measures each), AI/AN (6 measures), Asian (5 measures) and Black (1 measure) Veterans received the same preventive services as non-Hispanic White Veterans.
- Asian (3 measures), Black and Hispanic (2 measures each), more than one race and NHOPI (1 measure each) Veterans received more preventive services compared to non-Hispanic White Veterans.

Exhibit 2-31. VHA patients who accepted influenza immunization.
[Note: This measure was assessed FY2017-FY2019]

Reference group: Non-Hispanic White Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

Note: AI/AN denotes American Indian or Alaska Native; NHOPI denotes Native Hawaiian or other Pacific Islander

Importance:

Vaccination can prevent influenza and reduce influenza-related morbidity and mortality.[19]

Findings:

- Black Veterans ages 18-44 years (67.5%) had lower rates of influenza immunization while AI/AN Veterans (80.2%) and Asian Veterans (79.2%) had higher rates compared to non-Hispanic White Veterans (72.6%).
- Black Veterans ages 45-64 years (70.3%) had lower rates of influenza immunization while Asian Veterans (81.8%) had higher rates compared to non-Hispanic White Veterans (75.9%).
- Compared to non-Hispanic White Veterans age 65+ years (85.2%), Black Veterans (78.7%) and NHOPI Veterans (81.5%) had lower rates of influenza immunization.

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Chapter 3

Patient Experiences and Health Care Quality for Women Veterans in VHA

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Section I: Background and Sociodemographic Characteristics

Women have served in the U.S. Military since the American Revolution.[1] After Congress lifted a 2% cap on women in military service in 1968[1] their enrollment increased steadily with each decade. In 2019, approximately 225,000 (17%) of active-duty personnel were women. [2] Further, there are currently approximately 1.8 million American women Veterans. [3]

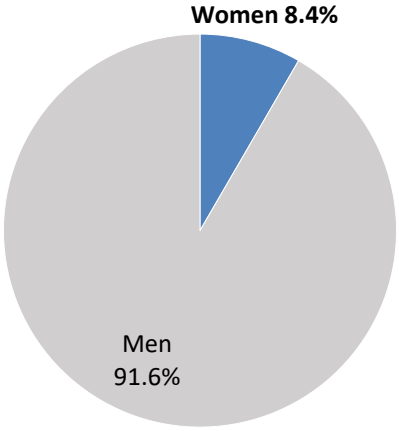
Despite substantial growth in the number of women Veterans, gender-specific and gender-sensitive care through the Veterans Health Administration (VHA) has historically lagged. Spurred by reports demonstrating deficiencies,[4,5] in 1992, Congress passed legislation establishing Women Veteran Comprehensive Health Centers.[6] Over the subsequent decades, with leadership from VHA's National Office of Women's Health Services (WHS) policy office, and multiple other national, regional, and local stakeholders, VHA made substantial progress towards addressing and correcting these deficiencies.[7,8] In 2008, WHS launched an initiative to fundamentally redesign VHA's women's healthcare through a multi-pronged approach.[9] Every VHA facility in the country now has at least one Designated Women's Health Primary Care Provider[10] who meets educational and practice requirements that demonstrate proficiency in women Veterans' care,[11] as well as a Women Veterans Program Manager, who reports to top facility leadership, advocating for the needs of women Veterans. Education and training gaps received focused attention, front-line providers educated through national Women's Health Mini-residency programs,[12] and Women Veteran Specialists through Women's Health Fellowships.[13] In addition to redesigning primary care to deliver comprehensive women's care,[14] national and regional initiatives were launched aiming to optimize VA care across conditions and settings[15] including reproductive health, mental health, diabetes, cardiovascular care, emergency care, and others.[16-22] Much progress has been made in recognizing and tailoring VHA care to meet the high prevalence of Military Sexual Trauma (MST) among women Veterans.[23] Problematic issues of VHA culture and environment of care were targeted through communications initiatives, including efforts to address the

pernicious issue of harassment of women Veterans at VHA facilities.[24] In addition, in situations where gender-specific care is better delivered by providers outside of VA. Through VA Community Care, care coordination initiatives have been established aiming to improve women Veterans' outcomes and experiences with this care.[25] Finally, Women Veteran's health and healthcare is a priority area for VHA's Office of Research & Development, funding numerous studies to inform diverse aspects of care,[26-30] including a VA women's health practice-based research network.[31]

With this progress, persistent disparities in care for women Veterans have been noted, resulting in continued calls for attention and improvement. This chapter provides foundation for that work through summarizing the sociodemographic characteristics of women VHA users, their perceptions of care, and care quality. Of note, gender comparisons in this chapter are based on comparisons between women and men, as identified through the sex data field in administrative data tables. Data on self-identified gender identity was not widely available at the time of this report.

Gender in VHA

Exhibit 3-1. Distribution of Gender among Veteran VHA Patients, FY16-FY19



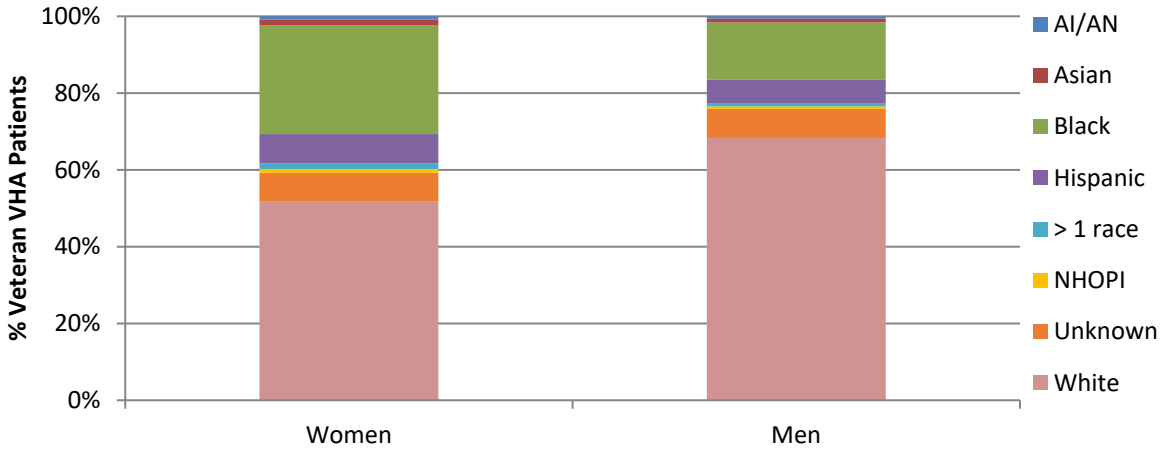
Women	Men
8.4%	91.6%

Findings:

- Women continue to be an extreme numeric minority among VHA patients.
- Women increased to being 8.4% of VHA patients in FY16-19, compared to 6.8% in FY13.[32]

Race/Ethnicity by Gender

Exhibit 3-2. Percent Distribution of Race/Ethnicity by Gender among Veteran VHA Patients, FY16-FY19



Race/Ethnicity	Women	Men
American Indian or Alaska Native	0.9%	0.6%
Asian	1.5%	1.0%
Black	28.3%	14.9%
Hispanic	7.7%	6.2%
More than one race	1.4%	0.7%
Native Hawaiian or other Pacific Islander	1.0%	0.7%
Unknown, declined, or missing	7.4%	7.5%
White	51.9%	68.2%

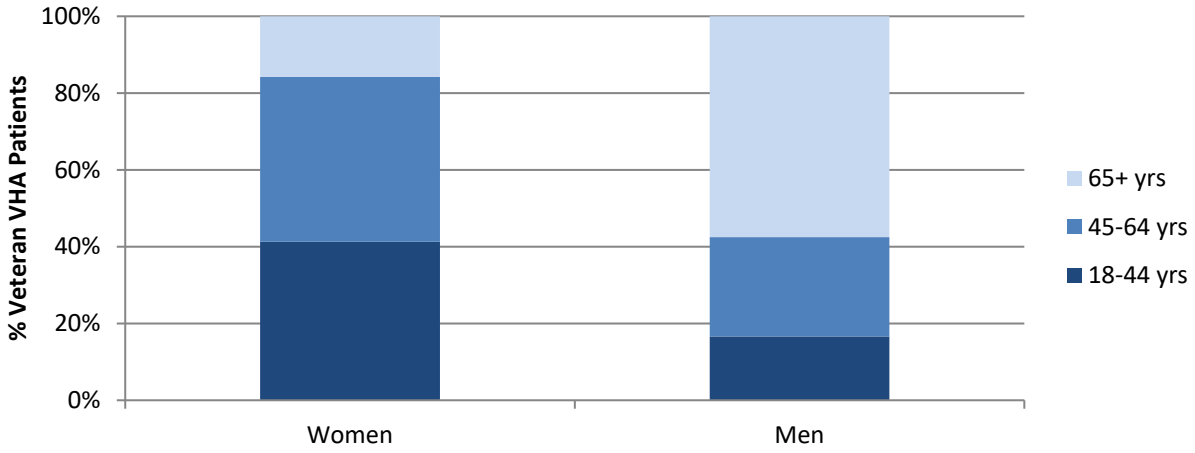
Note: AI/AN denotes American Indian or Alaskan Native; NHOPI denotes Native Hawaiian or other Pacific Islander; Unk denotes unknown, declined, or missing race/ethnicity

Findings:

- Women VHA patients have greater racial/ethnic diversity compared to men VHA patients.
- Nearly half of women VHA patients, compared to approximately one-third of men VHA patients, self-identified as belonging to a race/ethnicity minority group.
- Larger proportions of women than men VHA patients self-identified as belonging to Black, Hispanic, Asian, Native Hawaiian/Other Pacific Islander, American Indian/American Native, and more than one race groups.
- While absolute differences in proportions of racial/ethnic groups between genders are small, the relative differences are often large (e.g., 50% more women than men self-identified as Asian)
- Compared with the VHA patient racial/ethnic diversity reported in the National Veteran Health Equity Report — FY13 (Office of Health Equity, Internet), the diversity of women VHA patients increased (37% racial/ethnic minorities in FY13, 41% in FY16-FY19). The diversity of men VHA patients similarly increased (22% racial/ethnic minorities in FY13, 24% in FY16-FY19).

Age Group by Gender

Exhibit 3-3. Percent Distribution of Age by Gender among Veteran VHA Patients, FY16-FY19



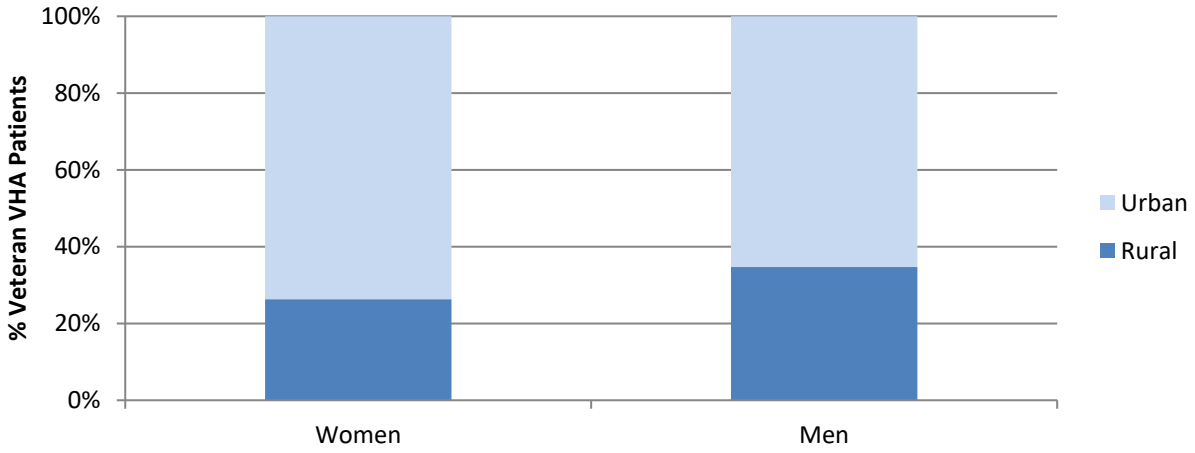
Age	Women	Men
65+ years	15.8%	57.5%
45-64 years	42.9%	25.9%
18-44 years	41.3%	16.6%

Findings:

- Women VHA patients were overall much younger than men VHA patients.
- Approximately two-fifths of women VHA patients were 44 years of age or younger, compared to one-sixth of men VHA patients.
- Approximately one-sixth of women VHA patients were 65 years of age or older, compared to nearly three-fifths of men VHA patients.
- The age distribution of women Veterans is similar to FY13, although now there are approximately 16% of women 65 years and older compared to 12% in FY13 (with a concordant change in the proportion of women 45-64 years of age). There has been a more pronounced growth in the proportion of men 65 years and older (49% in FY13).[32]

Rurality by Gender

Exhibit 3-4. Percent Distribution of Rural/Urban Status by Gender among Veteran VHA Patients, FY16-FY19



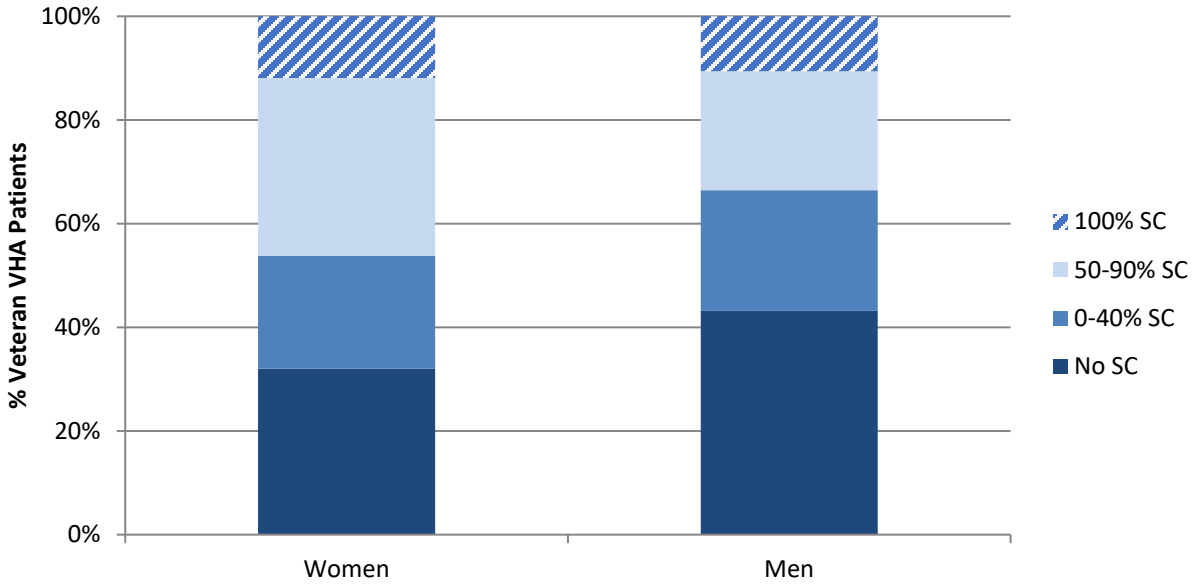
Rural/Urban Status	Women	Men
Urban	73.7%	65.3%
Rural	26.3%	34.7%

Findings:

- Most VHA patients lived in urban settings.
- Approximately one-fourth of women, compared to one-third of men VHA patients, reside in rural settings.
- The proportion of women VHA users residing in rural settings is slightly decreased from 29% in FY13, with a similar decrease observed in men VHA users (38% in FY13).[32]

Service-connected Disability Rating by Gender

Exhibit 3-5. Percent Distribution of Service-connected Disability Rating by Gender among Veteran VHA Patients, FY16-FY19



Service-connected Disability Rating	Women	Men
100% SC	11.9%	10.6%
50-90% SC	34.3%	23.0%
0-40% SC	21.7%	23.3%
No SC	32.0%	43.2%

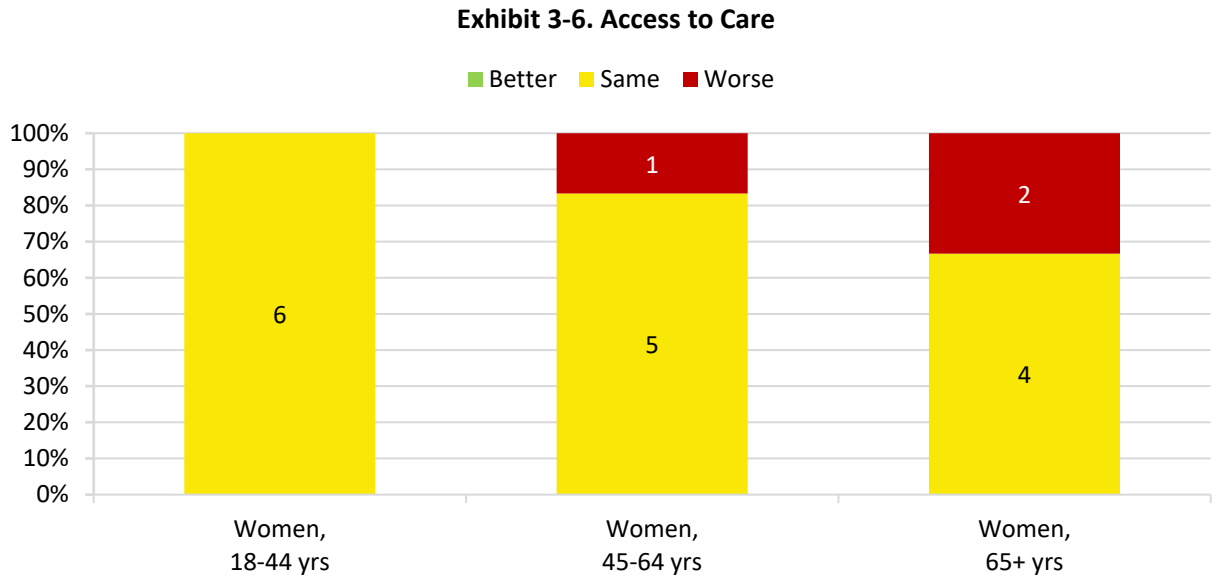
Findings:

- More than two-thirds of women VHA patients had a service-connected disability, compared to less than three-fifths of men VHA patients.
- Nearly one-half of women VHA patients had a service-connected disability rating of 50% or more, compared to approximately one-third of men VHA patients.
- The proportion of women having a service-connected disability is higher (68%) compared to FY13, in which it was 59%, with a similar increase observed in men VHA users (57% compared to 48% in FY13).[32]

Section II: Patient Experiences

Variations in VHA Patient Experience of Access to Care by Veteran Gender

Exhibit 3-6. Number and percentage of measures for which women Veteran VHA patients of specified age groups experienced better, same, or worse access to care compared with reference group



Comparison	Women, 18-44 years	Women, 45-64 years	Women, 65+ years
Worse	0	1	2
Same	6	5	4
Better	0	0	0

Reference group: Male Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

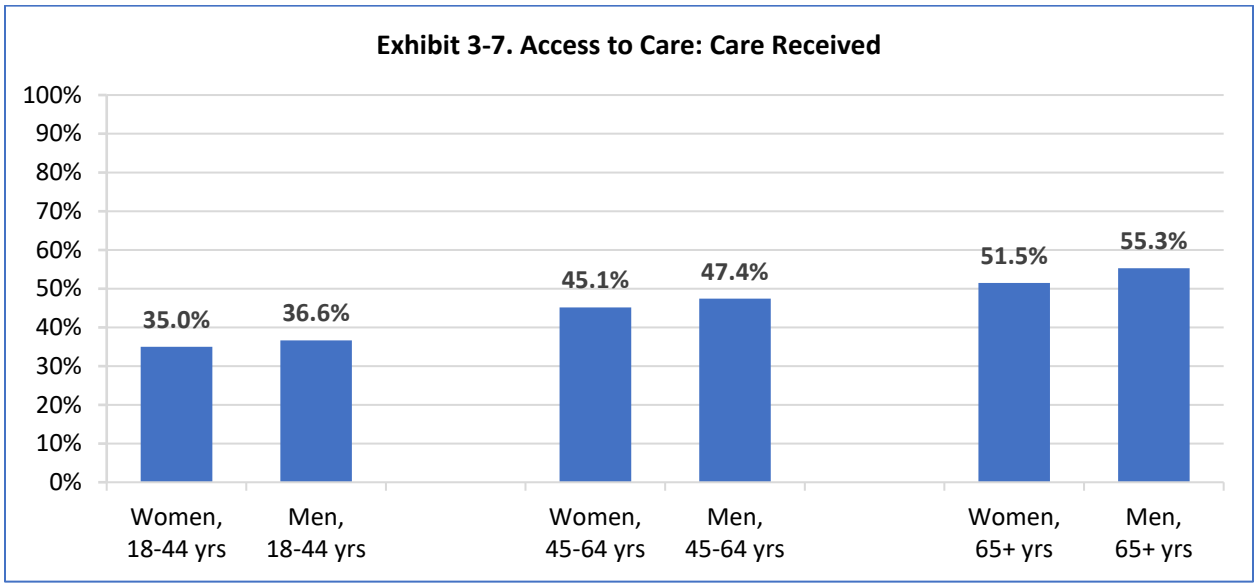
Importance:

- Timely access to healthcare is foundational for achieving optimal health outcomes.
- Prior work has demonstrated that barriers to accessing care are prevalent among women Veterans.

Findings:

- The number of access measures for which women Veterans indicated experiencing worse access than men Veterans was increased in older, compared to younger, age groups.
- Women VHA patients 18-44 years of age indicated experiencing the same level of access to care as men VHA patients.
- Women VHA patients 45-64 years of age indicated experiencing the same level of access to care as men VHA patients in 5 out of 6 measures; in 1 measure they indicated having worse access.
- Women VHA patients 65 years of age and older indicated experiencing the same level of access to care as men VHA patients in 4 out of 6 measures; in 2 measures they indicated having worse access.

Exhibit 3-7. VHA users who indicated, in the last 6 months, when they contacted their provider's office to get an appointment for care they needed right away, they always received an appointment as soon as they needed



Reference group: Male Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

Importance:

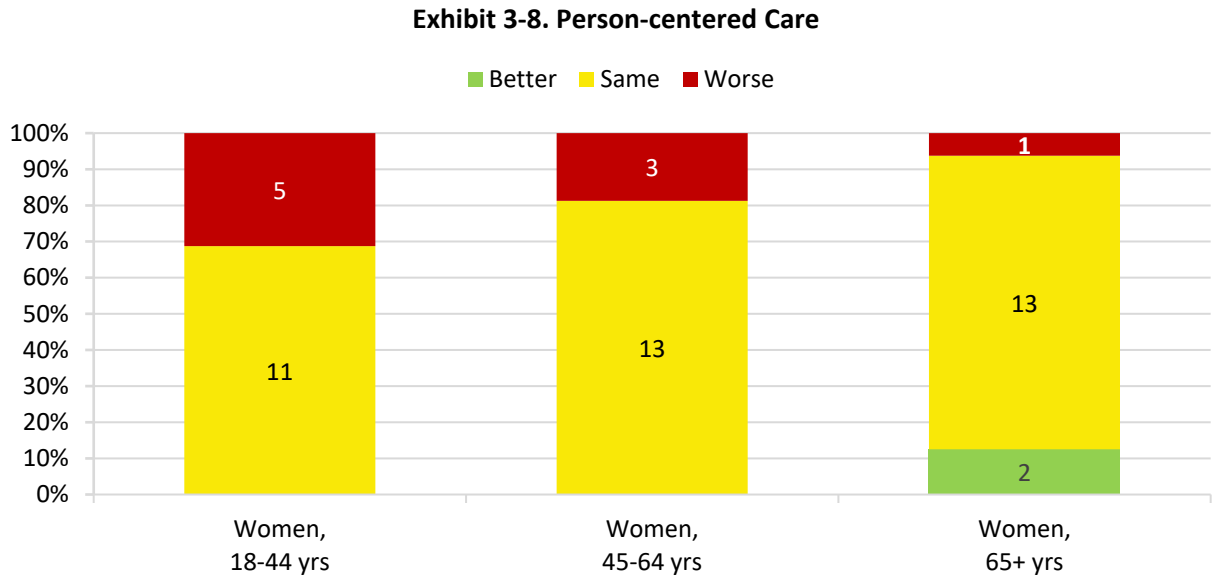
Patients having timely access to primary and specialty care for urgent care needs is important for avoiding unnecessary emergency department visits, improving care continuity, and improving Veteran satisfaction with care.

Findings:

- Younger Veterans indicated getting an appointment as soon as needed less often than older Veterans.
- Across all age groups, women Veterans were less likely than men Veterans to indicate getting an appointment as soon as they needed; disparities between women and men Veterans increased with increasing age.
- Women Veterans 18 to 44 years of age indicated getting an appointment as soon as needed 35.0% of the time, compared to 36.6% of men Veterans in the same age group (difference -1.6%).
- Women Veterans 45 to 64 years of age indicated getting an appointment as soon as needed 45.1% of the time, compared to 47.4% of men Veterans in the same age group (difference -2.3%).
- Women Veterans 65 years of age and older indicated getting an appointment as soon as needed 51.5% of the time, compared to 55.3% of men Veterans in the same age group (difference -3.8%).

Variations in VHA Patient Experience of Person-centered Care by Veteran Gender

Exhibit 3-8. Number and percentage of measures for which women Veteran VHA patients of specified age groups experienced better, same, or worse person-centered care compared with reference group



Comparison	Women, 18-44 years	Women, 45-64 years	Women, 65+ years
Worse	5	3	1
Same	11	13	13
Better	0	0	2

Reference group: Male Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

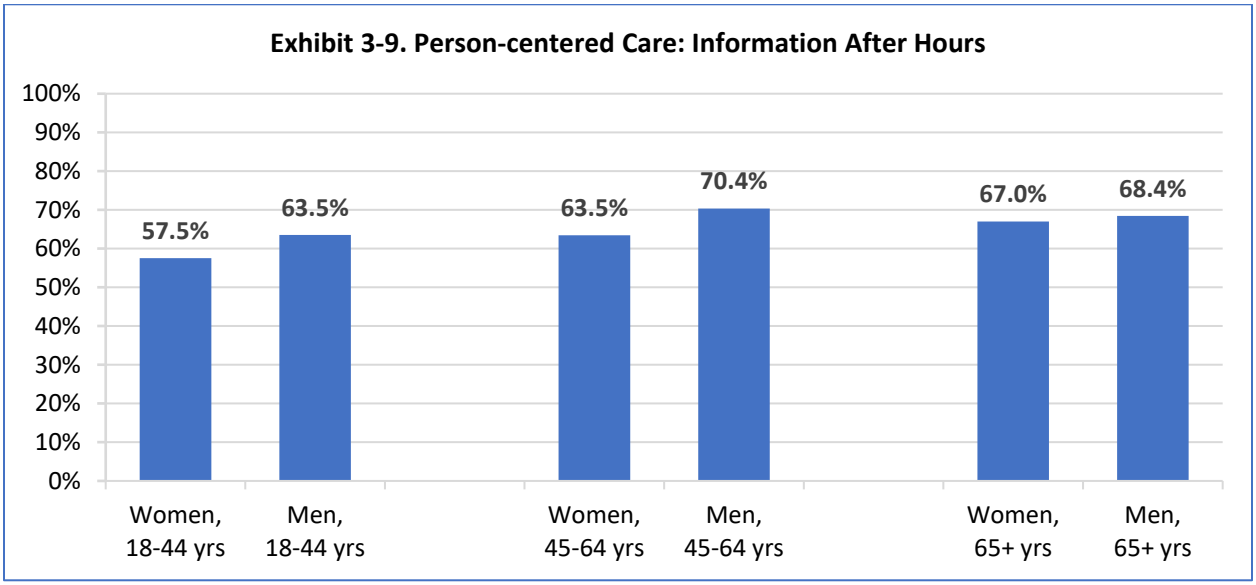
Importance:

- Person-centeredness, the extent to which care is respectful and responsive to patients' preferences, needs and values, is one of six domains of care quality, as defined by the Institute of Medicine.[33]
- Women Veterans generally have different care preferences and needs compared to men Veterans.[34]

Findings:

- The number of person-centered care measures for which women Veterans indicated experiencing worse access than men Veterans was increased in younger, compared to older, age groups.
- Women VHA patients 18-44 years of age indicated receiving the same level of person-centered care as men VHA patients in 11 out of 16 measures; in 5 measures they indicated receiving less person-centered care.
- Women VHA patients 45-64 years of age indicated receiving the same level of person-centered care as men VHA patients in 13 out of 16 measures; in 3 measures they indicated receiving less person-centered care.
- Women VHA patients 65 years of age and older indicated receiving the same level of person-centered care as men VHA patients in 13 out of 16 measures; in 1 measure they indicated receiving less person-centered care; in 2 measures they indicated receiving more person-centered care.

Exhibit 3-9. VHA users who indicated that their provider's office gave them information about what to do if they needed care during evenings, weekends, or holidays



Reference group: Male Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

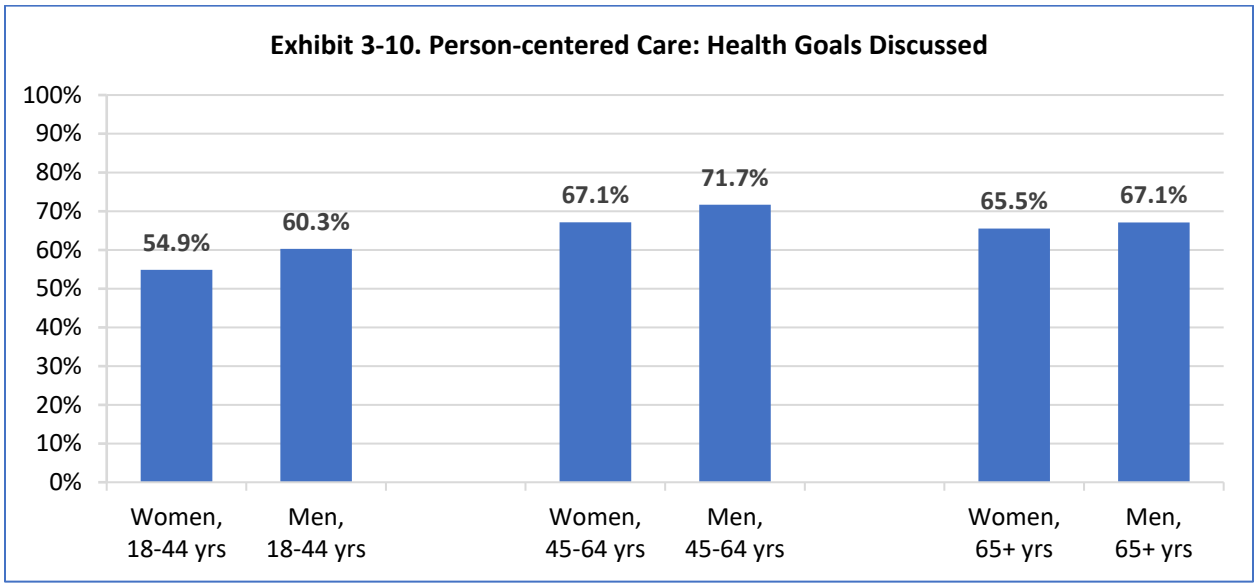
Importance:

- Veterans having information on what to do for urgent and emergent care needs that arise during evenings, weekends, or holidays is foundational for empowering them to receive the care they need in the location that is best suited to their needs.
- Veterans need to be aware of the urgent care and emergency care benefits available to them through the VA MISSION Act of 2018.[35,36]

Findings:

- Across all age groups, women Veterans were less likely than men Veterans to indicate getting information after hours; disparities between women and men Veterans were wider between women and men 18 to 44 and 45 to 64 years of age, compared to those 65 years of age and older.
- Women Veterans 18 to 44 years of age indicated getting information after hours 57.5% of the time, compared to 63.5% of men Veterans in the same age group (difference -6.0%).
- Women Veterans 45 to 64 years of age indicated getting information after hours 63.5% of the time, compared to 70.4% of men Veterans in the same age group (difference -6.9%).
- Women Veterans 65 years of age and older indicated getting information after hours 67.0% of the time, compared to 68.4% of men Veterans in the same age group (difference -1.4%).

Exhibit 3-10. VHA users who indicated, in the last 6 months, that someone in their provider's office spoke with them about specific goals for their health



Reference group: Male Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

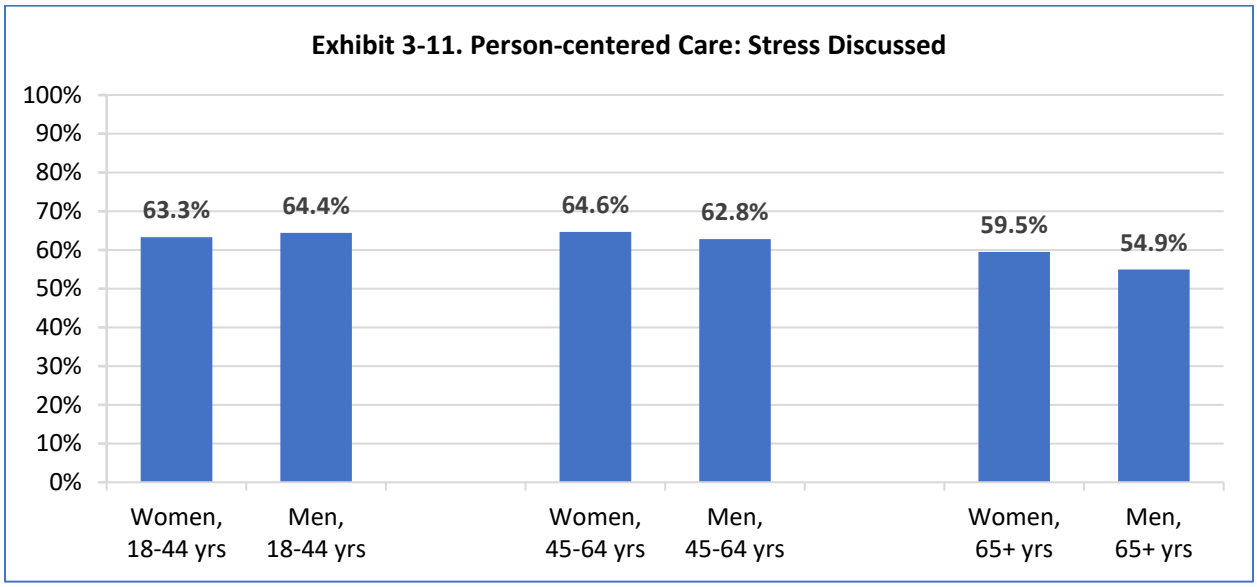
Importance:

Conversations between patients and providers about the patient's goals for their health are foundational to shared decision-making and delivering other key aspects of person-centered care.

Findings:

- Across all age groups, women Veterans were less likely than men Veterans to indicate that someone in their provider's office spoke with them about specific goals for their health; disparities between women and men Veterans increased with younger age.
- Women Veterans 18 to 44 years of age indicated that someone in their provider's office spoke with them about specific goals for their health 54.9% of the time, compared to 60.3% of men Veterans in the same age group (difference -5.4%).
- Women Veterans 45 to 64 years of age indicated that someone in their provider's office spoke with them about specific goals for their health 67.1% of the time, compared to 71.7% of men Veterans in the same age group (difference -4.6%).
- Women Veterans 65 years of age and older indicated that someone in their provider's office spoke with them about specific goals for their health 65.5% of the time, compared to 67.1% of men Veterans in the same age group (difference -1.6%).

Exhibit 3-11. VHA users who indicated, in the last 6 months, that they talked with someone in their provider's office about things in their life that worry them or cause them stress



Reference group: Male Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

Importance:

- Anxiety and stress-related disorders are prevalent among Veterans, especially women Veterans.
- Providers understanding their patients' psychosocial contexts is foundational to delivering person-centered care.

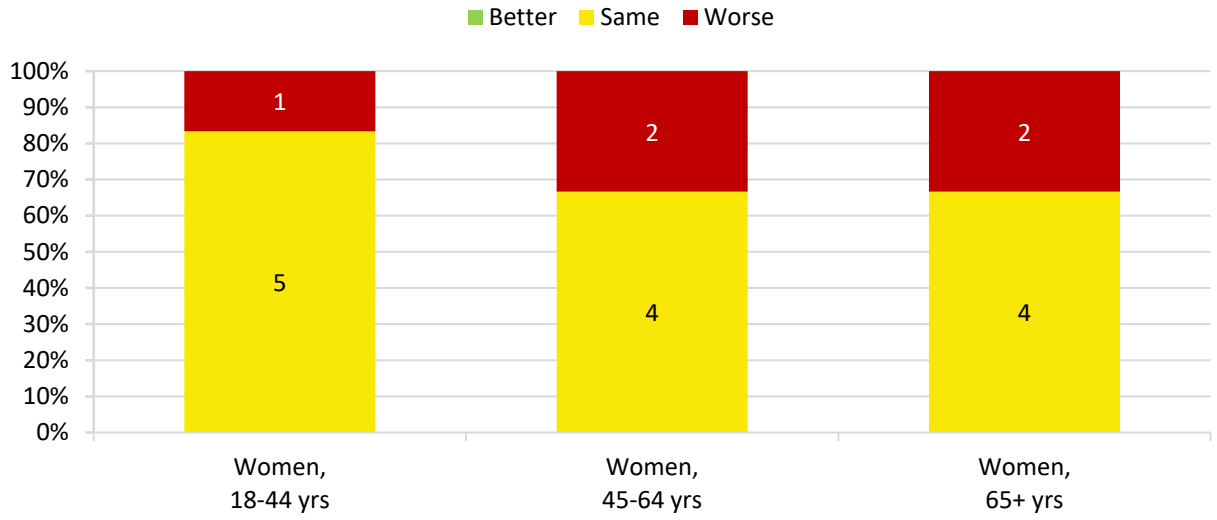
Findings:

- Women Veterans aged 45 to 64 years, and those aged 65 years or more, were more likely than men Veterans in the same age groups to indicate that they talked with someone in their providers' office about things in their life that worry them or cause them stress; Women Veterans aged 18 to 44 were slightly less likely to indicate this compared to men Veterans aged 18 to 44.
- Women Veterans aged 18 to 44 years indicated that they talked with someone in their providers' office about things in their life that worry them or cause them stress 63.3% of the time, compared to 64.4% of men Veterans in the same age group (difference -1.1%).
- Women Veterans aged 45 to 64 years indicated that they talked with someone in their providers' office about things in their life that worry them or cause them stress 64.6% of the time, compared to 62.8% of men Veterans in the same age group (difference +1.8%).
- Women Veterans 65 years of age and older indicated that they talked with someone in their providers' office about things in their life that worry them or cause them stress 59.5% of the time, compared to 54.9% of men Veterans in the same age group (difference +4.6%).

Variations in VHA Patient Experience of Care Coordination by Veteran Gender

Exhibit 3-12. Number and percentage of measures for which women Veteran VHA patients of specified age groups experienced better, same, or worse care coordination compared with reference group

Exhibit 3-12. Care Coordination



Comparison	Women, 18-44 years	Women, 45-64 years	Women, 65+ years
Worse	1	2	2
Same	5	4	4
Better	0	0	0

Reference group: Male Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

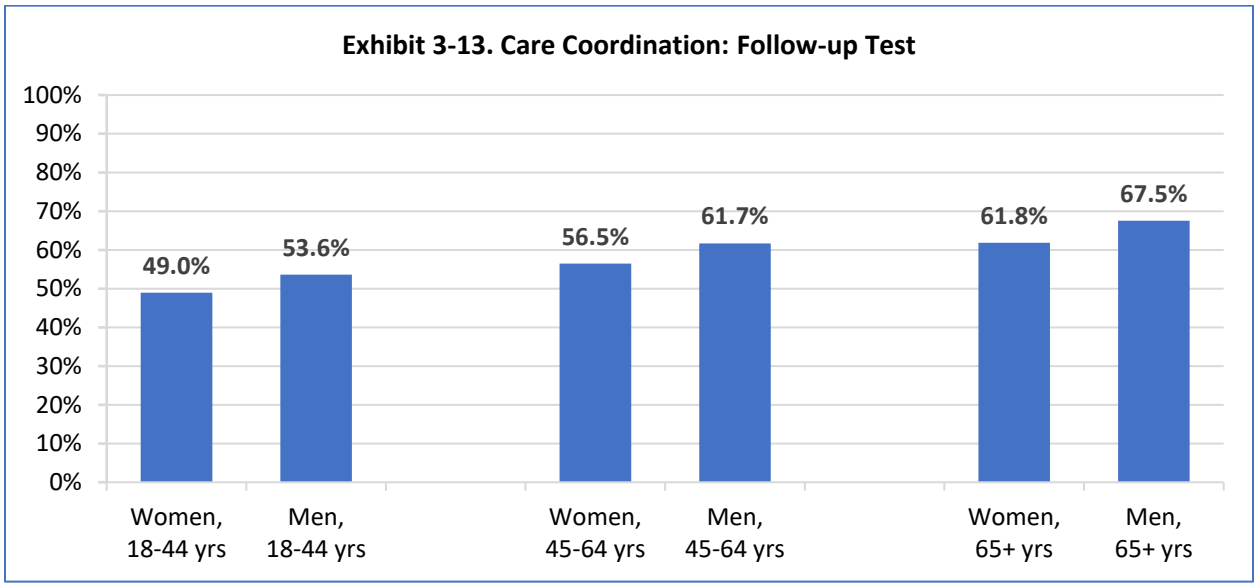
Importance:

- Care coordination is defined as the "deliberate organization of patient care activities between two or more participants (including the patient) involved in a patient's care, to facilitate the appropriate delivery of health care services."[37]
- Effective care coordination is essential for optimizing clinical outcomes, enhancing patients' care experiences, increasing provider satisfaction, and decreasing waste.[38]

Findings:

- Women VHA patients 18 to 44 years of age indicated receiving the same level of care coordination as men VHA patients in 5 out of 6 measures; in 1 measure they indicated receiving less care coordination.
- Women VHA patients 45 to 64 years of age indicated receiving the same level of care coordination as men VHA patients in 4 out of 6 measures; in 2 measures they indicated receiving less care coordination.
- Women VHA patients 65 years of age and older indicated receiving the same level of care coordination as men VHA patients in 4 out of 6 measures; in 2 measures they indicated receiving less care coordination.

Exhibit 3-13. VHA users who indicated, in the last 6 months, that when their provider ordered a blood test, x-ray, or other test for them, someone in their provider's office always followed up to give them the results



Reference group: Male Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

Importance:

Communicating with patients about the results of blood tests, x-rays and other tests is essential for educating patients and optimizing outcomes.

Findings:

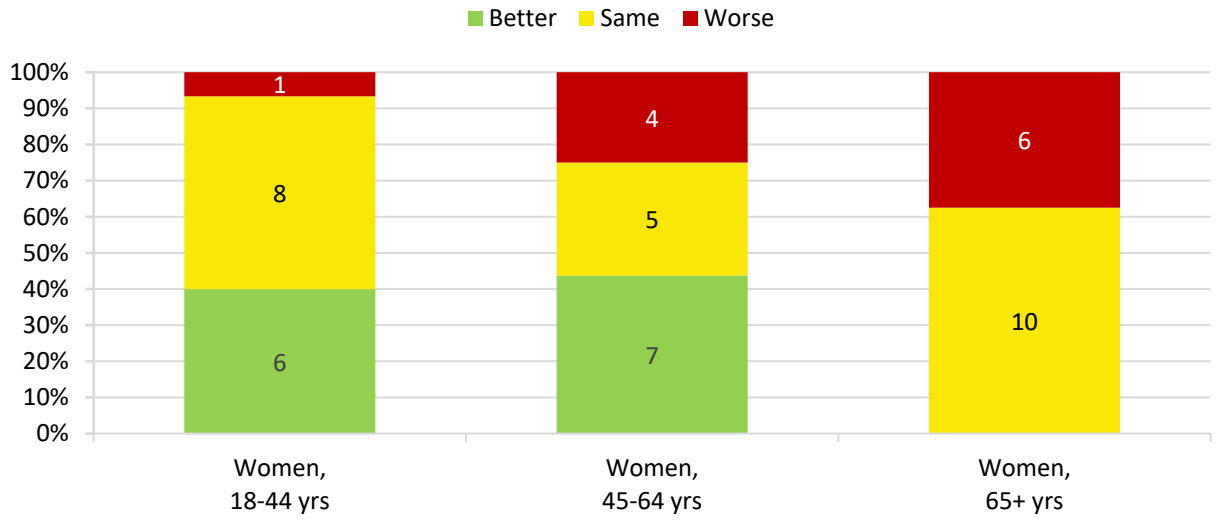
- Across all age groups, women Veterans were less likely than men Veterans to indicate receiving test results; disparities between women and men Veterans increased with older age.
- Women Veterans 18 to 44 years of age indicated receiving test results 49.0% of the time, compared to 53.6% of men Veterans in the same age group (difference -4.6%).
- Women Veterans 45 to 64 years of age indicated receiving test results 56.5% of the time, compared to 61.7% of men Veterans in the same age group (difference -5.2%).
- Women Veterans 65 years of age and older indicated receiving test results 61.8% of the time, compared to 67.5% of men Veterans in the same age group (difference -5.7%).

Section III: Health Care Quality

Variations in VHA Health Care Quality of Effective Treatment by Veteran Gender

Exhibit 3-14. Number and percentage of measures for which women Veteran VHA patients of specified age groups experienced better, same, or worse effective treatment compared with reference group

Exhibit 3-14. Effective Treatment



Comparison	Women, 18-44 years	Women, 45-64 years	Women, 65+ years
Worse	1	4	6
Same	8	5	10
Better	6	7	0

Reference group: Male Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

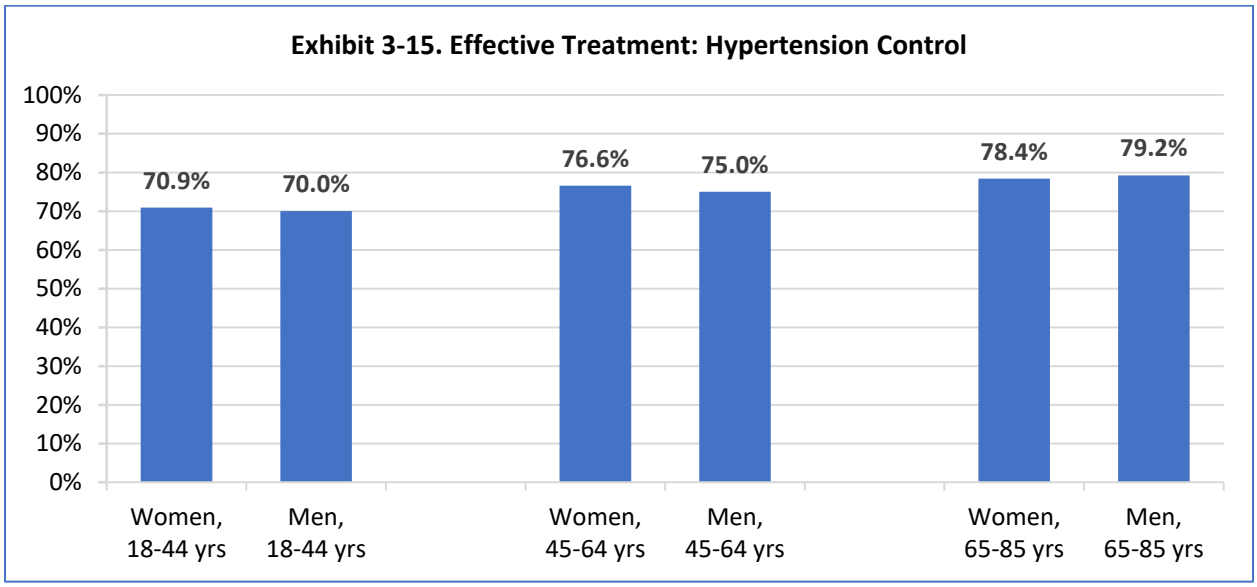
Importance:

The extent to which patients receive evidence-based effective treatments for acute and chronic conditions directly effects short and long-term health outcomes.

Findings:

- The number of measures for which women Veterans had less effective treatment was increased in older, compared to younger, age groups.
- Women VHA patients 18 to 44 years of age received effective treatments as often as men VHA patients in 8 out of 15 measures; in 1 measure they received effective treatment less often and in 6 measures they received effective treatments more often.
- Women VHA patients 45 to 64 years of age received effective treatments as often as men VHA patients in 5 out of 16 measures; in 4 measures they received effective treatment less often and in 7 measures they received effective treatments more often.
- Women VHA patients 65 years of age and older received effective treatments as often as men VHA patients in 10 out of 16 measures; in 6 measures they received effective treatment less often.

Exhibit 3-15. VHA patients with diagnosed hypertension whose most recent blood pressure was less than 140/90 mmHg (or less than 150/90 mmHg for patients age 60-85 without a diagnosis of diabetes)



Reference group: Male Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

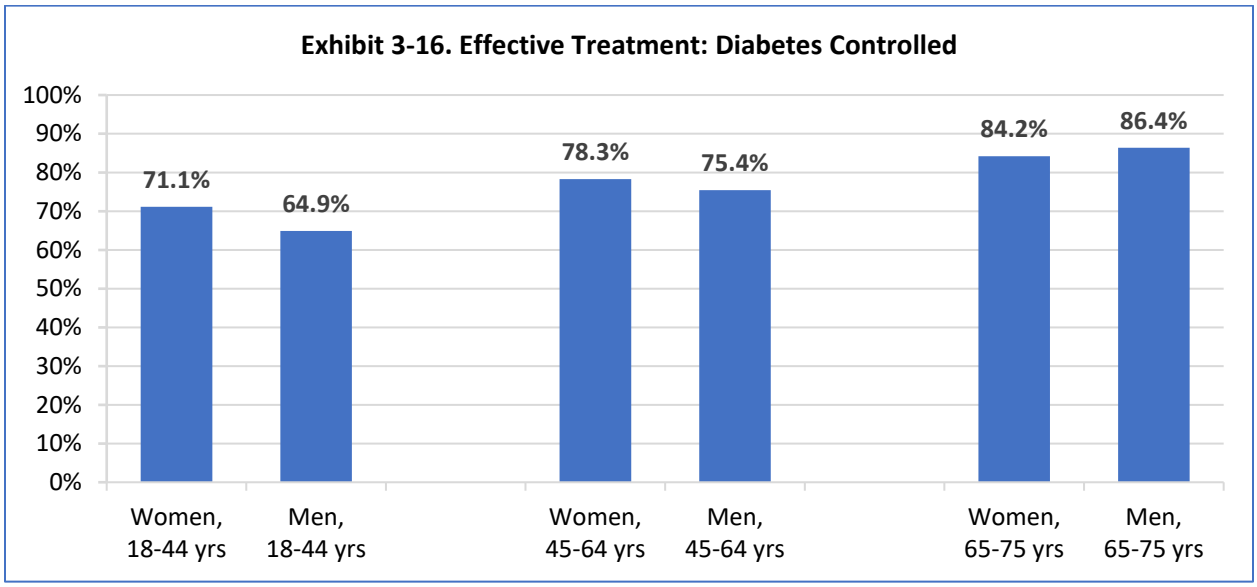
Importance:

Effective blood pressure control is associated with decreased risk for complications from hypertension (e.g., cardiovascular events, heart failure, stroke, nephropathy).

Findings:

- Across all age groups, women Veterans with hypertension had similar likelihoods of having effective blood pressure control compared to men in the same age category.
- Women Veterans 18 to 44 years of age with hypertension had effective blood pressure control 70.9% of the time, compared to 70.0% of men Veterans with hypertension in the same age group (difference +0.9%).
- Women Veterans 45 to 64 years of age with hypertension had effective blood pressure control 76.6% of the time, compared to 75.0% of men Veterans with hypertension in the same age group (difference +1.6%).
- Women Veterans 65 to 85 years of age with hypertension had effective blood pressure control 78.4% of the time, compared to 79.2% of men Veterans with hypertension in the same age group (difference +0.8%).
- Younger women and men Veterans with hypertension had lower likelihood of having effective blood pressure control compared to their older counterparts.

Exhibit 3-16. VHA patients with diagnosed diabetes whose glycosylated hemoglobin (HbA1C) was measured in the prior year, and was less than 9%



Reference group: Male Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

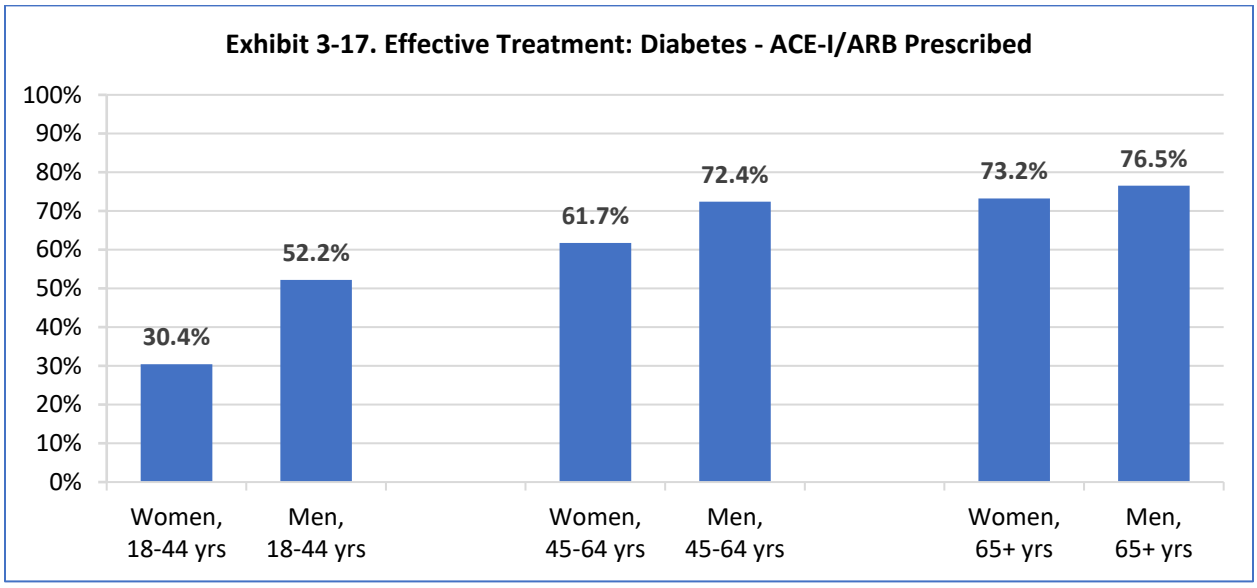
Importance:

- Glycosylated hemoglobin (HBA1C) is an indicator of blood glucose control in patients with diabetes.
- Lower HbA1C is associated with decreased risk for complications from diabetes (e.g., retinopathy, neuropathy, nephropathy, stroke, cardiovascular disease, stroke).

Findings:

- Women Veterans 18-44 years of age and 45-64 years of age with diabetes had higher likelihoods of having HbA1C measured in the prior year, and having it be less than 9%, compared to men in the same age categories; women Veterans 65-75 years of age were less likely to have this be true compared to men Veterans 65-75 years of age.
- Women Veterans 18-44 years of age with diabetes had HbA1C measured in the prior year, and had it be less than 9%, 71.1% of the time, compared to 64.9% of men Veterans with diabetes in the same age group (difference +6.2 percentage points).
- Women Veterans 45-64 years of age with diabetes had HbA1C measured in the prior year, and had it be less than 9%, 78.3% of the time, compared to 75.4% of men Veterans with diabetes in the same age group (difference +2.9 percentage points).
- Women Veterans 65-75 years of age with diabetes had HbA1C measured in the prior year, and had it be less than 9%, 84.2% of the time, compared to 86.4% of men Veterans with diabetes in the same age group (difference -2.2 percentage points).
- Younger women and men Veterans with diabetes had lower likelihoods of having HbA1C measured in the prior year and having an HbA1c be less than 9%.

Exhibit 3-17. VHA patients with diagnosed diabetes that had an angiotensin-converting enzyme inhibitor (ACE-I) or angiotensin receptor blocker (ARB) included in their current medications
[Note: This measure was active through FY2016 only]



Reference group: Male Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

Importance:

The American Diabetes Association recommends that ACE-Is or ARBs be used as first-line treatment for hypertension in patients with diabetes and microalbuminuria.[39]

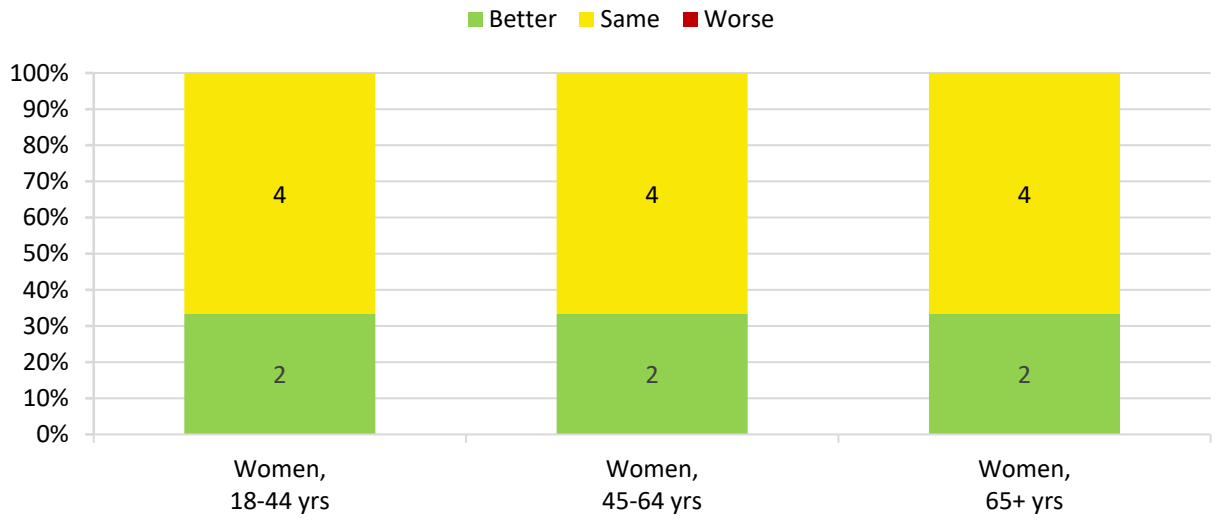
Findings:

- Across all age groups, women Veterans with diabetes had lower likelihoods of having an angiotensin-converting enzyme inhibitor (ACE-I) or angiotensin receptor blocker (ARB) prescribed compared to men in the same age category; disparities between women and men Veterans were increased with younger age.
- Women Veterans 18 to 44 years of age with diabetes had an angiotensin-converting enzyme inhibitor (ACE-I) or angiotensin receptor blocker (ARB) prescribed 30.4% of the time, compared to 52.2% of men Veterans with diabetes in the same age group (difference -21.8 percentage points). This difference may be driven at least partially by concern for potential teratogenicity from ACE-I/ARB.
- Women Veterans 45 to 64 years of age with diabetes had an angiotensin-converting enzyme inhibitor (ACE-I) or angiotensin receptor blocker (ARB) prescribed 61.7% of the time, compared to 72.4% of men Veterans with diabetes in the same age group (difference -10.7 percentage points).
- Women Veterans 65 years of age and older with diabetes had an angiotensin-converting enzyme inhibitor (ACE-I) or angiotensin receptor blocker (ARB) prescribed 73.2% of the time, compared to 76.5% of men Veterans with diabetes in the same age group (difference -3.3 percentage points).
- Younger women and men Veterans with diabetes had lower likelihoods of having an angiotensin-converting enzyme inhibitor (ACE-I) or angiotensin receptor blocker (ARB) prescribed compared to their older counterparts.

Variations in VHA Health Care Quality of Healthy Living – Lifestyle Modification by Veteran Gender

Exhibit 3-18. Number and percentage of measures for which women Veteran VHA patients of specified age groups experienced better, same, or worse Healthy Living – Lifestyle Modification compared with reference group

Exhibit 3-18. Healthy Living – Lifestyle Modification



Comparison	Women, 18-44 years	Women, 45-64 years	Women, 65+ years
Worse	0	0	0
Same	4	4	4
Better	2	2	2

Reference group: Male Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

Importance:

Lifestyle modifications, such as diet, exercise and tobacco use cessation, are highly effective at reducing long-term mortality and morbidity.

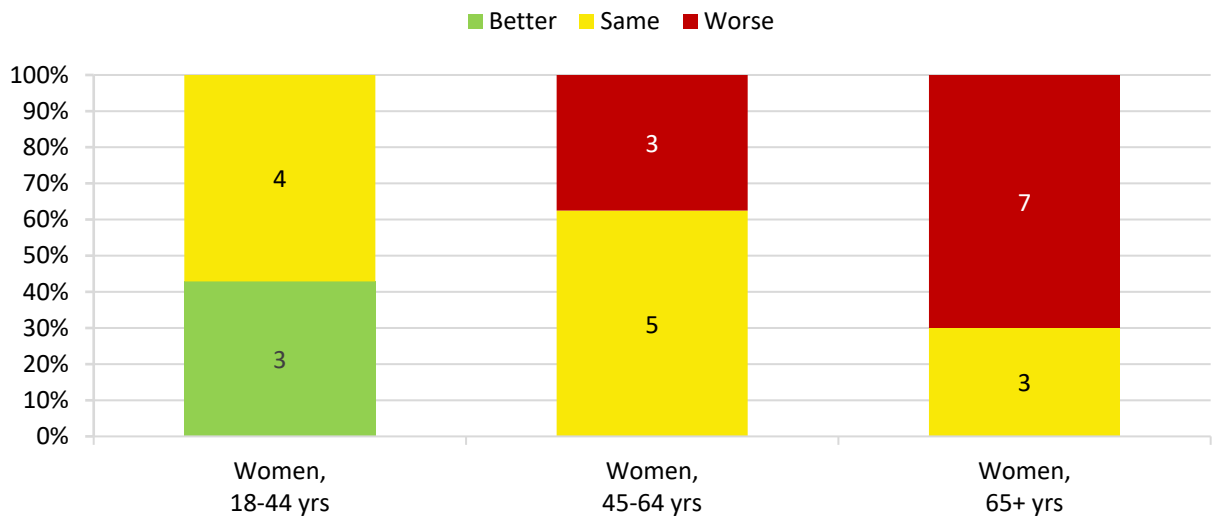
Finding:

Across all age groups, women VHA patients received healthy living – lifestyle modification interventions as often as men VHA patients in 4 out of 6 measures; and in 2 measures they received healthy living – lifestyle modification interventions more often.

Variations in VHA Health Care Quality of Healthy Living – Clinical Preventive Services by Veteran Gender

Exhibit 3-19. Number and percentage of measures for which women Veteran VHA patients of specified age groups experienced better, same, or worse Healthy Living – Clinical Preventive Services compared with reference group

Exhibit 3-19. Healthy Living – Clinical Preventive Services



Comparison	Women, 18-44 years	Women, 45-64 years	Women, 65+ years
Worse	0	3	7
Same	4	5	3
Better	3	0	0

Reference group: Male Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

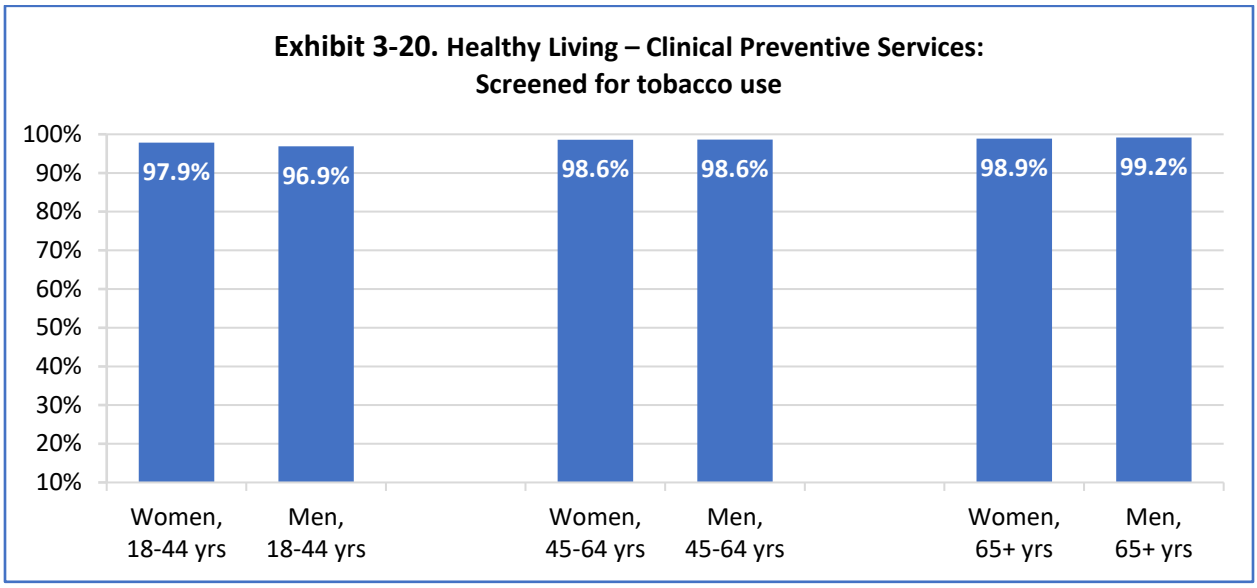
Importance:

Clinical Preventive Services, including screenings and immunizations, are highly effective at preventing illness and thereby improving health outcomes.

Findings:

- The number of measures for which women Veterans received less clinical preventive services compared to men Veterans was increased in older age groups.
- Women VHA patients 18-44 years of age received preventive interventions as often as men VHA patients in 4 out of 7 measures; in 3 measures they received preventive interventions more often.
- Women VHA patients 45-64 years of age received preventive interventions as often as men VHA patients in 5 out of 8 measures; in 3 measures they received preventive interventions less often.
- Women VHA patients 65 years of age and older received healthy preventive interventions as often as men VHA patients in 3 out of 10 measures; in 7 measures they received preventive interventions less often.

Exhibit 3-20. VHA patients who were screened in the past year for tobacco use



Reference group: Male Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

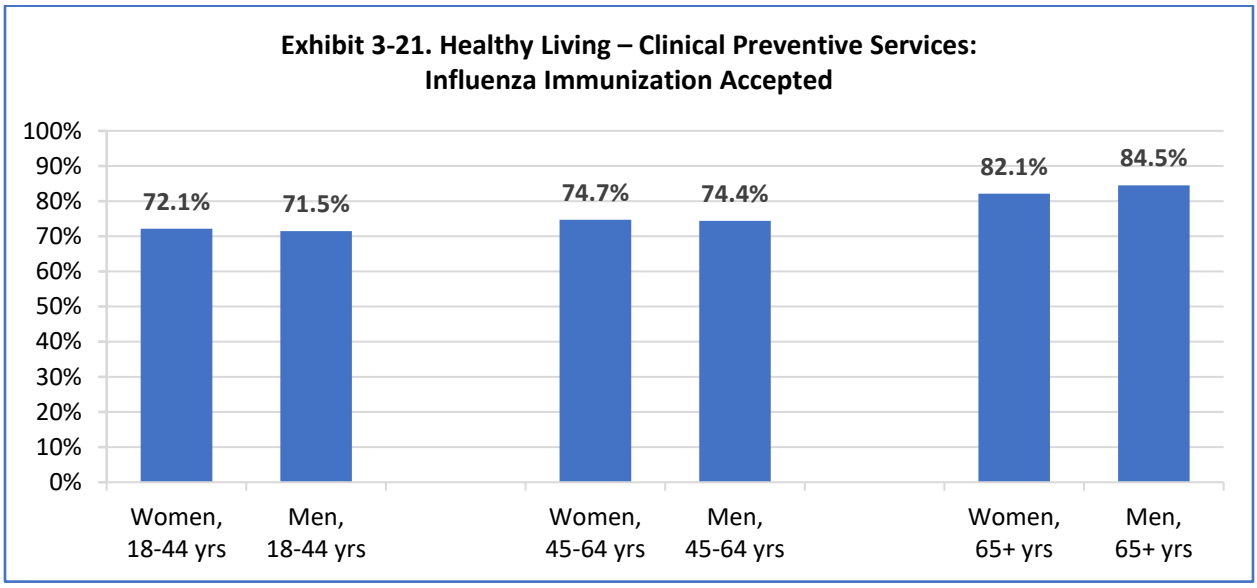
Importance:

- Tobacco use is the leading cause of preventable deaths in the United States.[40]
- Tobacco use is highly prevalent among United States military Veterans.[41]
- Screening for tobacco use is foundational for offering tobacco cessation services.

Findings:

- Overall, more than 95% of women and men, across all age groups, were screened for tobacco use; more than 98% of women and men 45 years of age and older were screened.
- Women 18 to 44 years of age were slightly more likely to be screened for tobacco use, compared to men 18 to 44 years of age and younger (difference +1.0 percentage points).
- Women and men 45 to 64 years of age, and 65 years of age and older were screened for tobacco use in similar proportions.

Exhibit 3-21. VHA patients who accepted influenza immunization.
[Note: This measure was assessed FY2017-FY2019]



Reference group: Male Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

Importance:

- Annual influenza vaccination is recommended for all adults who do not have contraindications.[42]
- Persons 65 years of age and older, and those with cardiovascular disease, pulmonary disease, diabetes, morbid obesity, and immunosuppression, all highly prevalent in the Veteran population, are at increased risk of having severe illness and death from influenza illness.[42]
- Vaccination reduces influenza-related morbidity and mortality.[43]

Findings:

- Across all ages, more than 70% of women and men Veterans accepted an influenza immunization; more than 80% of women and men 65 years of age and older accepted influenza immunization.
- Women and men 18 to 44 years of age, and 45-64 years of age accepted influenza immunization in similar proportions.
- Women Veterans 65 years of age and older were slightly less likely than men Veterans 65 years of age and older to accept influenza immunization (difference -2.4 percentage points).

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Chapter 4

Patient Experiences and Health Care Quality for Older Veterans in VHA

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Section I: Background and Sociodemographic Characteristics

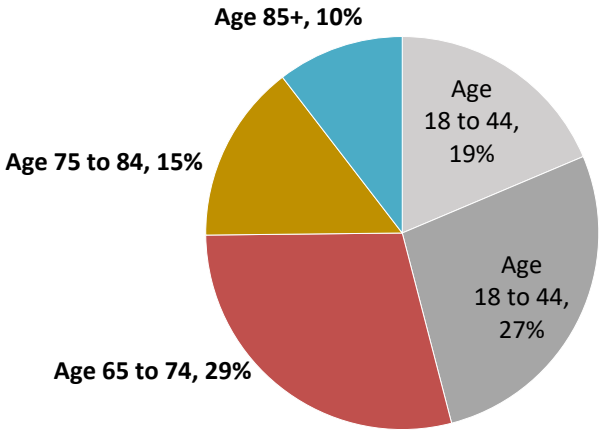
The Department of Veterans Affairs' (VA) commitment to serve Veterans continues throughout each Veteran's lifespan. Compared to the non-Veteran population, a higher percentage of Veterans are over age 65.[1] These older Veterans are a heterogeneous group. Although some Veterans maintain health and function well into their 80s and 90s, many Veterans experience age-associated sensory, cognitive, and physical decline. Meeting Veterans' current needs and planning for their future needs requires consideration of their characteristics across different age groups. For example, the Veteran population overall has a higher rate of disability than the non-Veteran population.[1] Projected increases in the aging Veteran population will be an important driver of demand for long-term services and supports from the Veterans Health Administration (VHA).[2]

This chapter describes characteristics of Veterans age 65 years and older who received VA services between 2016 and 2019. We compare this older population to Veterans aged 18-44 years and aged 45-64 years. This chapter includes sociodemographic characteristics, patient satisfaction, and health care quality data by age group. For selected characteristics, we highlight the differences among three subgroups of Veterans 65 years and older (65-74, 75-84, 85+) who may have different care needs. Where relevant, we also compare findings to the previous NVHER report.[3]

Age Group in VHA

Exhibit 4-1. Overall, 54% of Veteran VHA patients were age 65 years and older between Fiscal Years 2016 and 2019 (specifically 29% 65-74, 15% 75-84, and 10% 85+), 27% were 45-64 years, and 19% were 18-44 years. These proportions represent a 12% increase in the percentage of Veterans over the age of 65 years since 2013.[3]

Exhibit 4-1. Distribution of Age among Veteran VHA Patients, FY16-FY19



Age	18-44	45-64	65-74	75-84	85+
Percentage	19%	27%	29%	15%	10%

Importance:

The VHA user population is older than the general population where 16% of the population was age 65+ years in 2018.[4] Despite these differences, the increase in the percentage of Veterans over the age of 65 over time is similar to national demographic changes, and this trend is expected to continue.[5] Such demographic changes create an urgent and shared need by VHA and our nation's large health systems to understand and address the health challenges of an aging society.

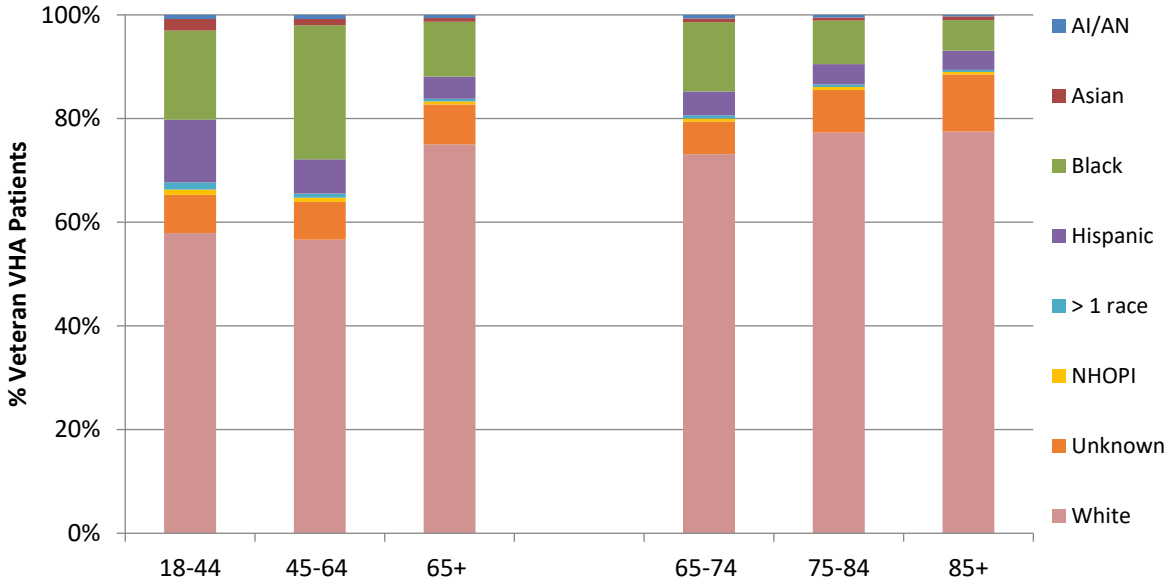
Finding:

The majority of VHA users are age 65+ years and the proportion of Veterans age 65+ years has increased over the past decade. An analysis of 2017 data found that the proportion of Veterans age 65+ years using VHA is similar to the general Veteran population.[1]

Race/Ethnicity by Age Group

Exhibit 4-2. Among Veterans using VHA who were age 65 years and older, a higher percentage self-reported non-Hispanic White racial and ethnic identity compared to ages 45-64 and 18-44 years.

Exhibit 4-2. Percent Distribution of Race/Ethnicity by Age among Veteran VHA Patients, FY16-FY19



Race/Ethnicity	18-44	45-64	65+	65-74	75-84	85+
AI/AN	0.8%	0.8%	0.6%	0.7%	0.5%	0.3%
Asian	2.2%	1.2%	0.7%	0.7%	0.6%	0.7%
Black	17.2%	25.9%	10.6%	13.4%	8.4%	5.9%
Hispanic	12.1%	6.6%	4.3%	4.6%	3.9%	3.7%
More than one race	1.4%	0.8%	0.5%	0.6%	0.5%	0.4%
NHOPI	1.0%	0.8%	0.6%	0.6%	0.6%	0.5%
Unk	7.4%	7.3%	7.7%	6.3%	8.2%	11.0%
White	57.9%	56.7%	75.1%	73.2%	77.3%	77.5%

Note: AI/AN denotes American Indian or Alaskan Native; NHOPI denotes Native Hawaiian or other Pacific Islander; Unk denotes unknown, declined, or missing race/ethnicity

Importance:

These data highlight the need to ensure that future long-term services and supports be designed to meet the needs of a more culturally diverse population.

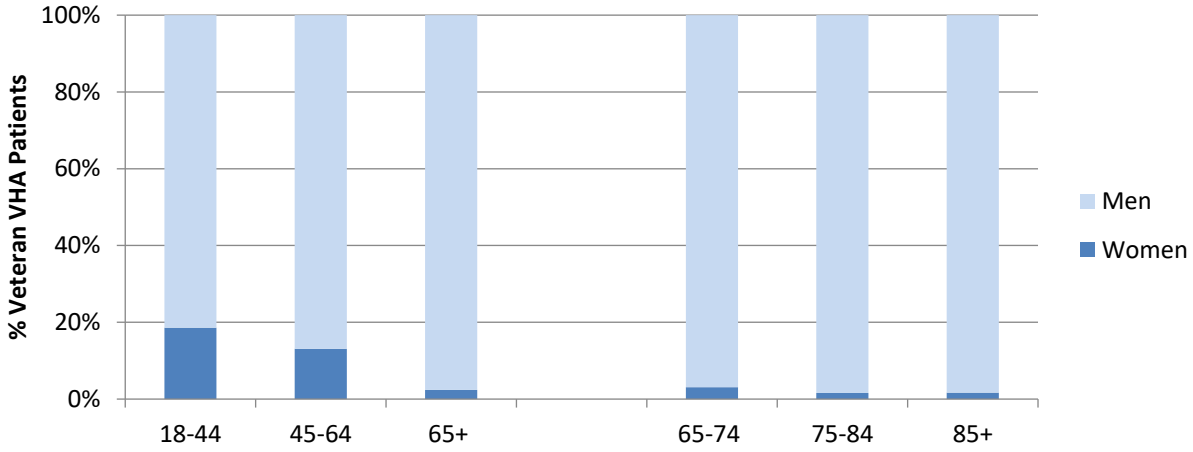
Finding:

Although the younger age groups have greater racial/ethnic diversity when viewed by percentages, the percentage of non-Hispanic Whites among all age groups has decreased since 2013.[3] The largest change in diversity was among Veterans age 65+ years, in which non-Hispanic Whites decreased by about 10%.[3]

Gender by Age Group

Exhibit 4-3. The overall VHA patient population was predominantly male (91.6%), though there was a slight increase in the proportion of women Veterans since 2013.[3] Gender composition differed dramatically across age groups. Whereas women were only 2.4% of patients age 65 years and older, they constituted 13.1% of patients 45-64 years of age and 18.6% of patients age 18-44. Among Veteran VHA patients age 65+ years, women constitute 3.1% of the 65-74 years group, 1.6% of the 75-84 years group, and 1.7% of the 85+ years group.

Exhibit 4-3. Percent Distribution of Gender by Age among Veteran VHA Patients, FY16-FY19



Gender	18-44	45-64	65+	65-74	75-84	85+
Men	81.4%	86.9%	97.6%	96.9%	98.4%	98.3%
Women	18.6%	13.1%	2.4%	3.1%	1.6%	1.7%

Importance:

As the population of women Veterans ages, VA care for older patients will need to adapt to address their healthcare needs. VA must continue to expand the availability and range of services to address the health concerns of older women.

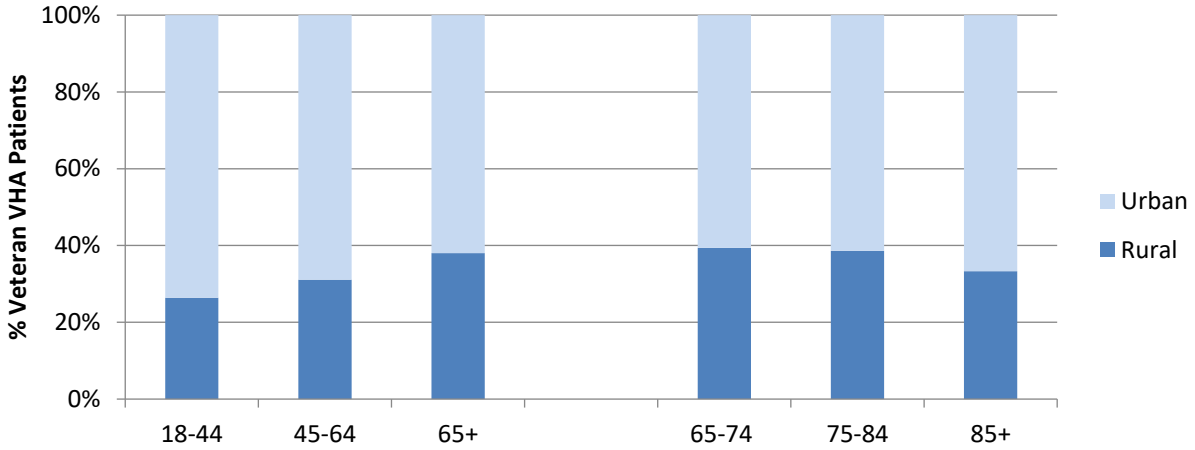
Finding:

Compared to FY2013, the largest increase in the percentage of women Veterans was in the 45-64 years age group (8.2% in 2013 to 13.1% in 2016-2019).

Rurality by Age Group

Exhibit 4-4. Overall, the majority of Veteran VHA patients (66%) lived in urban areas; however, older (age 65+ years) Veteran patients were more likely to live in rural locations (38.0%) compared to their younger counterparts (31.1% among 45-64 years of age; 26.4% among 18-44 years of age). Among Veteran VHA patients age 65+ years, 39.4% of the 65-74 years group, 38.6% of the 75-84 years group, and 33.3% of the 85+ years group resided in rural areas.

Exhibit 4-4. Percent Distribution of Rural/Urban Status by Age among Veteran VHA Patients, FY16-19



Rural/Urban Status	18-44	45-64	65+	65-74	75-84	85+
Urban	73.6%	68.9%	62.0%	60.6%	61.4%	66.7%
Rural	26.4%	31.1%	38.0%	39.4%	38.6%	33.3%

Importance:

Veterans are also more likely to live in rural areas compared to the non-Veteran population (AHRQ Chartbook 2020).[1] Older, rural Veterans are more likely to have chronic health conditions such as diabetes, obesity, and hypertension and traditionally have greater barriers to accessing care.[6] Expansion of telehealth services in VHA has specifically targeted provision of services to rural Veterans.[7] During the COVID-19 pandemic, use of telehealth services increased rapidly to maintain continuity of care for Veterans in both urban and rural areas.[8] VHA has established an interdisciplinary training program to enhance the geriatric knowledge and skills of primary care providers who care for older rural Veterans.[9]

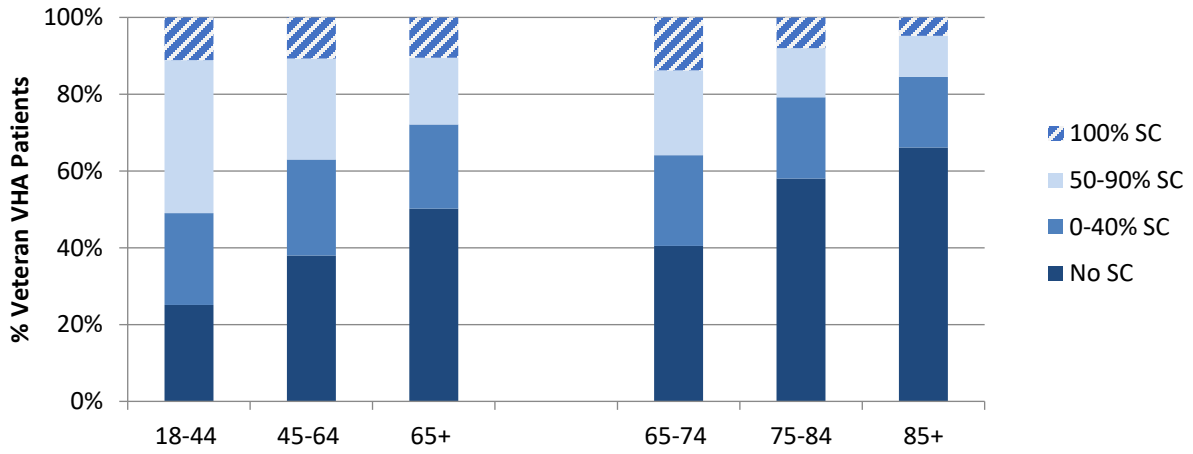
Findings:

- Compared to FY2013, the percentage of rural Veterans has declined across all age groups (40.7% in 2013 vs. 34.0% in 2016-2019).
- However, a higher proportion of Veterans aged 65+ are rural residing compared to the 18-44 and 45-64 years age groups.

Service-connected Disability Rating by Age Group

Exhibit 4-5. Half of VHA patients age 65+ years did not have a service-connected disability during FY2016 – FY2019 (50.2%), compared to only 38.0% and 25.1% of their counterparts age 45-64 years and 18-44 years, respectively. Among those with documented service-connection status, a higher proportion of patients age 18-44 years had 50% or greater service connection (50.9%) compared to patients 45-64 years (37.0%) and patients 65+ years (27.9%). Among Veteran VHA patients aged 65 years and older, the 65-74 age group had a higher proportion of Veterans with 50% or greater service connection (35.9%) compared to those 75-84 (20.8%) or 85+ years (15.5%).

Exhibit 4-5. Percent Distribution of Service-connected Disability Rating by Age among Veteran VHA Patients, FY16-FY19



Service-connected Disability Rating	18-44	45-64	65+	65-74	75-84	85+
100% SC	11.1%	10.7%	10.5%	13.8%	8.0%	4.8%
50-90% SC	39.8%	26.3%	17.4%	22.1%	12.8%	10.7%
0-40% SC	23.9%	25.0%	21.9%	23.6%	21.2%	18.4%
No SC	25.1%	38.0%	50.2%	40.5%	58.1%	66.1%

Importance:

This finding may signal that younger Veterans who have a service-connected disability are more likely to use VHA services than Veterans of the same age without a disability. Older patients may find care outside of the VHA. It may also reflect a survivor effect of healthier VHA users living longer. The increase in the proportion of younger VHA users with a service-connected disability highlights the importance of prioritizing research and clinical services addressing aging with disability in VHA.

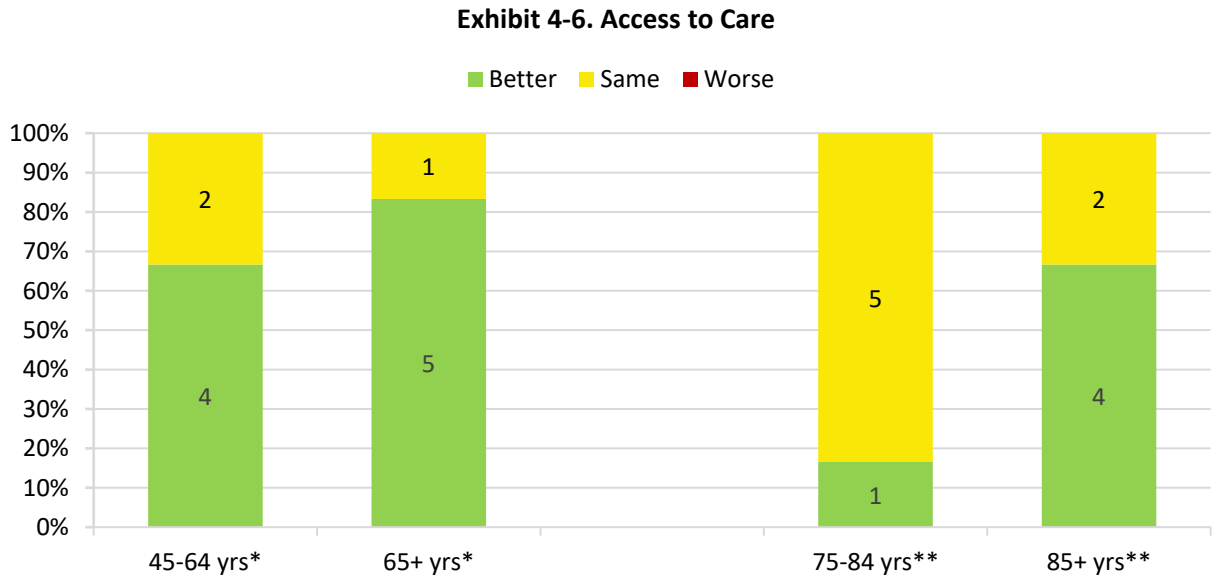
Findings:

- Compared to FY2013, the proportion of Veteran VHA users with a service-connected disability has increased in all age groups.
- Notably, about half of the 18-44 age group has a service-connected disability of 50% or more.

Section II: Patient Experiences

Variations in VHA Patient Experience of Access to Care by Veteran Age

Exhibit 4-6. Number and percentage of measures for which older Veteran VHA patients of specified age groups experienced better, same, or worse access to care compared with reference group



Comparison	45-64*	65+*	75-84**	85+**
Worse	0	0	0	0
Same	2	1	5	2
Better	4	5	1	4

**Reference group for 45-64 yrs and 65+ yrs:* Veteran VHA patients age 18-44 yrs
***Reference group for 75-84 yrs and 85+ yrs:* Veteran VHA patients age 65-74 yrs
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

Importance:

The objective of quality improvement is to produce better quality of and access to care to improve patient outcomes, regardless of VHA user characteristics.

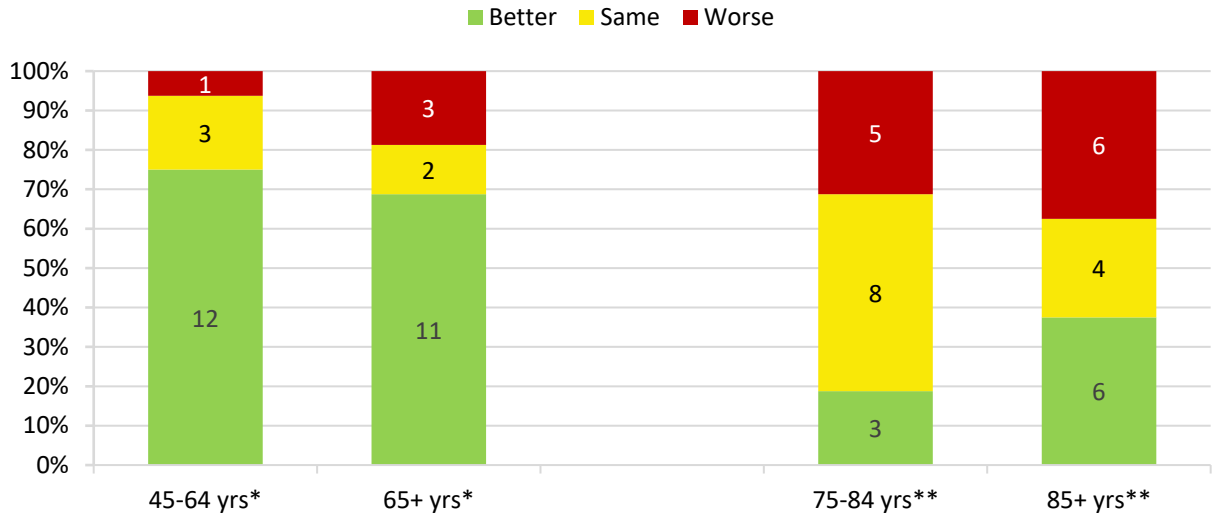
Findings:

- During the study timeframe, findings show that VHA users in the 45-64 and 65+years age groups reported the same or better access than VHA users ages 18-44 years across measures.
- VHA users ages 45-64 years reported better access than VHA users ages 18-44 years on 4 measures (67%) and similar access on 2 measures (33%).
- VHA users ages 65+ years reported better access than VHA users ages 18-44 years on 5 measures (83%) and similar access on 1 measure (17%).
- VHA users ages 75-84 years reported better access than VHA users ages 65-74 years on 1 measure (17%) and similar access on 5 measures (83%).
- VHA users ages 85+ years reported better access than VHA users ages 65-74 on 4 measures (67%) and similar access on 2 measures (33%).

Variations in VHA Patient Experience of Person-centered Care by Veteran Age

Exhibit 4-7. Number and percentage of measures for which older Veteran VHA patients of specified age groups experienced better, same, or worse person-centered care compared with reference group

Exhibit 4-7. Person-centered Care



Comparison	45-64*	65+*	75-84**	85+**
Worse	1	3	5	6
Same	3	2	8	4
Better	12	11	3	6

**Reference group for 45-64 yrs and 65+ yrs: Veteran* VHA patients age 18-44 yrs
***Reference group for 75-84 yrs and 85+ yrs:* Veteran VHA patients age 65-74 yrs
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

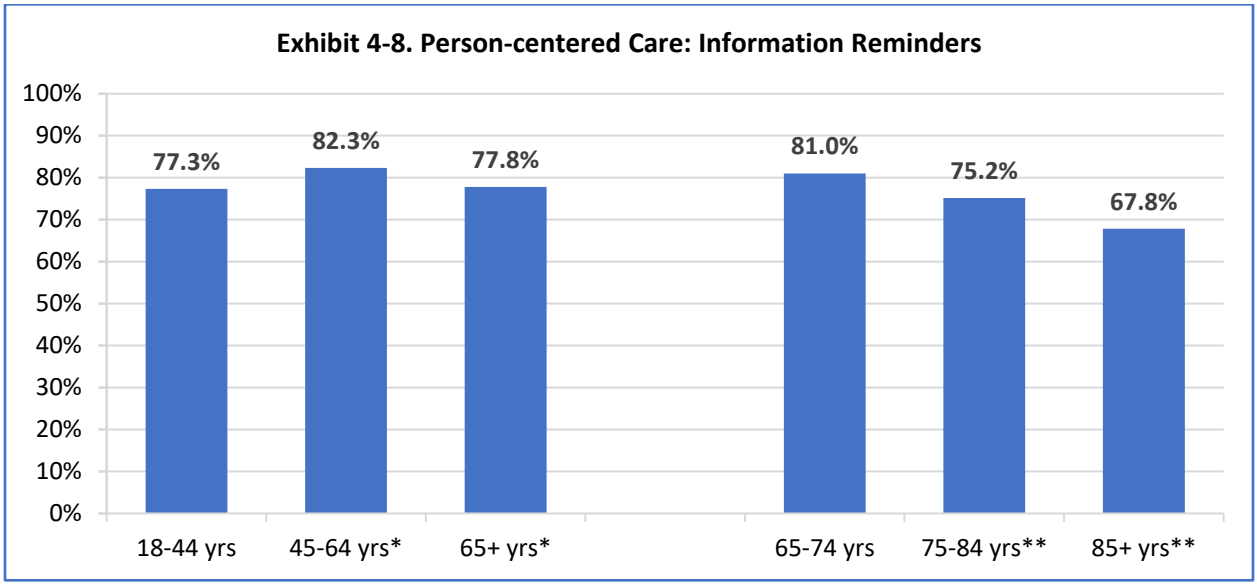
Importance:

The objective of quality improvement is to produce better quality of and access to care, including person-centered care, to improve patient outcomes, regardless of VHA user characteristics.

Findings:

- During the study timeframe, findings show age disparities across measures of person-centered care.
- VHA users ages 45-64 years reported better person-centered care than VHA users ages 18-44 years on 12 measures (75%), similar person-centered care on 3 measures (19%), and worse person-centered care on 1 measure (6%).
- VHA users ages 65+ years reported better person-centered care than VHA users ages 18-44 years on 11 measures (69%), similar person-centered care on 2 measures (12%), and worse person-centered care on 3 measures (19%).
- VHA users ages 75-84 years reported better person-centered care than VHA users ages 65-74 years on 3 measures (19%), similar person-centered care on 8 measures (50%), and worse person-centered care on 5 measures (31%).
- VHA users ages 85+ years reported better person-centered care than VHA users ages 65-74 years on 6 measures (38%), similar person-centered care on 4 measures (25%), and worse person-centered care on 6 measures (38%).

Exhibit 4-8. VHA users who indicated, in the last 6 months, that they received reminders from their provider's office between visits about tests, treatment, or appointments



**Reference group for 45-64 yrs and 65+ yrs: Veteran* VHA patients age 18-44 yrs
***Reference group for 75-84 yrs and 85+ yrs:* Veteran VHA patients age 65-74 yrs
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

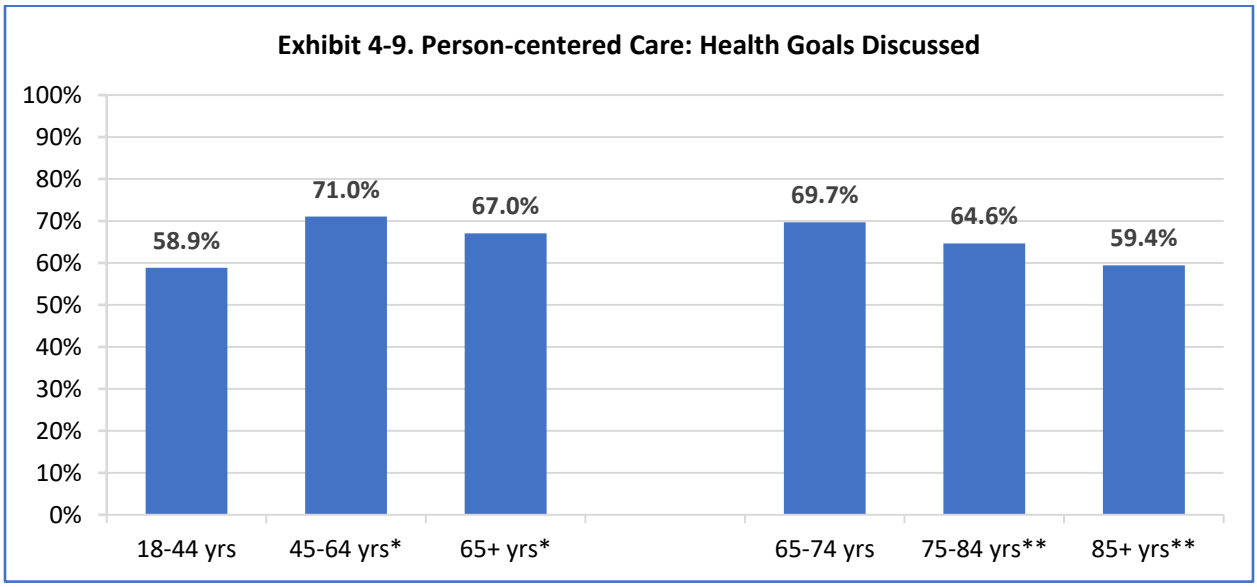
Importance:

Information reminders is a measure of the healthcare system's capacity to manage organizational workflow and provide person-centered care.[10]

Findings:

- For the most recent data (FY2016 – FY2019), findings show age disparities in information reminders.
- VHA users ages 45-64 years were more likely to receive information reminders than VHA users 18-44 years (82.3% vs. 77.3%).
- There was no considerable difference between VHA users ages 65+ years and 18-44 years in the percentage who received information reminders (77.8% vs. 77.3%).
- VHA users ages 75-84 years were less likely to receive information reminders than VHA users 65-74 years (75.2% vs. 81.0%).
- VHA users ages 85+ years were less likely to receive information reminders than VHA users 65-74 years (67.8% vs. 81.0%)

Exhibit 4-9. VHA users who indicated, in the last 6 months, that someone in their provider's office spoke with them about specific goals for their health



**Reference group for 45-64 yrs and 65+ yrs:* Veteran VHA patients age 18-44 yrs
***Reference group for 75-84 yrs and 85+ yrs:* Veteran VHA patients age 65-74 yrs
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

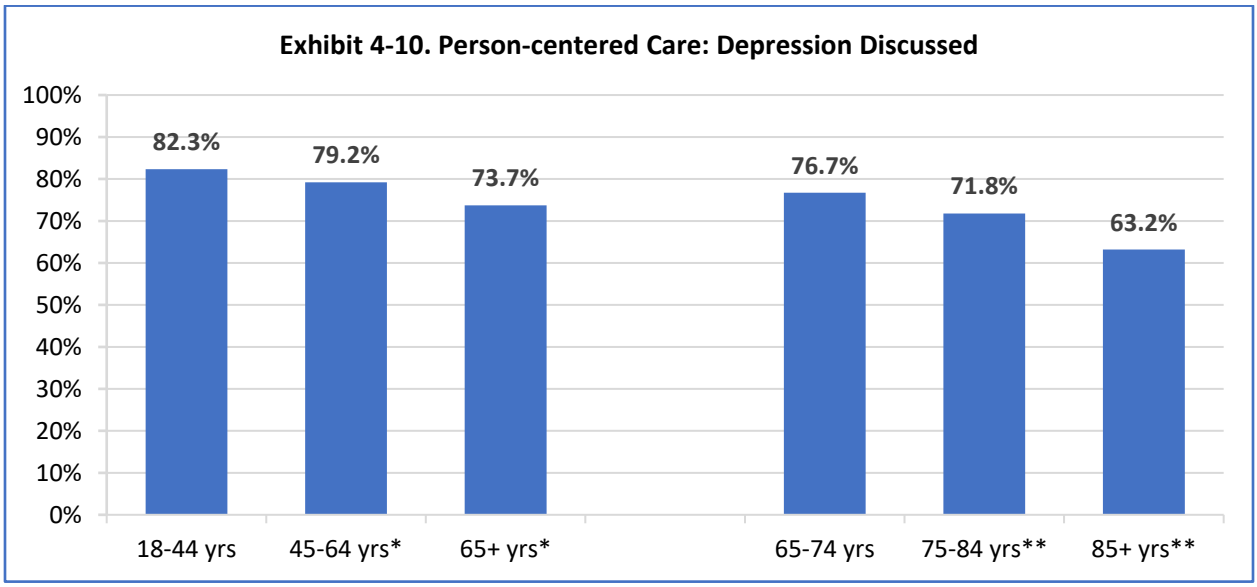
Importance:

Health goals discussed is a measure of the healthcare system's capacity to form clinician-patient relationships and provide person-centered care.[11]

Findings:

- For the most recent data (FY2016 – FY2019), findings show age disparities in health goals discussed.
- VHA users ages 45-64 years were more likely to discuss health goals with their provider than VHA users 18-44 (71.0% vs. 58.9%).
- VHA users ages 65+ years were more likely to discuss health goals with their provider than VHA users 18-44 years (67.0% vs. 58.9%).
- VHA users ages 75-84 years were less likely to discuss health goals with their provider than VHA users 65-74 years (64.6% vs. 69.7%).
- VHA users ages 85+ years were less likely to discuss health goals with their provider than VHA users 65-74 years (59.4% vs. 69.7%).

Exhibit 4-10. VHA users who indicated, in the last 6 months, that someone in their provider's office asked them if there was a period of time when they felt sad, empty, or depressed



**Reference group for 45-64 yrs and 65+ yrs:* Veteran VHA patients age 18-44 yrs
***Reference group for 75-84 yrs and 85+ yrs:* Veteran VHA patients age 65-74 yrs
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

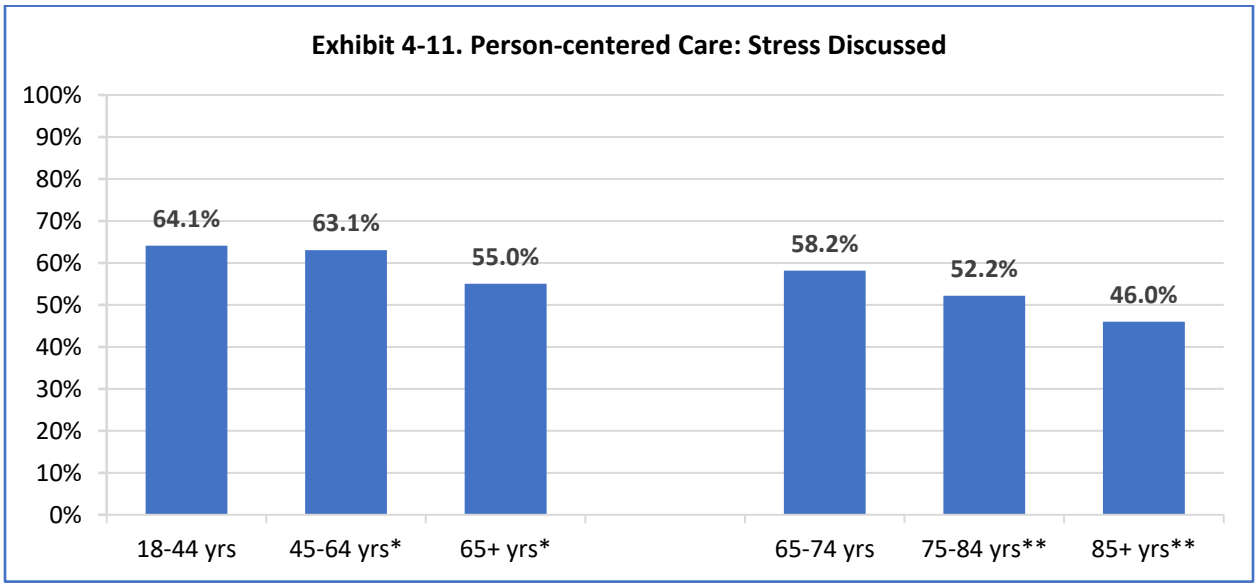
Importance:

Depression discussed is a measure of the healthcare system's capacity to develop effective clinician-patient communication and provide person-centered care.[12]

Findings:

- For the most recent data (FY2016 – FY2019), findings show age disparities in depression discussed.
- VHA users ages 45-64 years were less likely to discuss depression with their provider than VHA users 18-44 years (79.2% vs. 82.3%).
- VHA users ages 65+ years were less likely to discuss depression with their provider than VHA users 18-44 years (73.7% vs. 82.3%).
- VHA users ages 75-84 years were less likely to discuss depression with their provider than VHA users 65-74 years (71.8% vs. 76.7%).
- VHA users ages 85+ years were less likely to discuss depression with their provider than VHA users 65-74 years (63.2% vs. 76.7%).

Exhibit 4-11. VHA users who indicated, in the last 6 months, that they talked with someone in their provider's office about things in their life that worry them or cause them stress



**Reference group for 45-64 yrs and 65+ yrs:* Veteran VHA patients age 18-44 yrs
***Reference group for 75-84 yrs and 85+ yrs:* Veteran VHA patients age 65-74 yrs
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

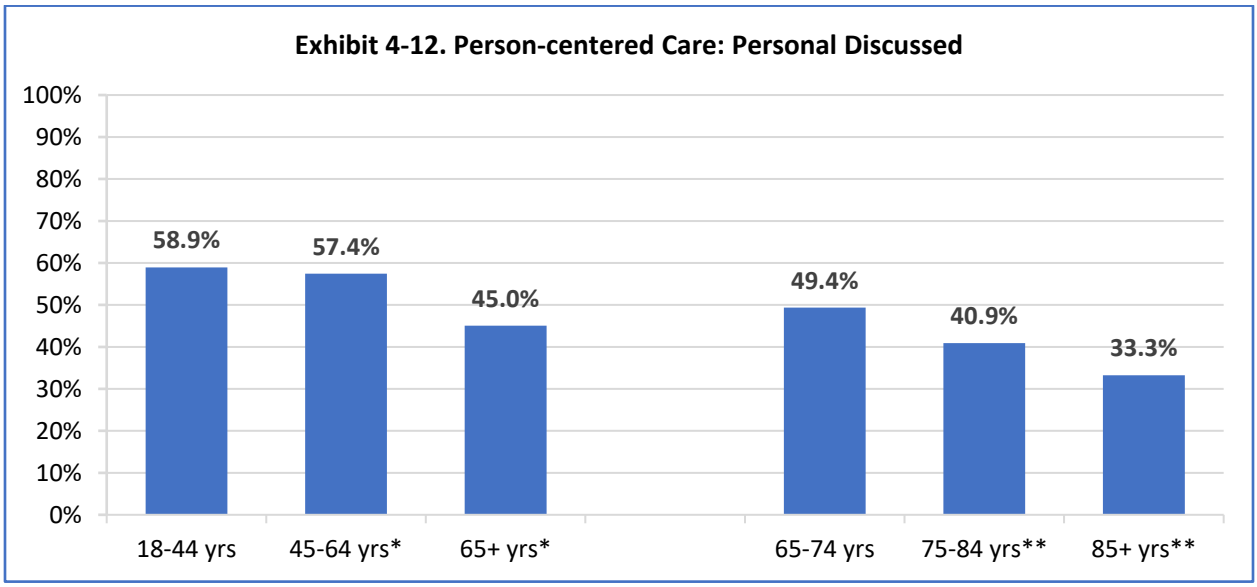
Importance:

Stress discussed is a measure of the healthcare system's capacity to nurture clinician-patient relationships and provide person-centered care.[13]

Findings:

- For the most recent data (FY2016 – FY2019), findings show age disparities in stress discussed.
- There was no considerable difference between VHA users ages 45-64 and 18-44 years in the percentage who discussed stress with their provider (63.1% vs. 64.1%).
- VHA users ages 65+ years were less likely to discuss stress with their provider than VHA users 18-44 years (55.0% vs. 64.1%).
- VHA users ages 75-84 years were less likely to discuss stress with their provider than VHA users 65-74 years (52.2% vs. 58.2%).
- VHA users ages 85+ years were less likely to discuss stress with their provider than VHA users 65-74 years (46.0% vs. 58.2%).

Exhibit 4-12. VHA users who indicated, in the last 6 months, that they and someone in their provider's office talked about a personal problem, family problem, alcohol use, drug use, or a mental or emotional illness



**Reference group for 45-64 yrs and 65+ yrs:* Veteran VHA patients age 18-44 yrs
***Reference group for 75-84 yrs and 85+ yrs:* Veteran VHA patients age 65-74 yrs
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

Importance:

Discussed personal problems is a measure of the healthcare system's capacity to manage hidden health problems and provide person-centered care.[14]

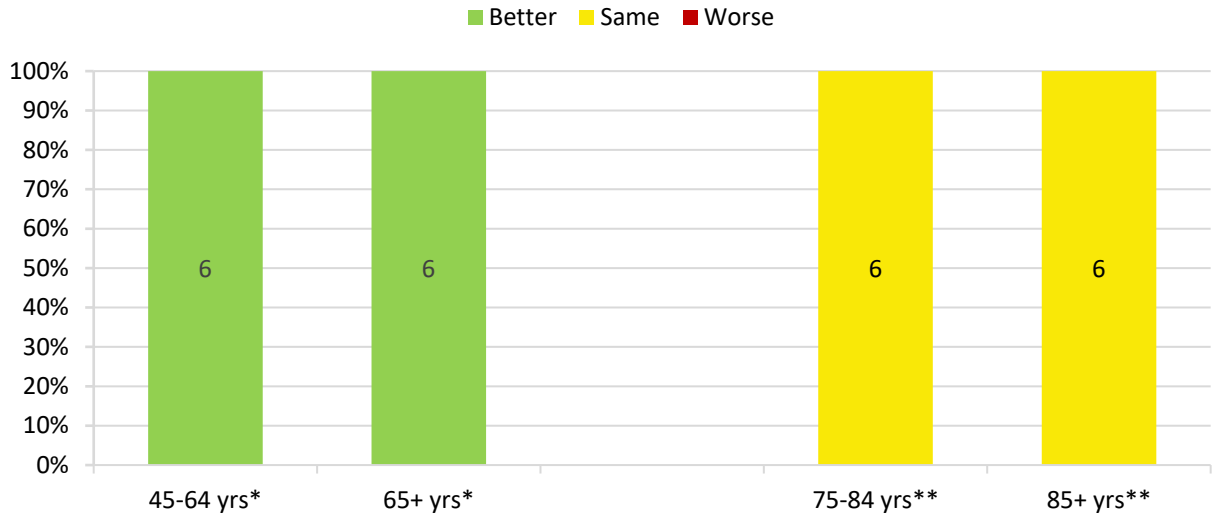
Findings:

- For the most recent data (FY2016 – FY2019), findings show age disparities in discussed personal problems.
- VHA users ages 45-64 years were slightly less likely to discuss personal problems with their provider than VHA users 18-44 years (57.4% vs. 58.9%).
- VHA users ages 65+ years were less likely to discuss personal problems with their provider than VHA users 18-44 years (45.0% vs. 58.9%).
- VHA users ages 75-84 years were less likely to discuss personal problems with their provider than VHA users 65-74 years (40.9% vs. 49.4%).
- VHA users ages 85+ years were less likely to discuss personal problems with their provider than VHA users 65-74 years (33.3% vs. 49.4%).

Variations in VHA Patient Experience of Care Coordination by Veteran Age

Exhibit 4-13. Number and percentage of measures for which older Veteran VHA patients of specified age groups experienced better, same, or worse care coordination compared with reference group

Exhibit 4-13. Care Coordination



Comparison	45-64*	65+*	75-84**	85+**
Worse	0	0	0	0
Same	0	0	6	6
Better	6	6	0	0

**Reference group for 45-64 yrs and 65+ yrs:* Veteran VHA patients age 18-44 yrs
***Reference group for 75-84 yrs and 85+ yrs:* Veteran VHA patients age 65-74 yrs
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

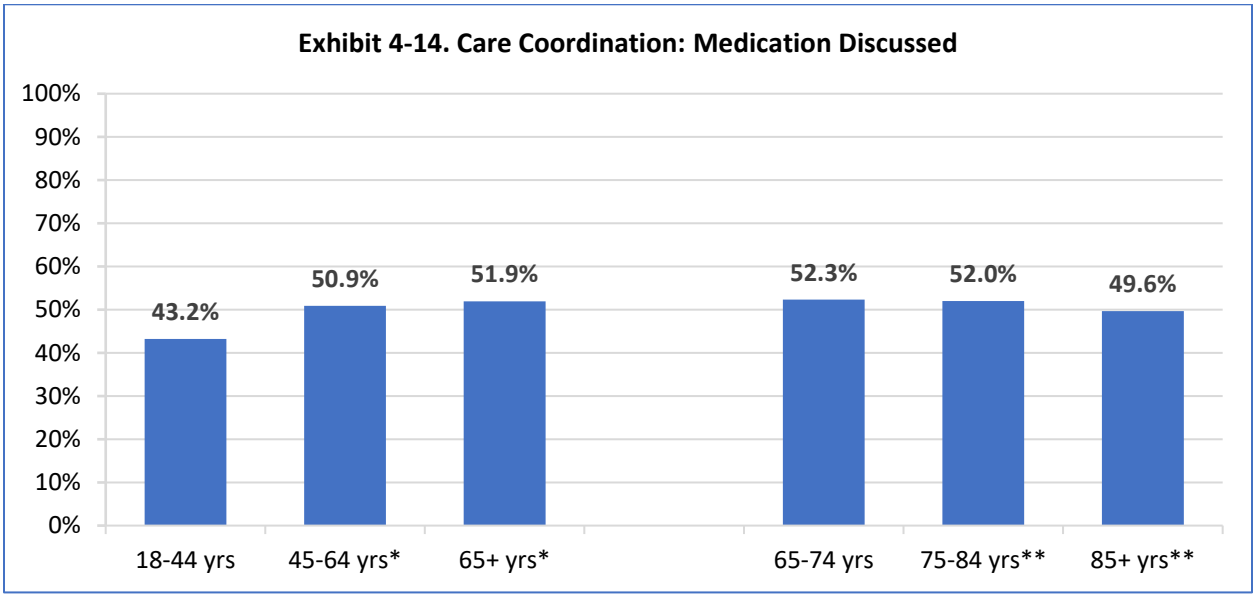
Importance:

The objective of quality improvement is to produce better quality of and access to care, including care coordination, to improve patient outcomes, regardless of VHA user characteristics.

Findings:

- VHA users in both 45-64 and 65+ years age groups reported better care coordination on all measures (100%) compared with VHA users age 18-44 years.
- VHA users in both 75-84 and 85+ years age groups reported care coordination similar to VHA users ages 65-74 years on all measures (each 100%).

Exhibit 4-14. VHA users who indicated, in the last 6 months, that someone from their provider's office always spoke with them about all the prescription medicines they were taking



**Reference group for 45-64 yrs and 65+ yrs:* Veteran VHA patients age 18-44 yrs
***Reference group for 75-84 yrs and 85+ yrs:* Veteran VHA patients age 65-74 yrs
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

Importance:

Medication discussed is a measure of the healthcare system's capacity to safely prescribe drugs, manage medication adherence, and provide person-centered care.[15]

Findings:

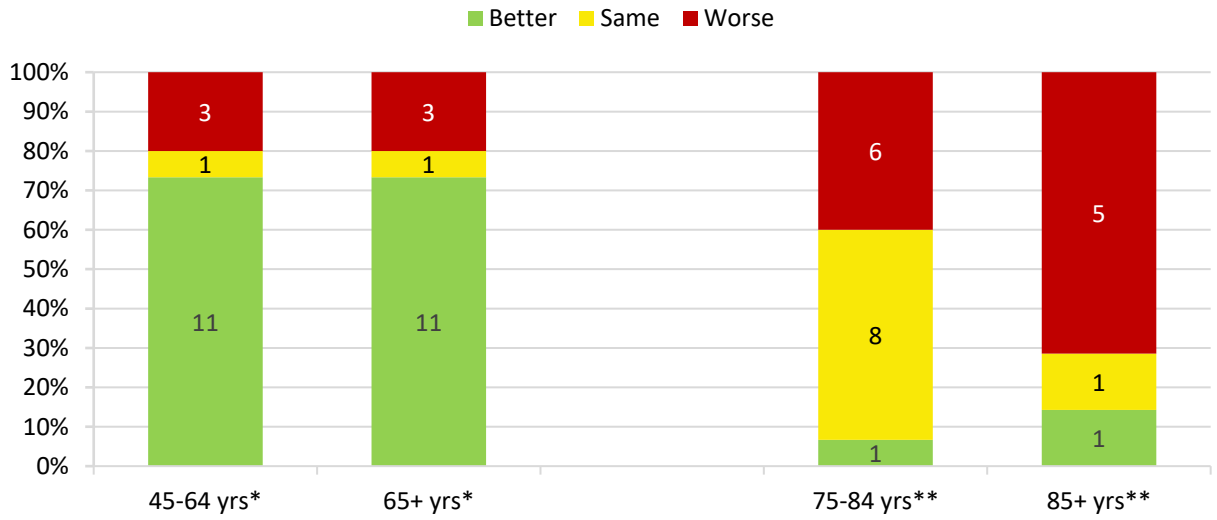
- For the most recent data (FY2016 – FY2019), findings show some age disparities in medications discussed.
- VHA users age 45-64 years were more likely to discuss medication with their provider than VHA users 18-44 (50.9% vs. 43.2%).
- VHA users age 65+ years were more likely to discuss medication with their provider than VHA users 18-44 (51.9% vs. 43.2%).
- VHA users across the older age groups (65-74 years, 75-84 years, and 85+ years) had similar proportions reporting medications discussed with someone from their provider's office (49.6%-52.3%).

Section III: Health Care Quality

Variations in VHA Health Care Quality of Effective Treatment by Veteran Age

Exhibit 4-15. Number and percentage of measures for which older Veteran VHA patients of specified age groups experienced better, same, or worse effective treatment compared with reference group

Exhibit 4-15. Effective Treatment



Comparison	45-64*	65+*	75-84**	85+**
Worse	3	3	6	5
Same	1	1	8	1
Better	11	11	1	1

**Reference group for 45-64 yrs and 65+ yrs:* Veteran VHA patients age 18-44 yrs
***Reference group for 75-84 yrs and 85+ yrs:* Veteran VHA patients age 65-74 yrs
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

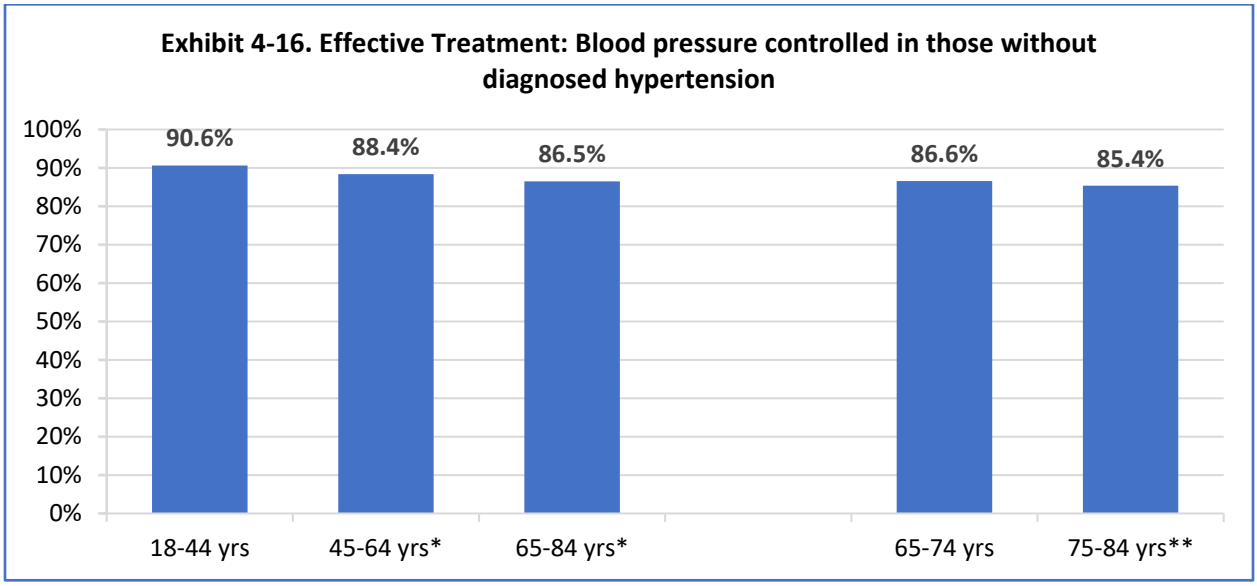
Importance:

The goal of quality improvement is to produce quality care, including the effectiveness of treatment, and improve patient outcomes regardless of VHA user characteristics.

Findings:

- During the study timeframe, findings show that age disparities were present across effective treatment measures.
- VHA users ages 45-64 and 65+ years reported better effective treatment than VHA users ages 18-44 years on 11 measures (73%), similar effective treatment on 1 measure (7%), and worse effective treatment on 3 measures (20%).
- VHA users ages 75-84 years reported better effective treatment than VHA users ages 65-74 years on 1 measure (7%), similar effective treatment on 8 measures (53%), and worse effective treatment on 6 measures (40%).
- VHA users ages 85+ years reported better effective treatment than VHA users ages 65-74 years on 1 measure (14%), similar effective treatment on 1 measure (14%), and worse effective treatment on 5 measures (72%).

Exhibit 4-16. VHA patients without a diagnosis of hypertension whose most recent blood pressure was less than 140/90 mmHg



**Reference group for 45-64 yrs and 65+ yrs: Veteran* VHA patients age 18-44 yrs
***Reference group for 75-84 yrs and 85+ yrs:* Veteran VHA patients age 65-74 yrs
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

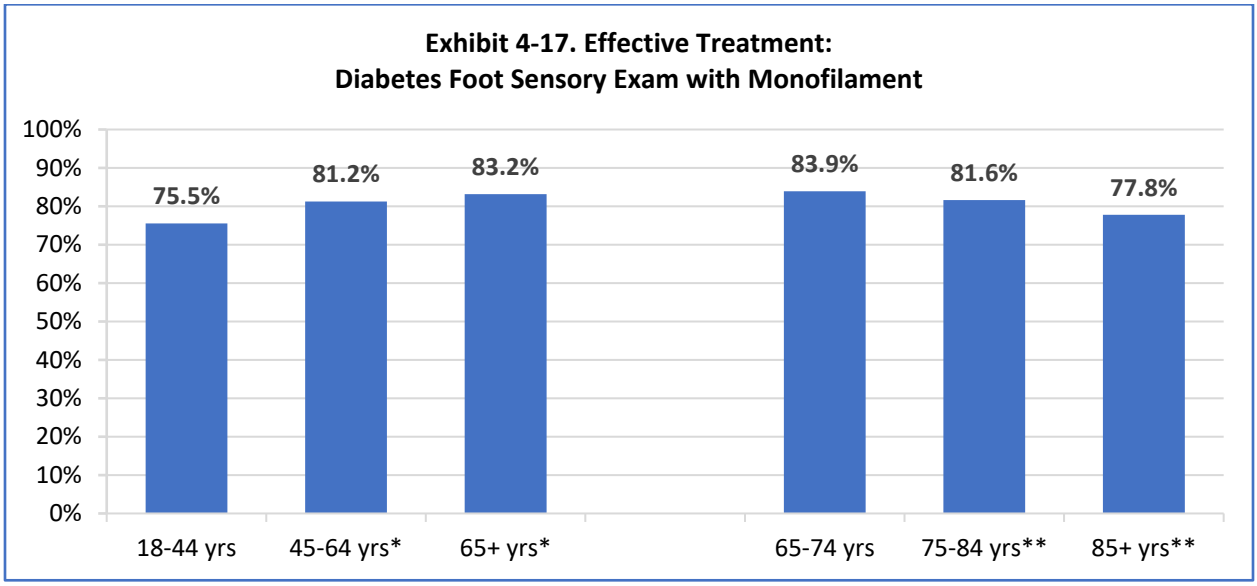
Importance:

In the United States, hypertension accounts for more cardiovascular deaths than any other modifiable cardiovascular risk factor.[16]

Finding:

For the most recent data of VHA patients without a diagnosis of hypertension, 90.6% aged 18-44 years, 88.4% aged 45-64 years, and 86.5% aged 65+ years had a blood pressure less than 140/90 mmHg as their most recent blood pressure. For the subset of VHA patients without a diagnosis of hypertension above 65, 86.6% aged 65-74 years and 85.4% aged 75-84 years had a blood pressure of less than 140/90 mmHg as their most recent blood pressure.

Exhibit 4-17. VHA patients with diagnosed diabetes who had documentation in the medical record that within the past year they had a foot exam using a monofilament



**Reference group for 45-64 yrs and 65+ yrs:* Veteran VHA patients age 18-44 yrs
***Reference group for 75-84 yrs and 85+ yrs:* Veteran VHA patients age 65-74 yrs
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

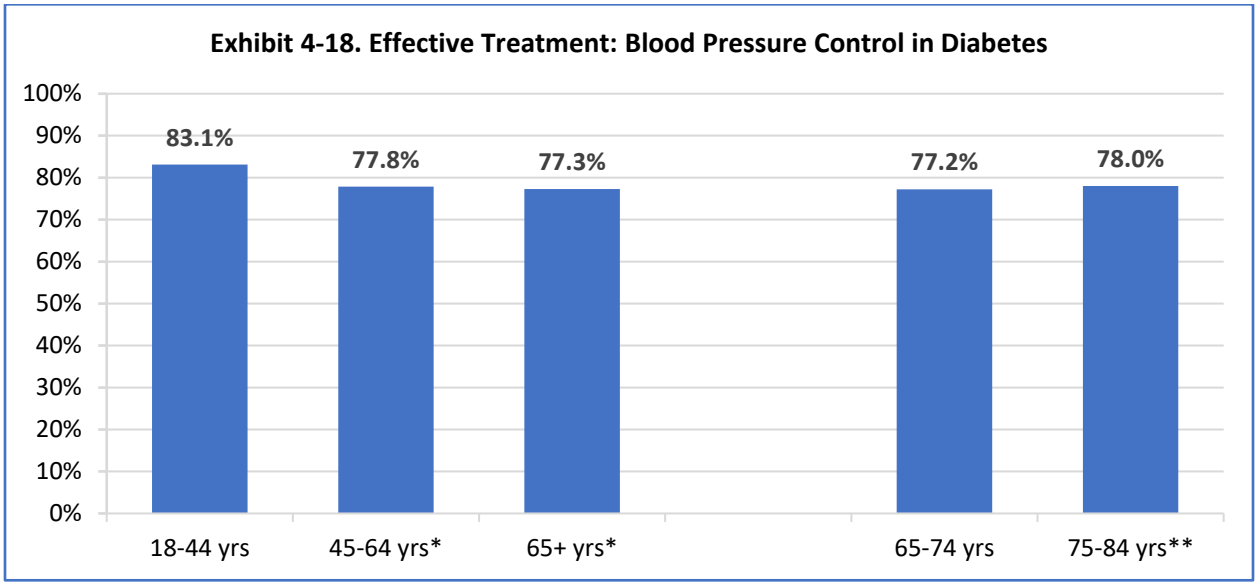
Importance:

Foot ulcers and resultant complications are an important cause of morbidity and mortality in people with diabetes.[17]

Finding:

For the most recent data of VHA patients with diagnosed diabetes, 75.5% aged 18-44 years, 81.2% aged 45-64 years, and 83.2% aged 65+ years had documentation in the medical record within the past year that they had a foot exam using a microfilament. For the subset of VHA patients with diagnosed diabetes above 65, 83.9% aged 65-74 years, 81.6% aged 75-84 years, and 77.8% aged 85+ years had documentation in the medical record within the past year that they had a foot exam using a microfilament.

Exhibit 4-18. VHA patients with diagnosed diabetes whose most recent blood pressure was less than 140/90 mmHg



**Reference group for 45-64 yrs and 65+ yrs:* Veteran VHA patients age 18-44 yrs
***Reference group for 75-84 yrs and 85+ yrs:* Veteran VHA patients age 65-74 yrs
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

Importance:

Hypertension is common in patients with diabetes and patients with both diabetes and hypertension have an increased risk of cardiovascular and kidney disease.[18]

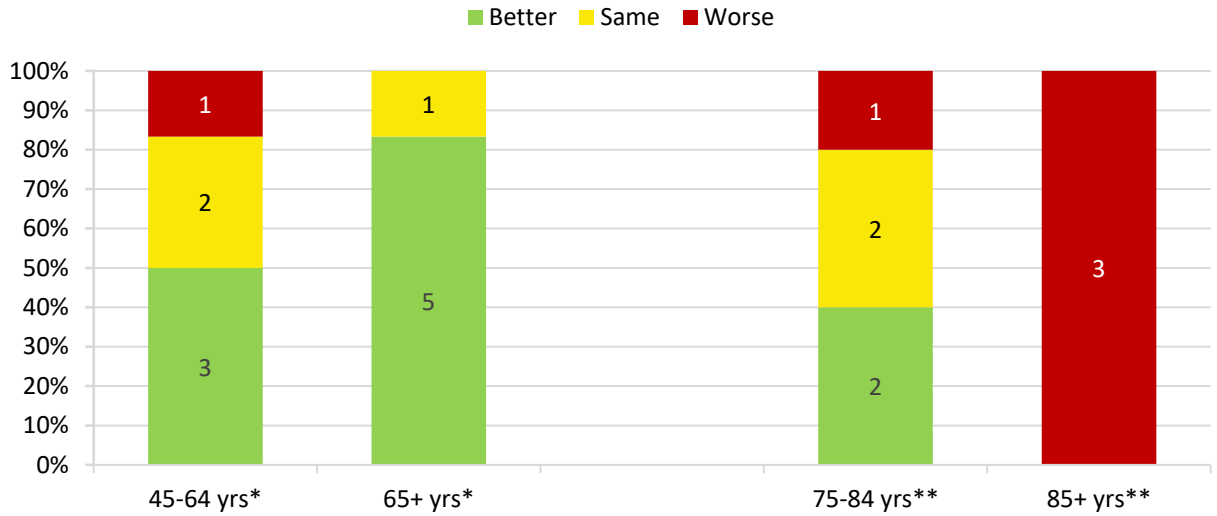
Finding:

For the most recent data of VHA patients with diagnosed diabetes, 83.1% aged 18-44 years, 77.8% aged 45-64 years, and 77.3% aged 65+ years had a blood pressure less than 140/90 mmHg as their most recent blood pressure. For the subset of VHA patients with diagnosed diabetes above 65, 77.2% aged 65-74 years and 78.0% aged 75-84 years had a blood pressure less than 140/90 mmHg as their most recent blood pressure.

Variations in VHA Health Care Quality of Healthy Living – Lifestyle Modification by Veteran Age

Exhibit 4-19. Number and percentage of measures for which older Veteran VHA patients of specified age groups experienced better, same, or worse healthy living – lifestyle modification compared with reference group

Exhibit 4-19. Healthy Living – Lifestyle Modification



Comparison	45-64*	65+*	75-84**	85+**
Worse	1	0	1	3
Same	2	1	2	0
Better	3	5	2	0

**Reference group for 45-64 yrs and 65+ yrs:* Veteran VHA patients age 18-44 yrs
***Reference group for 75-84 yrs and 85+ yrs:* Veteran VHA patients age 65-74 yrs
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

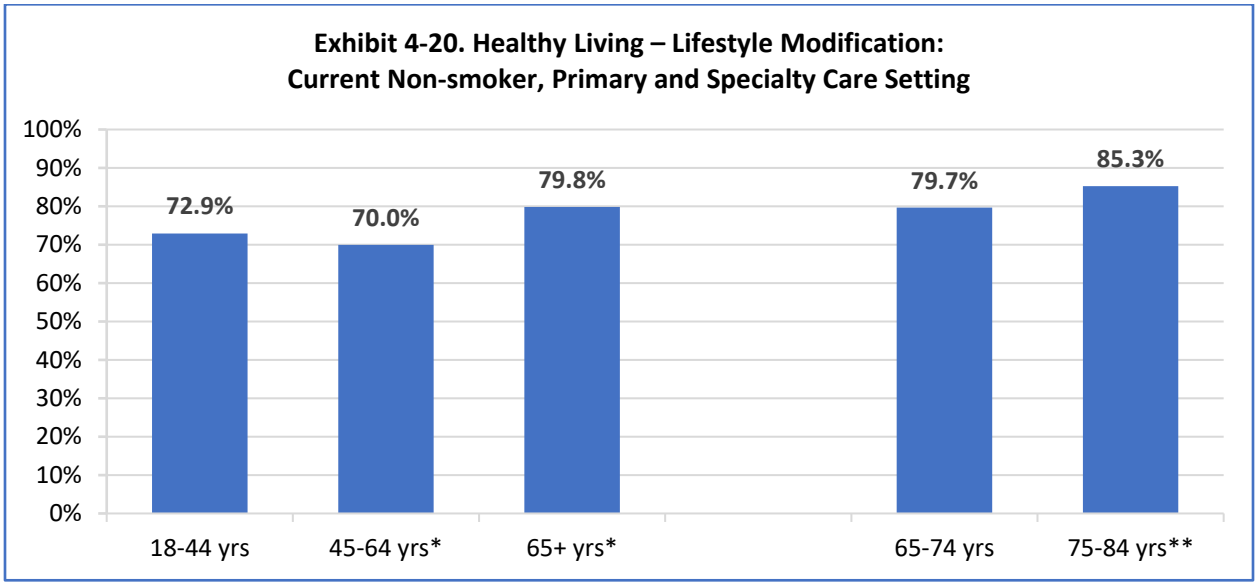
Importance:

The goal of quality improvement is to produce quality care, including healthy living through lifestyle modification, and improve patient outcomes regardless of VHA user characteristics.

Findings:

- During the study timeframe, findings show that age disparities were present across lifestyle modification measures.
- VHA users ages 45-64 years reported better lifestyle modification than VHA users ages 18-44 years on 3 measures (50%), similar lifestyle modification on 2 measures (33%), and worse lifestyle modification on 1 measure (17%).
- VHA users ages 65+ years reported better lifestyle modification than VHA users ages 18-44 years on 5 measures (83%) and similar lifestyle modification on 1 measure (17%).
- VHA users ages 75-84 years reported better lifestyle modification than VHA users ages 65-74 years on 2 measures (40%), similar lifestyle modification on 2 measures (40%), and worse lifestyle modification on 1 measure (20%).
- VHA users ages 85+ years reported worse lifestyle modification than VHA users ages 65-74 years on 3 measures (100%).

Exhibit 4-20. VHA outpatients in a non-mental health clinic who were screened for tobacco use and did not use tobacco any time during the past 12 months



**Reference group for 45-64 yrs and 65+ yrs:* Veteran VHA patients age 18-44 yrs
***Reference group for 75-84 yrs and 85+ yrs:* Veteran VHA patients age 65-74 yrs
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

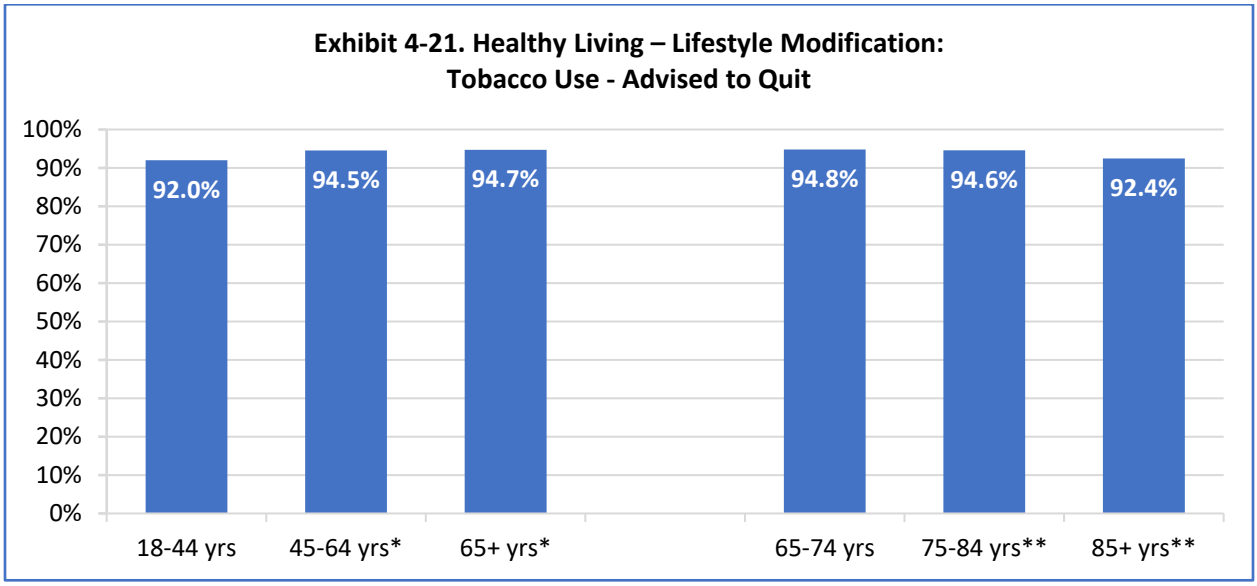
Importance:

Smoking is the leading preventable cause of premature disease and death in the United States.[19]

Finding:

For the most recent data on VHA outpatients who were screened for tobacco use in an outpatient non-mental health clinic, 72.9% aged 18-44 years, 70.0% aged 45-64 years, and 79.8% aged 65+ years did not use tobacco any time during the past 12 months. For the subset above 65 years who were screened for tobacco use in an outpatient non-mental health clinic, 79.7% aged 65-74 years and 85.3% aged 75-84 years did not use tobacco any time during the past 12 months.

Exhibit 4-21. VHA patients who are current tobacco users (any tobacco use in the past 12 months) who in the past 12 months have been advised to quit



**Reference group for 45-64 yrs and 65+ yrs: Veteran* VHA patients age 18-44 yrs
***Reference group for 75-84 yrs and 85+ yrs:* Veteran VHA patients age 65-74 yrs
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

Importance:

Smoking is the leading preventable cause of premature disease and death in the United States.[19]

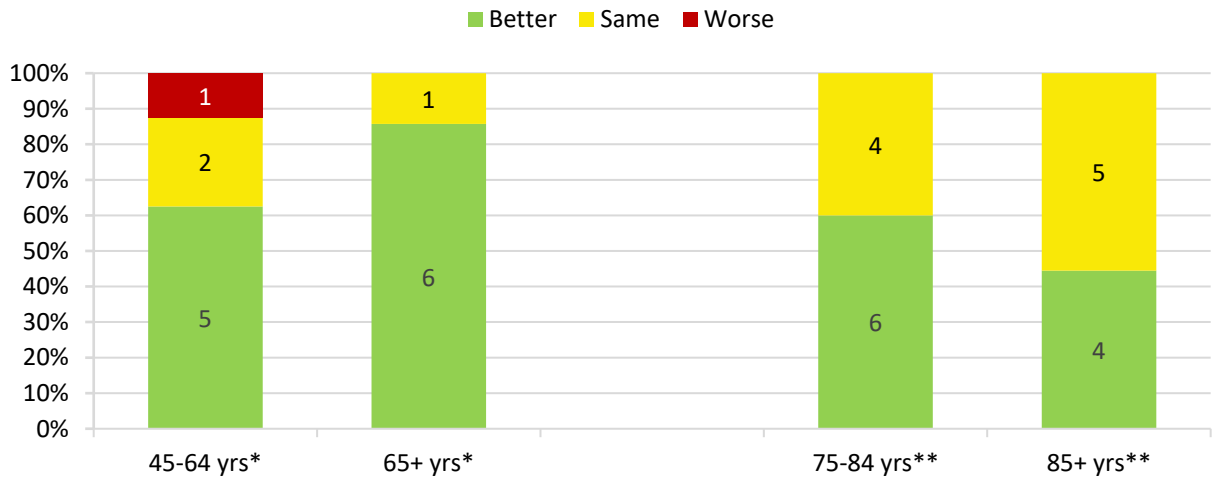
Finding:

For the most recent data on VHA patients who are current tobacco users (any use in the past 12 months), 92.0% aged 18-44 years, 94.5% aged 45-64 years, and 94.7% aged 65+ years have been advised to quit in the past 12 months. For the subset of VHA patients who are current tobacco users (any use in the past 12 months) above 65, 94.8% aged 65-74 years, 94.6% aged 75-84 years, and 92.4% aged 85+ years have been advised to quit in the past 12 months.

Variations in VHA Health Care Quality of Healthy Living – Clinical Preventive Services by Veteran Age

Exhibit 4-22. Number and percentage of measures for which older Veteran VHA patients of specified age groups experienced better, same, or worse healthy living – clinical preventive services compared with reference group

Exhibit 4-22. Healthy Living – Clinical Preventive Services



Comparison	45-64*	65+*	75-84**	85+**
Worse	1	0	0	0
Same	2	1	4	5
Better	5	6	6	4

**Reference group for 45-64 yrs and 65+ yrs:* Veteran VHA patients age 18-44 yrs
***Reference group for 75-84 yrs and 85+ yrs:* Veteran VHA patients age 65-74 yrs
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

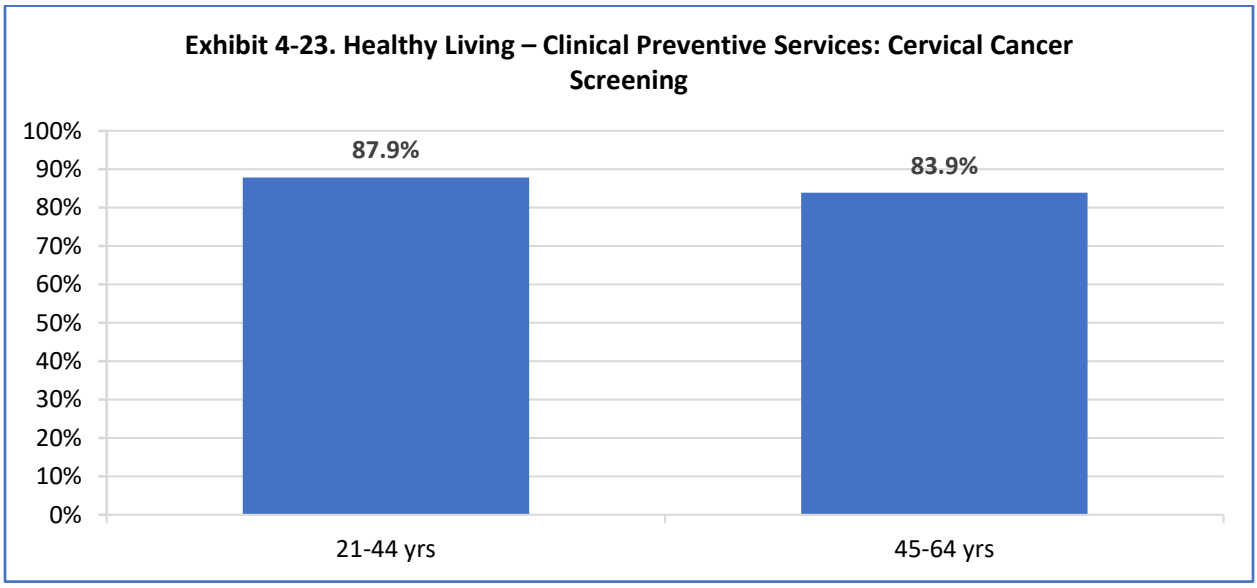
Importance:

The goal of quality improvement is to produce quality care, including healthy living through clinical preventive services, and improve patient outcomes regardless of VHA user characteristics.

Findings:

- During the study timeframe, findings show that age disparities were present across clinical preventive service measures.
- VHA users ages 45-64 years reported receiving better clinical preventive services than VHA users ages 18-44 on 5 measures (62%), similar clinical preventive services on 2 measures (25%), and worse clinical preventive services on 1 measure (13%).
- VHA users ages 65+ years reported receiving better clinical preventive services than VHA users ages 18-44 years on 6 measures (86%) and similar clinical preventive services on 1 measure (14%).
- VHA users ages 75-84 years reported receiving better clinical preventive services than VHA users ages 65-74 years on 6 measures (60%) and similar clinical preventive services on 4 measures (40%).
- VHA users ages 85+ years reported receiving better clinical preventive services than VHA users ages 65-74 years on 4 measures (44%) and similar clinical preventive services on 5 measures (56%).

Exhibit 4-23. Cervical cancer screening for VHA women patients age 21-64, as evidenced by Papanicolaou test (Pap smear) in the prior 3 years or Pap test plus HPV test in the prior 5 years among those age 24-64 years



Reference group: Veteran VHA patients age 21-44 yrs
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

Importance:

The U.S. Preventive Services Task Force recommends cervical cancer screening as part of routine health maintenance for women ages 21 through 65 years.[20]

Finding:

For the most recent data, 87.9% of VHA women patients aged 21-44 years and 83.9% of VHA women patients aged 45-64 years had evidence of cervical cancer screening in the prior 3 years with a Papanicolaou test (Pap smear) or 5 years with a Pap test plus HPV test.

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Chapter 5

Patient Experiences and Health Care Quality for Veterans in VHA in Rural Areas

Ruth Adekunle, MD, MSCR
R. Neal Axon, MD, MSCR

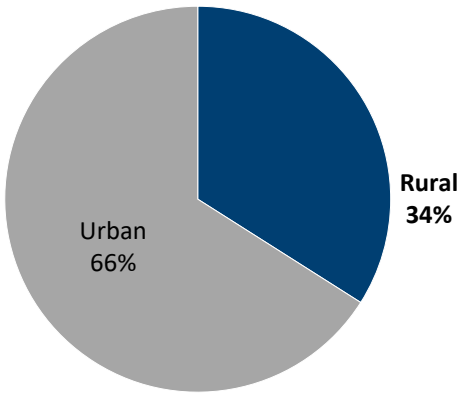
Section I: Background and Sociodemographic Characteristics

The Veterans Health Administration provides care to over 5.6 million Veterans, who reside in a rural residence, of which 2.7 million (37%) are enrolled in the VA.[1] Compared to urban Veterans, rural Veterans often experience higher rates of poverty, poorer access to care, and experience worse health outcomes across a number of comorbidities including higher rates of cardiovascular deaths, increased in-hospital mortality from ischemic stroke and increased rates of suicide deaths.[2-4] Barriers in access to care for rural residents include increased travel time, increased wait-times, lack of specialty services, provider shortages and lack of knowledge of navigating the VA system.[5-7] These barriers to care can lead to disparities in quality of care provided, healthcare utilization and perceived quality of life.[8,9,10] For example, compared to Veterans with a mental health condition living in urban areas, Veterans in rural areas have 70% lower odds of receiving any mental health treatment.[11] Additionally, rural residents experienced limited access to HIV care[12], HCV treatment[13], and transplantation services[14], all leading to the potential of increased morbidity and mortality.

The VHA has prioritized decreasing wait-times and improving access to care through avenues such as the MISSION ACT and increased use of telehealth services. Despite these efforts, disparities remain for Veterans of rural residence. It is important to explore these barriers to care and engage in continued efforts to close the disparity gap. To better understand how rural residents are being affected, this chapter provides a brief overview of the current state of health among rural Veterans by utilizing data for the entire VHA Veteran population during FY2016 – FY2019.

Rurality in VHA

Exhibit 5-1. Distribution of Rural/Urban Status among Veteran VHA Patients, FY16-FY19



Rural	Urban
34%	66%

Importance:

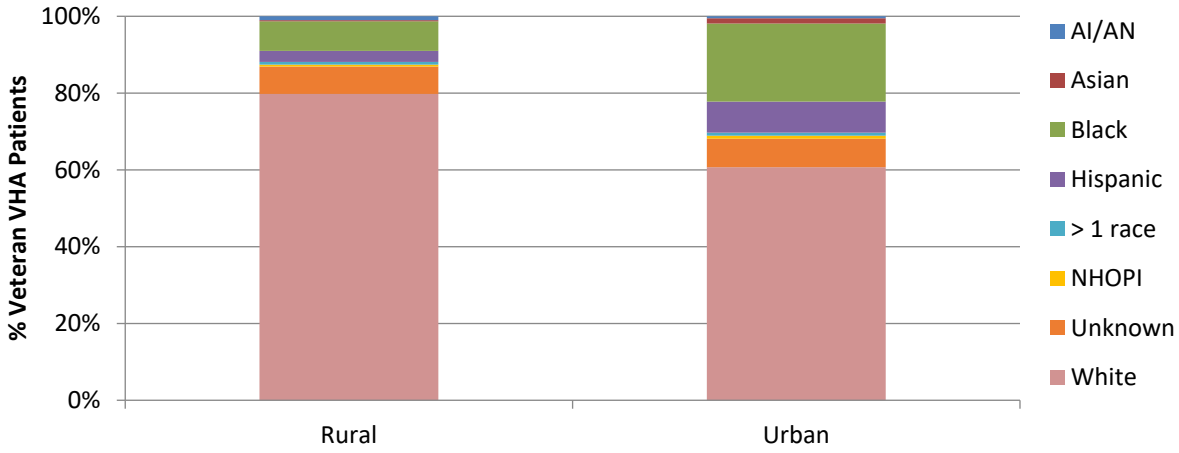
Veterans of rural residence may experience access barriers that can lead to disparities in quality of care and health outcomes.

Finding:

Over one third (34%) of the Veterans served by the Veterans Health Administration reside in rural areas.

Race/Ethnicity by Rurality

Exhibit 5-2. Percent Distribution of Race/Ethnicity by Rural/Urban Status among Veteran VHA Patients, FY16-FY19



Race/Ethnicity	Rural	Urban
American Indian or Alaska Native	1.0%	0.5%
Asian	0.3%	1.4%
Black	7.7%	20.3%
Hispanic	2.9%	8.1%
More than one race	0.7%	0.8%
Native Hawaiian or other Pacific Islander	0.5%	0.8%
Unknown, declined, or missing	7.1%	7.4%
White	79.8%	60.7%

Note: AI/AN denotes American Indian or Alaskan Native; NHOPI denotes Native Hawaiian or other Pacific Islander

Importance:

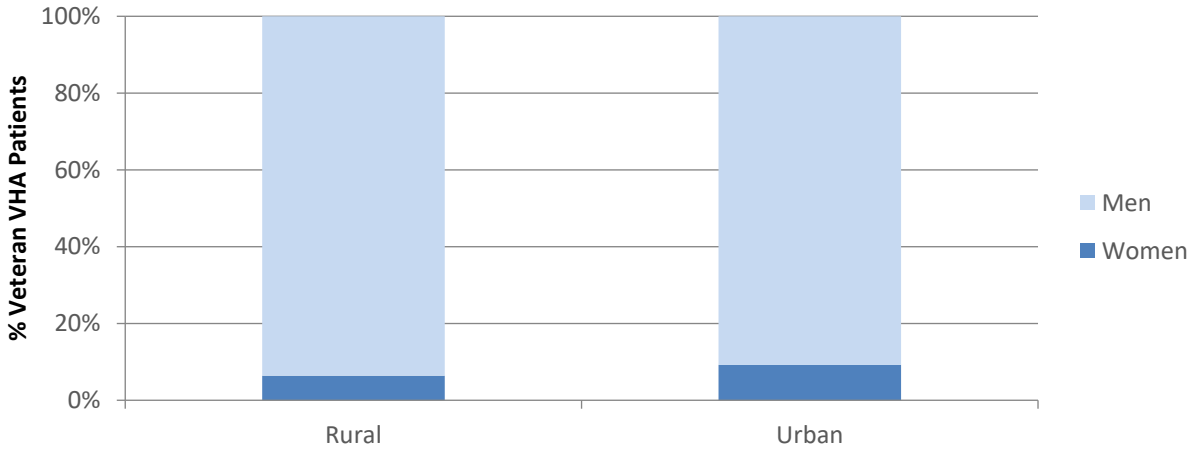
There is less ethnic diversity among Veterans who reside in rural regions compared with urban regions. This mirrors the rural/urban distribution of race and ethnicity nationally in the U.S.

Finding:

Rural Veterans are 79.8% non-Hispanic White compared with 60.7% of urban Veterans being non-Hispanic White.

Gender by Rurality

Exhibit 5-3. Percent Distribution of Gender by Rural/Urban Status among Veteran VHA Patients, FY16-FY19



Gender	Rural	Urban
Men	93.6%	90.8%
Women	6.4%	9.2%

Importance:

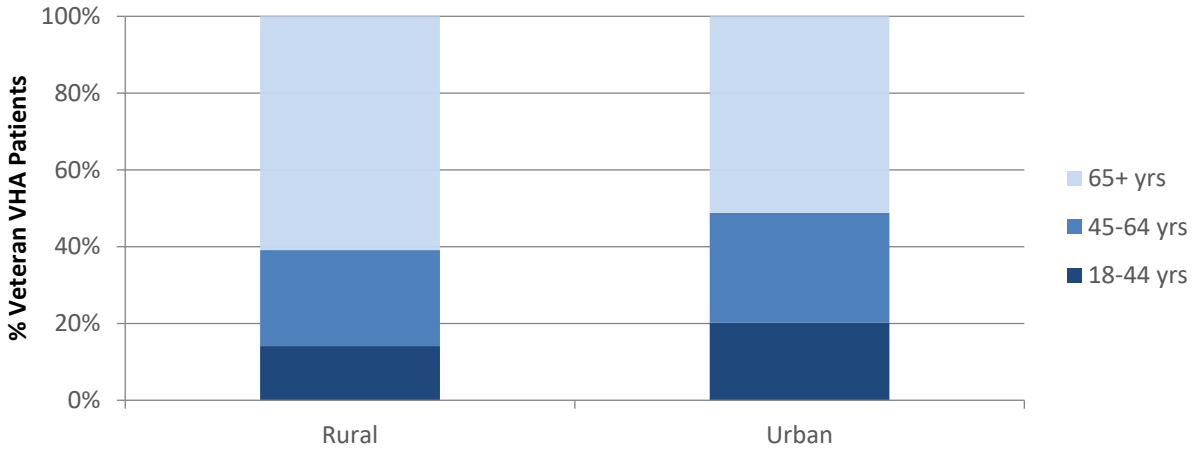
While the presence of women Veterans continues to grow, males make up the large majority of Veterans in both urban and rural areas.

Finding:

The vast majority of Veterans in both urban and rural regions are male (90.8% and 93.6%, respectively), though there is a slightly higher percentage of women in urban areas.

Age Group by Rurality

Exhibit 5-4. Percent Distribution of Age by Rural/Urban Status among Veteran VHA Patients, FY16-FY19



Age	Rural	Urban
65+ years	60.9%	51.2%
45-64 years	25.0%	28.6%
18-44 years	14.1%	20.2%

Importance:

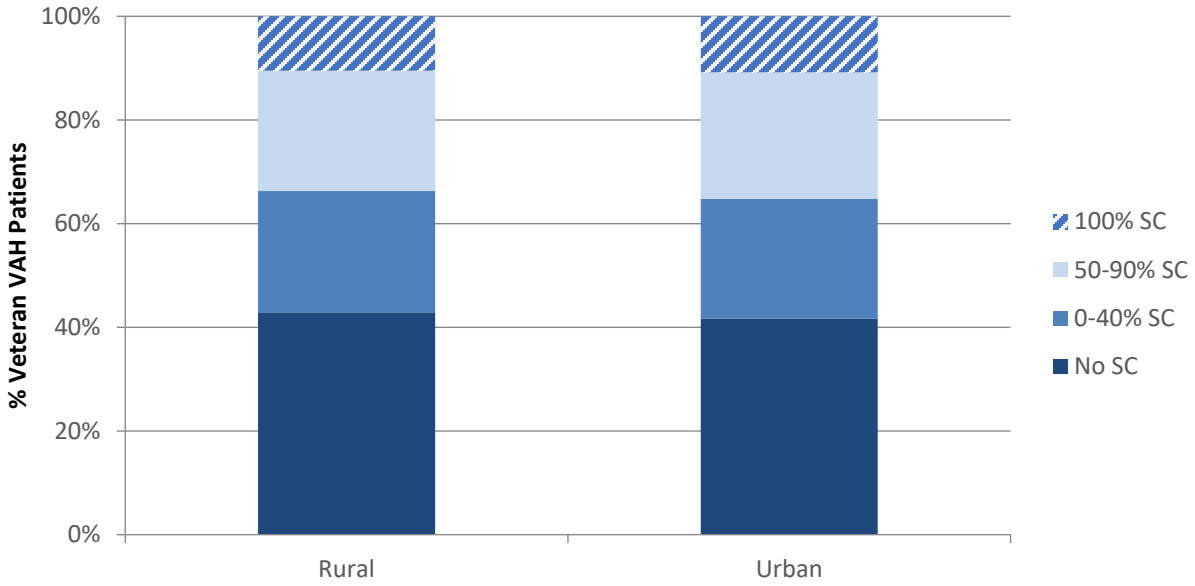
Efforts employed to improve access to care for rural residence should also consider the potential challenges faced by this aging demographic.

Finding:

Rural residents tend to be older than urban residents with just over 60% of rural residents being over the age of 65, versus 51% of urban residents.

Service-connected Disability Rating by Rurality

Exhibit 5-5. Distribution of Service-connected Disability Rating by Rural/Urban Status among Veteran VHA Patients, FY16-FY19



Service-connected Disability Rating	Rural	Urban
100% SC	10.5%	10.8%
50-90% SC	23.2%	24.4%
0-40% SC	23.4%	23.1%
No SC	42.9%	41.7%

Importance:

Historically, rural Veterans have experienced higher rates of service-connected disability compared with urban Veterans.

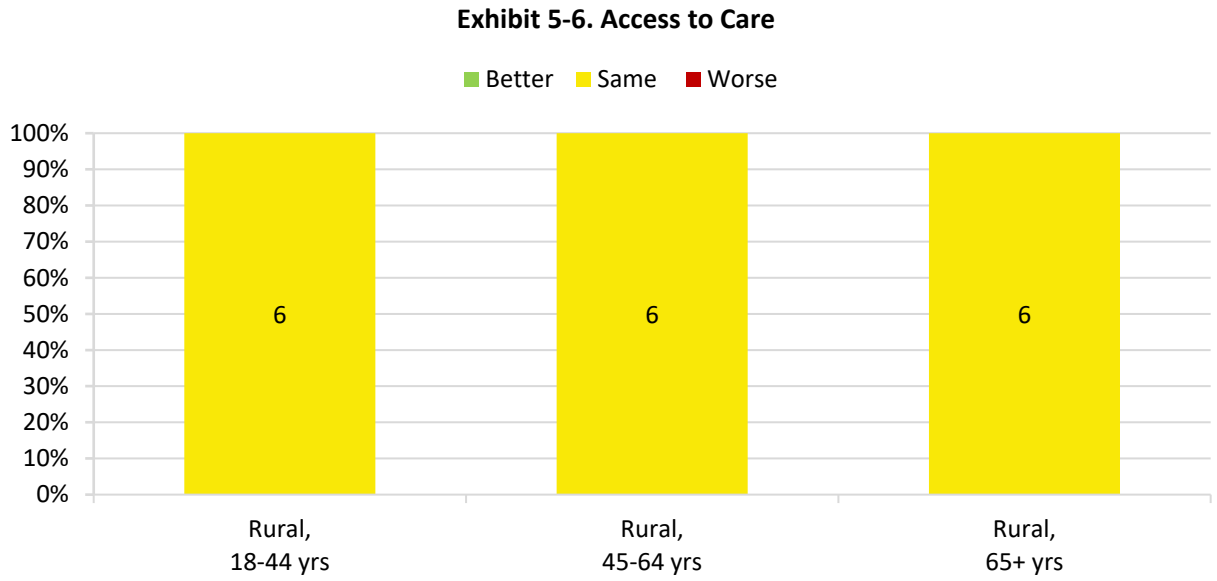
Finding:

Service-connected disability was similarly distributed when comparing rural Veterans to urban Veterans, with 57.1% of rural Veterans and 58.3% of urban Veterans having service-connected disabilities.

Section II: Patient Experiences

Variations in VHA Patient Experience of Access to Care by Veteran Rurality

Exhibit 5-6. Number and percentage of measures for which rural Veteran VHA patients of specified age groups experienced better, same, or worse access to care compared with reference group



Comparison	Rural, 18-44 years	Rural, 45-64 years	Rural, 65+ years
Worse	0	0	0
Same	6	6	6
Better	0	0	0

Reference group: Urban Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

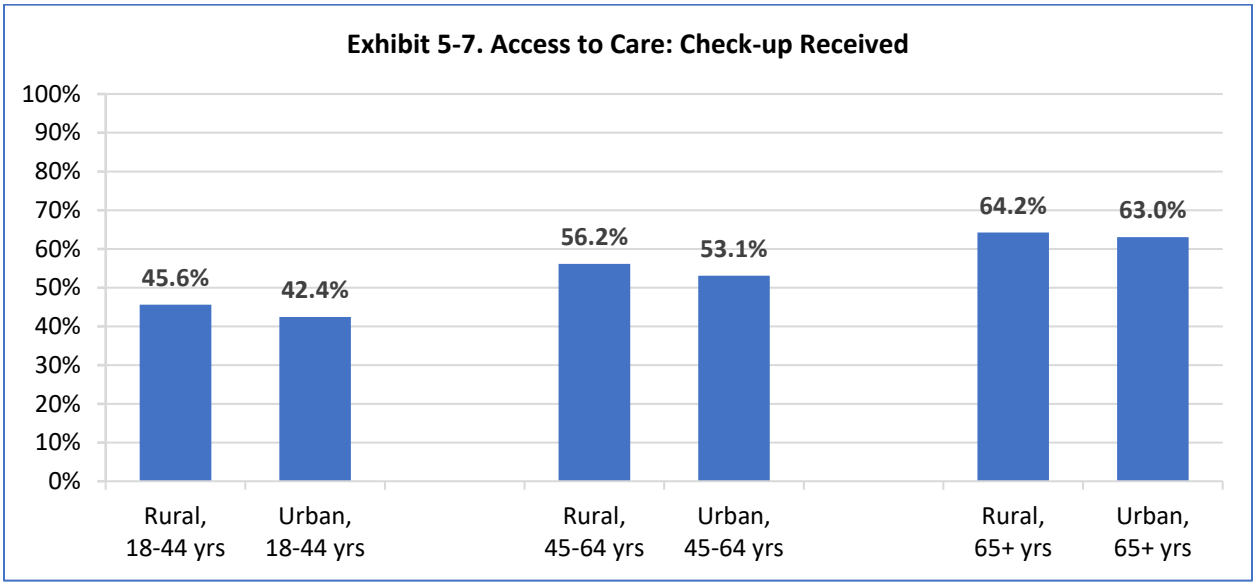
Importance:

Historically, Veterans of rural residence have experienced poorer access to care compared with urban residents, partially driven by distances between health care facilities and the patient. Improvements though are being made in this arena.

Finding:

Rural residents experienced similar access to care compared with urban residents. For all age groups, rural Veterans reported similar access as urban Veterans on all 6 measures.

Exhibit 5-7. VHA users who indicated, in the last 6 months, when they made an appointment with their provider for a check-up or routine care, they always received an appointment as soon as needed



Reference group: Urban Veteran VHA patients of corresponding age group.
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

Importance:

Appropriate and timely follow up appointments decreases rate of disease progression and hospital admissions.

Findings:

- In terms of timely follow up appointments, rural residents experienced similar access to appointments as urban residents.
- Among Veterans age 18-44 years, a similar proportion of rural (45.6%) and urban (42.4%) Veterans received timely check-ups.
- Among Veterans age 45-64 years, a similar proportion of rural (56.2%) and urban (53.1%) Veterans received timely check-ups.
- Among Veterans age 65 years or older, a similar proportion of rural (64.2%) and urban (63.0%) Veterans received timely check-ups.

Variations in VHA Patient Experience of Person-centered Care by Veteran Rurality

Exhibit 5-8. Number and percentage of measures for which rural Veteran VHA patients of specified age groups experienced better, same, or worse person-centered care compared with reference group

Comparison	Rural, 18-44 years	Rural, 45-64 years	Rural, 65+ years
Worse	0	0	0
Same	16	14	14
Better	0	2	2

Reference group: Urban Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

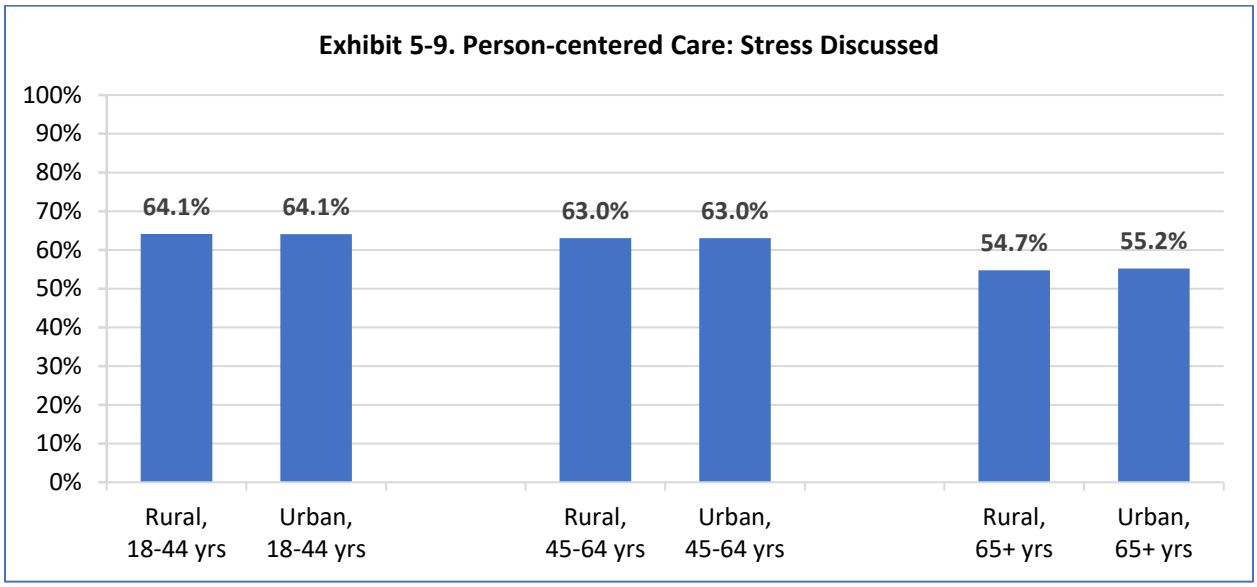
Importance:

Culturally sensitive approaches are vital to improve health outcomes and engagement of rural residents.

Findings:

- Experiences with person-centered care are comparable between rural and urban residents.
- Rural residents age 18-44 years reported similar person-centered care as urban residents of the same age group on 16 measures.
- Rural residents age 45-64 years and age 65 years or older reported similar person-centered care as urban residents of the same age group on 14 measures. On 2 measures, the experiences of rural Veterans in those age groups were enhanced.

Exhibit 5-9. VHA users who indicated, in the last 6 months, that they talked with someone in their provider's office about things in their life that worry them or cause them stress



Reference group: Urban Veteran VHA patients of corresponding age group.
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

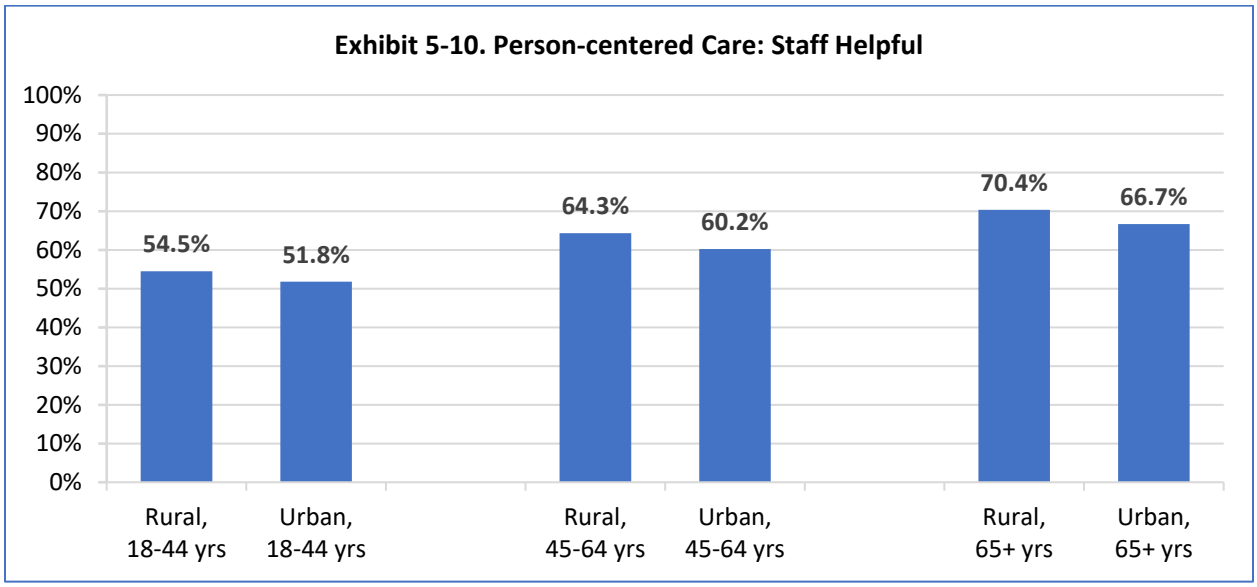
Importance:

The effects of hardship on rural residents can manifest as chronic stress leading to mental health disorders and unhealthy living.

Findings:

- Stress was discussed equally among rural and urban residents.
- Among Veterans age 18-44 years and those age 45-64 years, stress was discussed with someone in their provider's office approximately 63% to 64% of the time, whereas among Veterans age 65 years or older, stress was discussed with approximately 55% of the time.

Exhibit 5-10. VHA users who indicated, in the last 6 months, clerks and receptionists at their provider's office were always as helpful as they thought they should be



Reference group: Urban Veteran VHA patients of corresponding age group.
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

Importance:

Rural culture embraces a strong sense of community and comradery. This is reflected even in patient-staff relations.

Findings:

- Compared with urban Veterans, rural Veterans ages 45 years and greater had more positive experiences with helpful clerks and receptionists.
- Among those age 45-64 years, more positive experiences with helpful clerks and receptionists was reported by 64.3% of rural versus 60.2% of urban residents.
- Among those age 65 years or older, more positive experiences with helpful clerks and receptionists was reported by 70.4% of rural versus 66.7% of urban residents.

Variations in VHA Patient Experience of Care Coordination by Veteran Rurality

Exhibit 5-11. Number and percentage of measures for which rural Veteran VHA patients of specified age groups experienced better, same, or worse care coordination compared with reference group

Comparison	Rural, 18-44 years	Rural, 45-64 years	Rural, 65+ years
Worse	0	0	0
Same	6	6	6
Better	0	0	0

Reference group: Urban Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

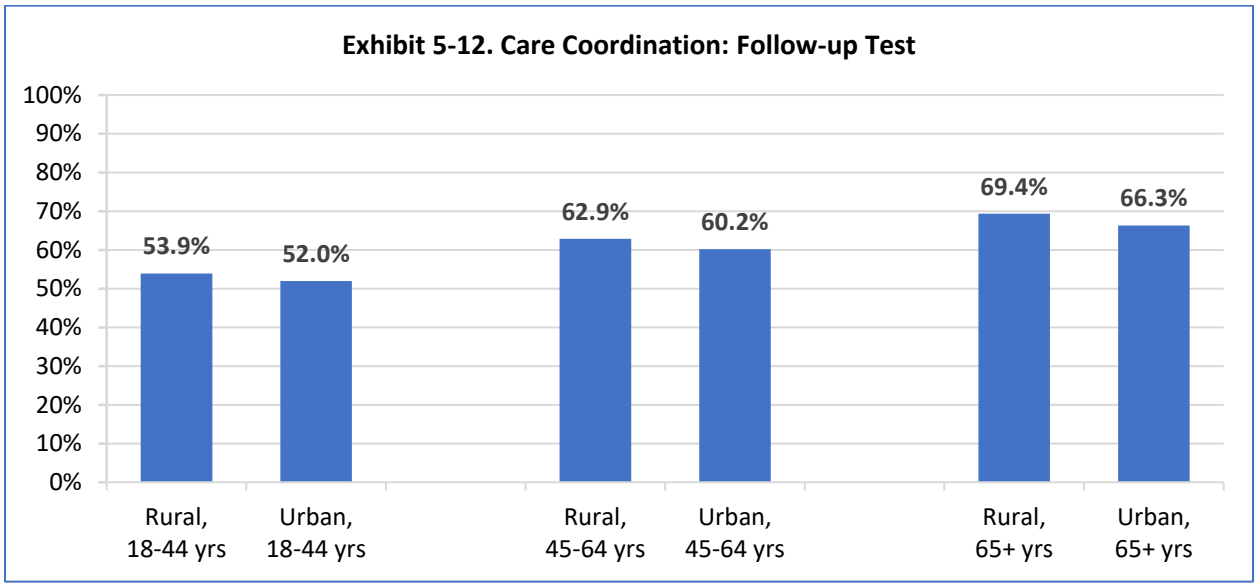
Importance:

As use of community providers expands, effective care coordination is imperative to increase access to care, decrease associated healthcare costs, and improve health outcomes.

Finding:

For all age groups, for the 6 measures of care coordination, there were no disparities identified; rural Veterans reported having similar experiences as urban Veterans.

Exhibit 5-12. VHA users who indicated, in the last 6 months, that when their provider ordered a blood test, x-ray, or other test for them, someone in their provider's office always followed up to give them the results



Reference group: Urban Veteran VHA patients of corresponding age group.
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

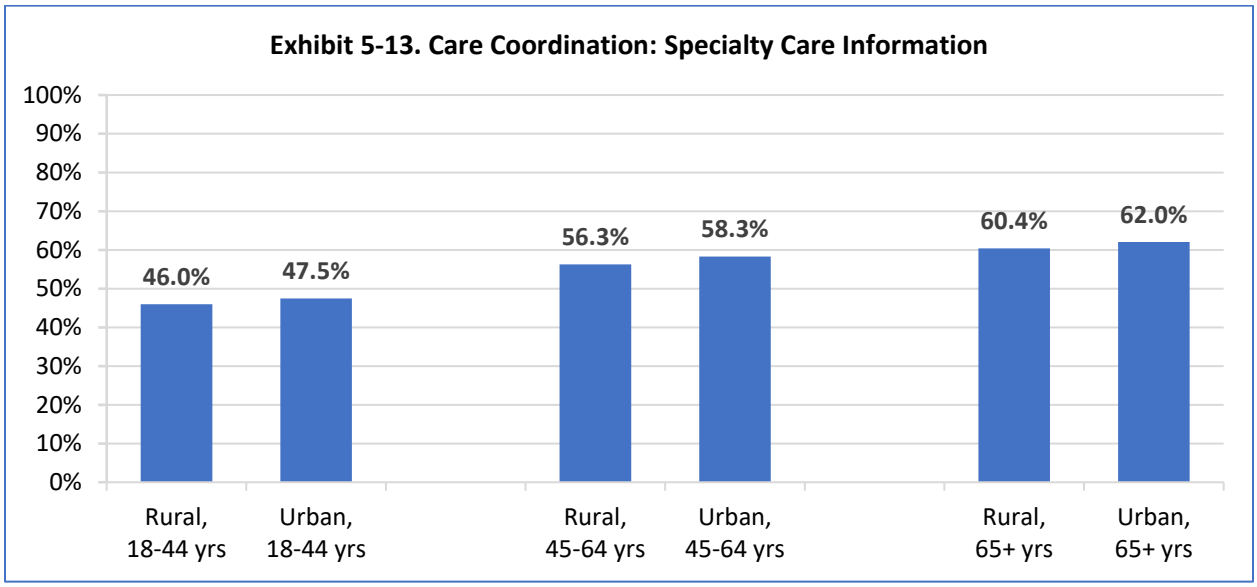
Importance:

Failure to provide test results can lead to medical errors and misunderstanding of disease severity.

Findings:

- Though improvement is needed in communicating test results, there were no differences between rural and urban residents.
- Overall, 52% to 54% of Veterans age 18-44 years, 60% to 63% of those age 45-64 years, and 66% to 69% of those age 65 years or older, reported that someone in their provider's office always followed up to give them test results.

Exhibit 5-13. VHA users who indicated, in the last 6 months, that their provider always seemed informed and up-to-date about the care they received from specialists



Reference group: Urban Veteran VHA patients of corresponding age group.
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

Importance:

With the MISSION ACT expanding access to specialty care within and outside the VA, it is becoming increasingly challenging for providers to be up to date on the specialty care being provided to their patients.

Findings:

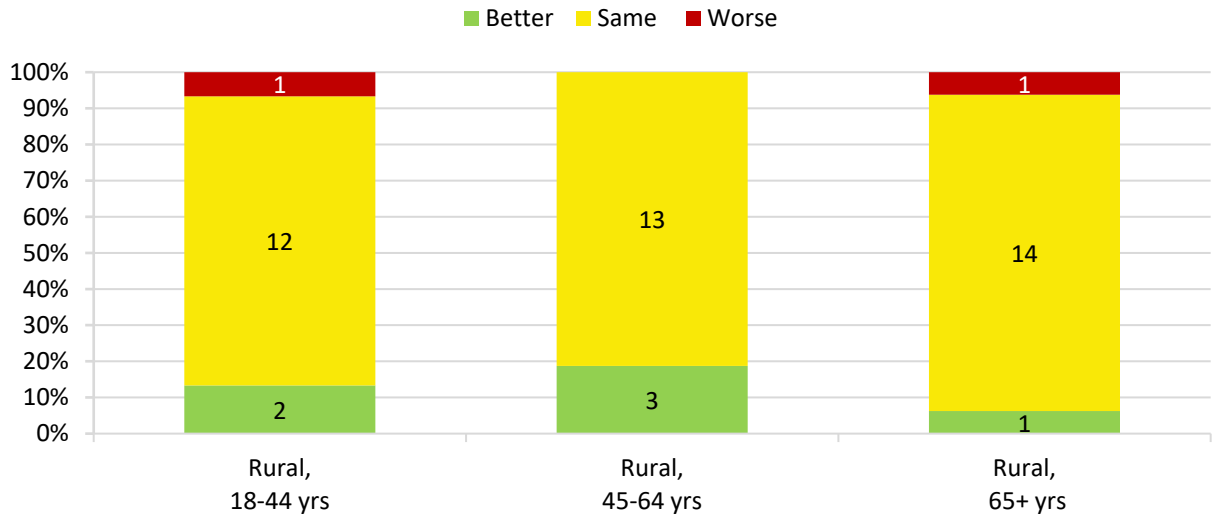
- Improvements are needed in providers being fully aware of the specialty care being provided to their patients, though there were no differences between rural and urban residents.
- Overall, approximately 46% to 48% of Veterans age 18-44 years, 56% to 58% of those age 45-64 years, and 60% to 62% of those age 65 years or older, reported that their provider always seemed informed and up to date about the care they received from specialists.

Section III: Health Care Quality

Variations in VHA Health Care Quality of Effective Treatment by Veteran Rurality

Exhibit 5-14. Number and percentage of measures for which rural Veteran VHA patients of specified age groups experienced better, same, or worse effective treatment compared with reference group

Exhibit 5-14. Effective Treatment



Comparison	Rural, 18-44 years	Rural, 45-64 years	Rural, 65+ years
Worse	1	0	1
Same	12	13	14
Better	2	3	1

Reference group: Urban Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

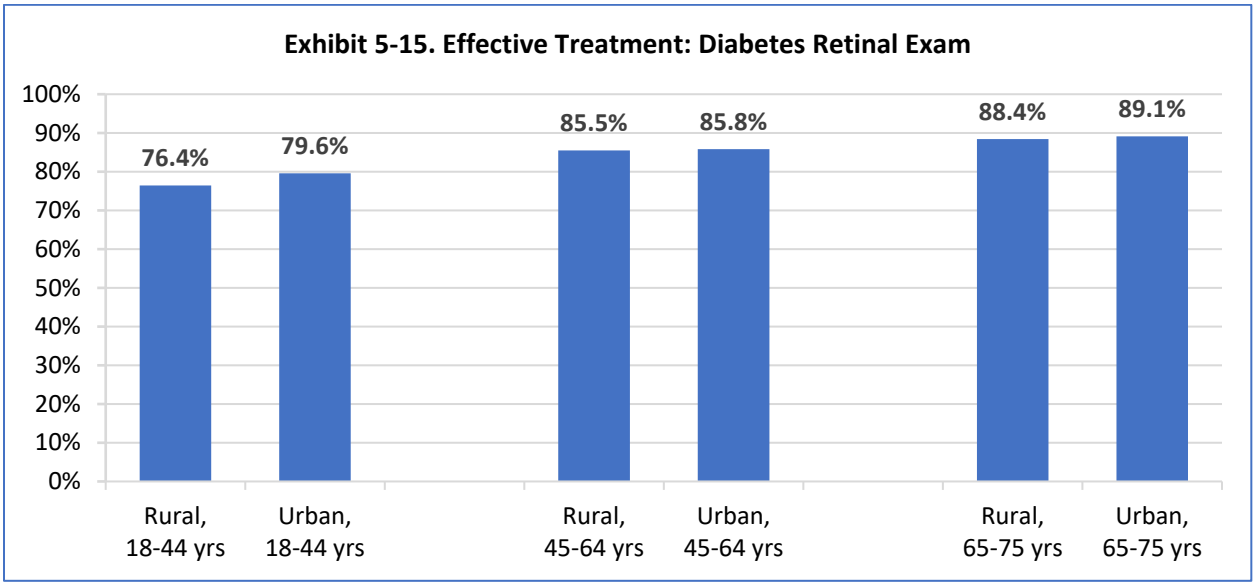
Importance:

Rural residents experience more cardiovascular disease and death. Employment of effective prevention and treatment practices for cardiovascular disease is vital to reduce mortality.

Findings:

- Overall, rural residents received similar to better rates of effective preventive treatments as urban residents.
- Rural residents age 18-44 years had 2 measures with higher ratings than urban residents, 12 measures with similar ratings, and 1 measure with worse ratings.
- Rural residents age 45-64 years had 3 measures with higher ratings than urban residents, and 13 measures with similar ratings.
- Rural residents age 65 years or older had 1 measure with higher ratings than urban residents, 14 measures with similar ratings, and 1 measure with worse ratings.

Exhibit 5-15. VHA patients with diagnosed diabetes who had a timely retinal examination



Reference group: Urban Veteran VHA patients of corresponding age group.
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

Importance:

Diabetes retinal exams are important to identify those who are at higher risk for developing sight-threatening diabetic retinopathy.

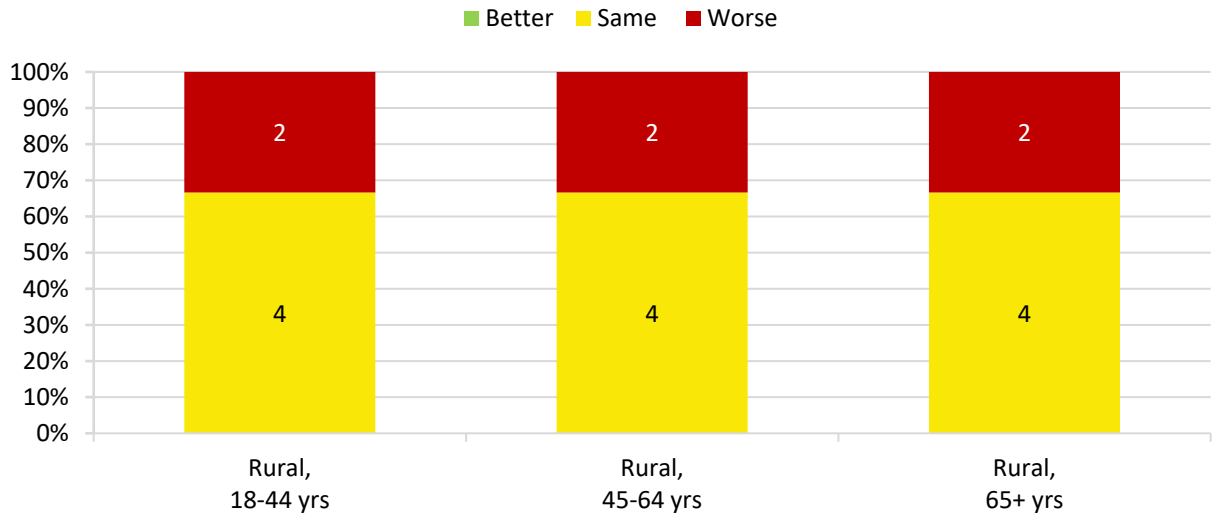
Findings:

- Among Veterans age 18-44 years, there were disparities between rural and urban residents in the timely receipt of diabetic retinal screening, with 76.4% of rural Veterans receiving this compared with 79.6% of urban Veterans.
- Among Veterans age 45-64 years and those age 65-75 years, similar percentages of rural and urban Veterans with diabetes received timely retinal exams. Overall, timely retinal exams were received by 86% of those age 45-64 years, and 88% to 89% of those age 65-75 years.

Variations in VHA Health Care Quality of Healthy Living – Lifestyle Modification by Veteran Rurality

Exhibit 5-16. Number and percentage of measures for which rural Veteran VHA patients of specified age groups experienced better, same, or worse healthy living – lifestyle modification compared with reference group

Exhibit 5-16. Healthy Living – Lifestyle Modification



Comparison	Rural, 18-44 years	Rural, 45-64 years	Rural, 65+ years
Worse	2	2	2
Same	4	4	4
Better	0	0	0

Reference group: Urban Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

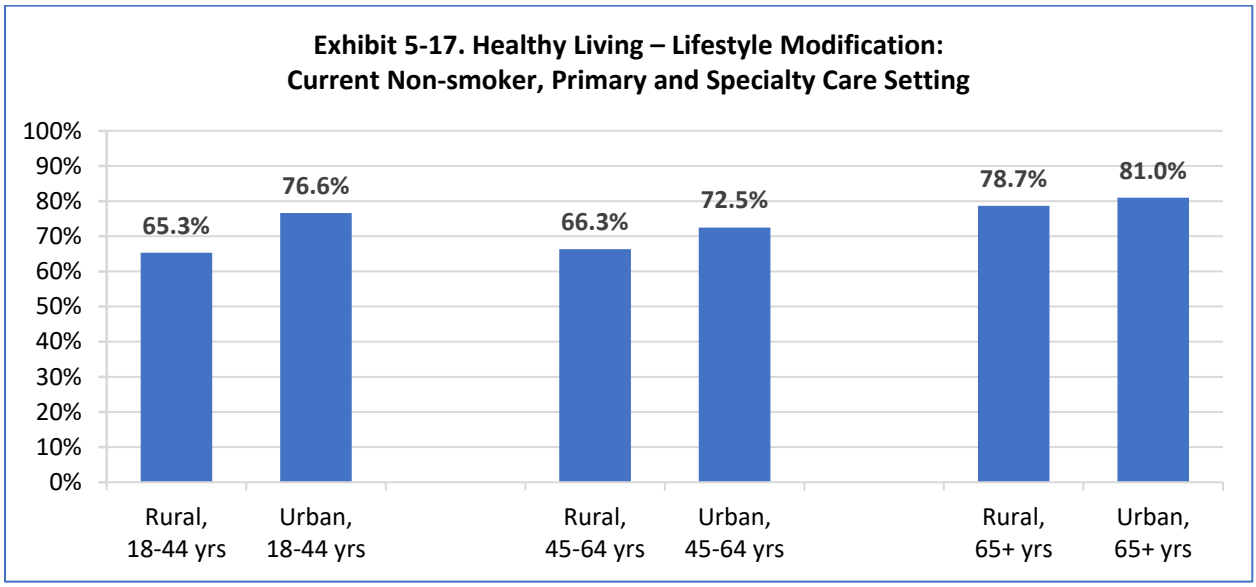
Importance:

Unhealthy behaviors such as tobacco use, limited exercise and poor nutrition are higher among rural residents, contributing to the increased rates of cardiovascular disease.

Findings:

- Across all age groups, rural residents had worse ratings on 2 measures of healthy living compared to urban residents.
- Rural residents had similar ratings as urban residents on 4 measures.

Exhibit 5-17. VHA outpatients in a non-mental health clinic who were screened for tobacco use and did not use tobacco any time during the past 12 months



Reference group: Urban Veteran VHA patients of corresponding age group.
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

Importance:

Unhealthy lifestyle behaviors such as smoking is known to be highest among rural residents.

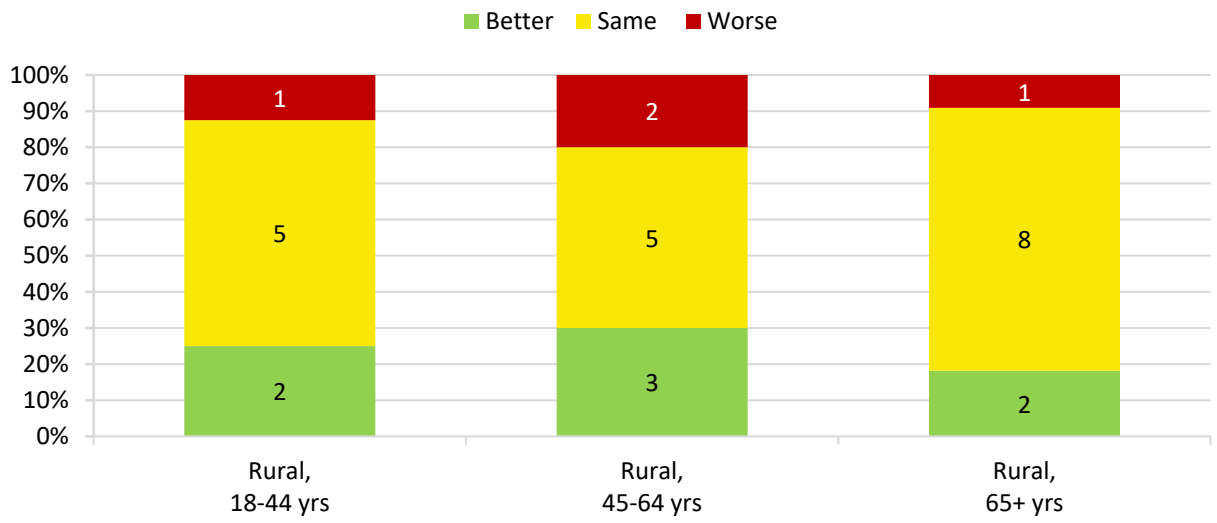
Findings:

- Across all age groups, rural residents were less likely than urban residents to be a non-smoker.
- Among Veterans age 18-44 years, 65% of rural residents compared with 77% of urban residents were non-smokers.
- Among Veterans age 45-64 years, 66% of rural residents compared with 73% of urban residents were non-smokers.
- Among Veterans age 65 years or older, 79% of rural residents compared with 81% of urban residents were non-smokers.

Variations in VHA Health Care Quality of Healthy Living – Clinical Preventive Services by Veteran Rurality

Exhibit 5-18. Number and percentage of measures for which rural Veteran VHA patients of specified age groups experienced better, same, or worse healthy living – clinical preventive services compared with reference group

Exhibit 5-18. Healthy Living – Clinical Preventive Services



Comparison	Rural, 18-44 years	Rural, 45-64 years	Rural, 65+ years
Worse	1	2	1
Same	5	5	8
Better	2	3	2

Reference group: Urban Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

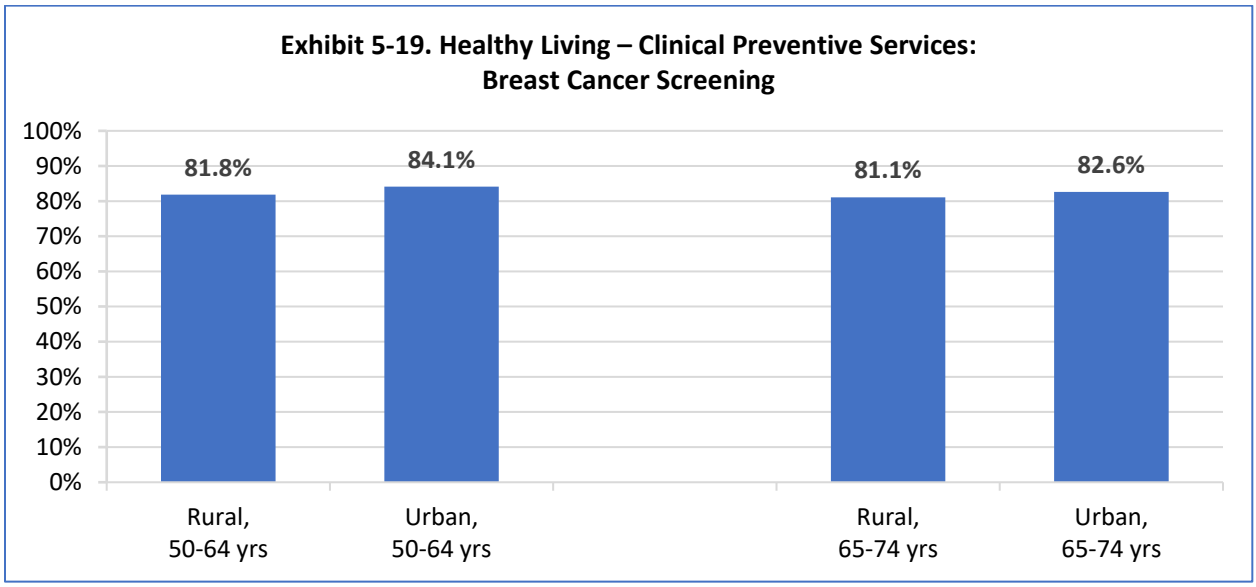
Importance:

Screenings are essential to identifying unhealthy behaviors and mental health conditions. Use of these best practices is essential to healthier living.

Findings:

- Rural residents age 18-44 years had 2 measures with higher ratings than urban residents, 5 measures with similar ratings, and 1 measure with worse ratings.
- Rural residents age 45-64 years had 3 measures with higher ratings than urban residents, 5 measures with similar ratings, and 2 measures with worse ratings.
- Rural residents age 65 years or older had 2 measures with higher ratings than urban residents, 8 measures with similar ratings, and 1 measure with worse ratings.

Exhibit 5-19. Breast cancer screening for VHA women patients age 50-74, as evidenced by mammography screening in the prior 27 months among those age 52-74



Reference group: Urban Veteran VHA patients of corresponding age group.
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

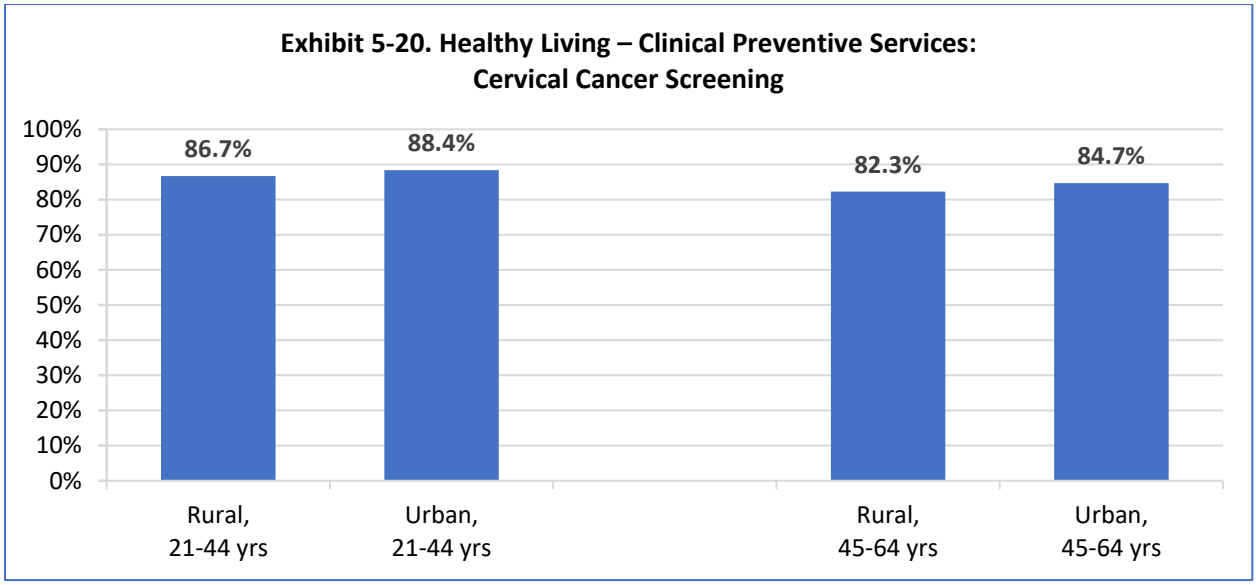
Importance:

With the increasing proportion of women Veterans, access to Designated Women's Health Providers to perform appropriate screenings has been a priority for the VHA.

Findings:

- While performance of breast cancer screening overall was high, disparities were identified in rural women Veterans age 50-64 years being less likely to receive appropriate breast cancer screening as compared with urban women Veterans of that age group.
- Among women Veterans age 50-64 years, approximately 82% of rural residents compared with 84% of urban residents received breast cancer screening.
- Among women Veterans age 65-74 years, similar percentages of rural and urban residents (approximately 81% to 83%) received breast cancer screening.

Exhibit 5-20. Cervical cancer screening for VHA women patients age 21-64, as evidenced by Papanicolaou test (Pap smear) in the prior 3 years or Pap test plus HPV test in the prior 5 years among those age 24-64



Reference group: Urban Veteran VHA patients of corresponding age group.
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

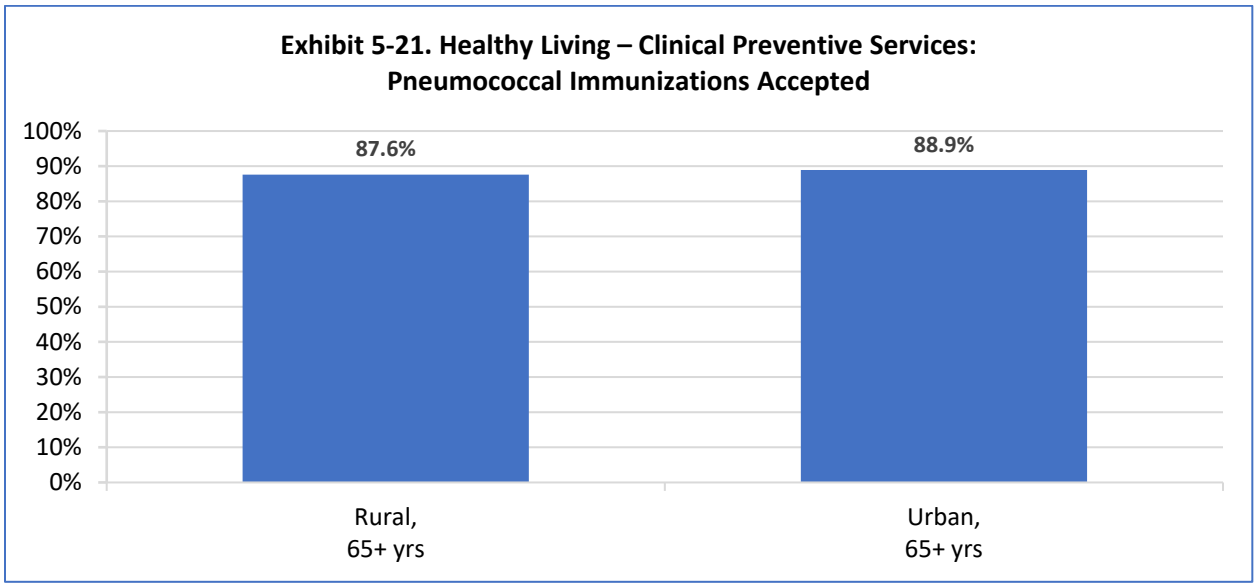
Importance:

With the increasing proportion of women Veterans, access to Designated Women's Health Providers to perform appropriate screenings has been a priority for the VHA.

Findings:

- While performance of cervical cancer screening overall was high, disparities were identified in rural VHA women being less likely to receive appropriate cervical cancer screening as compared with urban VHA women.
- Among women Veterans age 21-44 years, approximately 87% of rural residents compared with 88% of urban residents received cervical cancer screening.
- Among women Veterans age 45-64 years, approximately 82% of rural residents compared with 85% of urban residents received cervical cancer screening.

Exhibit 5-21. VHA patients age 65 or older who accepted pneumococcal immunizations



Reference group: Urban Veteran VHA patients of corresponding age group.
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

Importance:

Consequences of less access to healthcare of rural residents include lower vaccination coverage in this population.

Findings:

- Similar to the general population, urban Veterans have a higher vaccination rate compared with rural Veterans.
- Among Veterans age 65 years or older, 87.6% of rural residents compared with 88.9% of urban residents accepted pneumococcal immunization.

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Chapter 6

Patient Experiences and Health Care Quality for Veterans in VHA by Socio-economic Status

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Judith A. Long, MD

Section I: Background and Sociodemographic Characteristics

Socio-economic Status (SES) as a social determinant is often used as an economic variable analyzing the effect of educational attainment and income as a driver of health outcomes. For the Veteran patient population served by the VA, analyzing for SES can give trending insights into specific risk factors and vulnerability to poor outcomes. For example, those in lower SES populations are more likely to have higher nicotine use, a sedentary lifestyle, and a low-quality diet compared to their higher SES counterparts.[1]

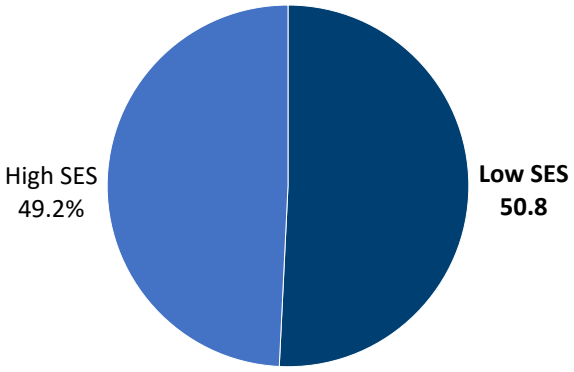
The VA may also try to provide supplementary income to these patient populations experiencing a lower SES by means of specific disability compensation or pension programs seeking to reduce the risk of homelessness, but specific subgroups may be less likely to participate in such programs (e.g., justice-involved or homeless Veterans).[2]

Finally, those who are low SES are more likely to experience a wider range of adverse social determinants. Among those who are VA-pension/Medicaid eligible, Veterans are more likely to be at risk for violent situations, housing instability, employment/financial problems, legal problems, family/social support problems, limited access to care and transportation, and non-specific psychosocial needs.[3]

This chapter examines Veteran VHA patient comparisons by SES. SES is defined as: low SES for those in enrollment priority group 5 (Veterans without service-connected disability ratings, below VA income thresholds for copayments), and high SES for those in enrollment priority groups 7 and 8 (Veterans without service-connected disability ratings, at or above VA income thresholds for copayments). We omit indeterminate SES (Veterans with service-connected disability ratings for whom income information is not collected). It should be noted that the average income of Veterans using the VA is lower than the average income in the U.S. and thus higher SES is a relative term.[4]

Socio-economic Status (SES) in VHA

Exhibit 6-1. Distribution of Socio-economic Status among Veteran VHA Patients, FY16-FY19



Low SES	High SES
50.8%	49.2%

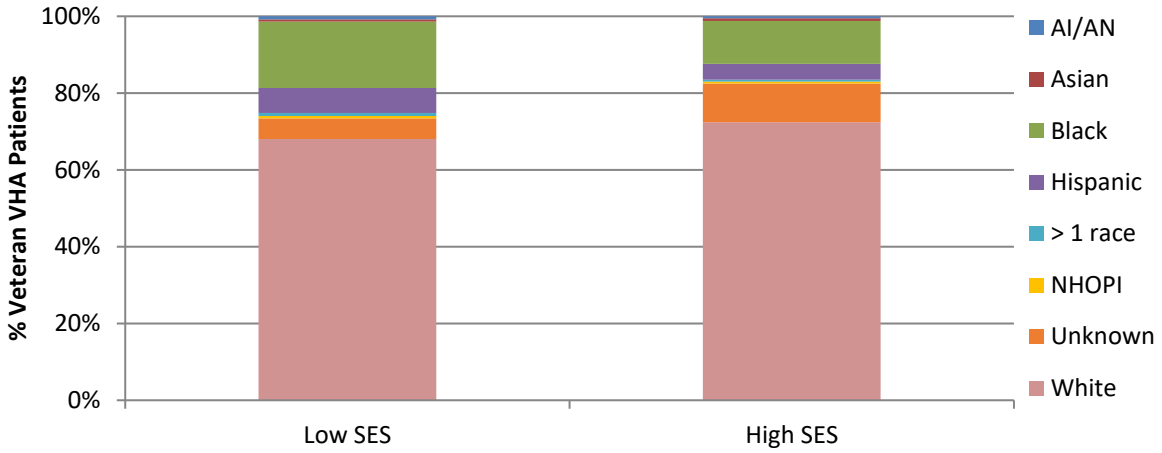
Note: SES denotes socio-economic status

Finding:

From FY16-FY19, the distribution of low versus high SES among Veteran VHA patients was almost even, with a slight majority (50.8%) in the Low SES category.

Race/Ethnicity by Socio-economic Status

Exhibit 6-2. Percent Distribution of Race/Ethnicity by Socio-economic Status among Veteran VHA Patients, FY16-FY19



Race/Ethnicity	Low SES	High SES
American Indian or Alaska Native	0.8%	0.5%
Asian	0.6%	0.7%
Black	17.3%	11.2%
Hispanic	6.5%	4.1%
More than one race	0.8%	0.5%
Native Hawaiian or other Pacific Islander	0.6%	0.5%
Unknown, declined, or missing	5.4%	10.1%
White	68.1%	72.4%

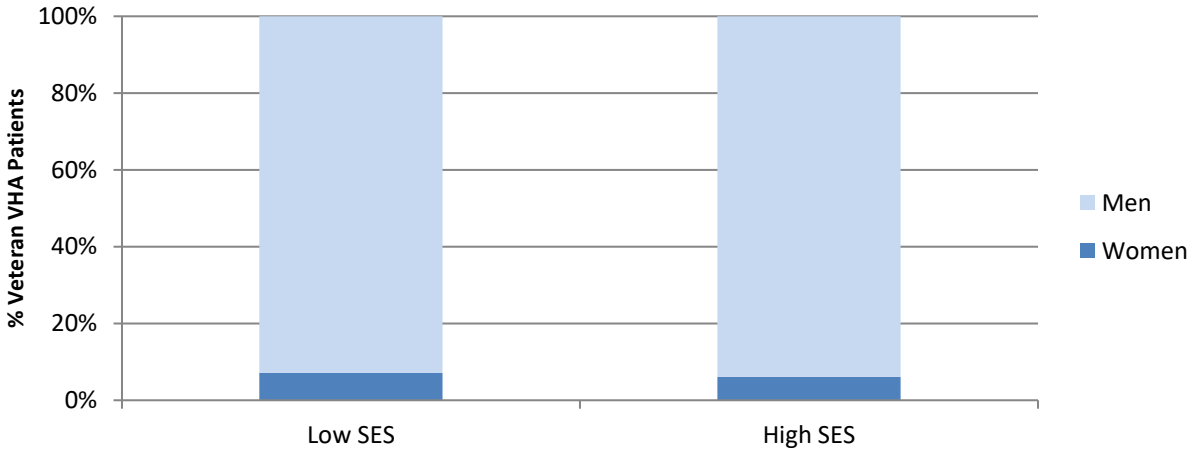
Note: AI/AN denotes American Indian or Alaskan Native; NHOPI denotes Native Hawaiian or other Pacific Islander

Finding:

From FY16-FY19, a higher proportion of Black (17.3% vs. 11.2%) and Hispanic Veterans (6.5% vs. 4.1%) were in the Low SES category, while White Veterans were more likely to be in the High SES category (72.4% vs. 68.1%).

Gender by Socio-economic Status

Exhibit 6-3. Percent Distribution of Gender by Socio-economic Status among Veteran VHA Patients, FY16-FY19



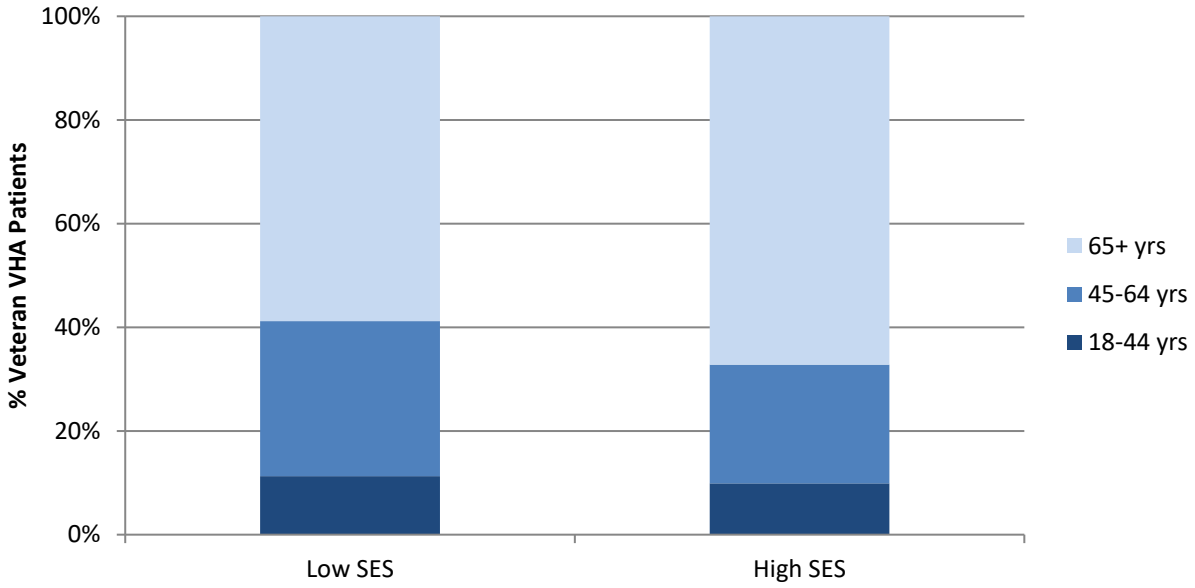
Gender	Low SES	High SES
Men	92.9%	93.9%
Women	7.1%	6.1%

Finding:

From FY16-FY19, a slightly higher proportion of Women were in the Low SES category (7.1%) compared to the High SES category (6.1%).

Age Group by Socio-economic Status (SES)

Exhibit 6-4. Percent Distribution of Age by Socio-economic Status among Veteran VHA Patients, FY16-FY19



Age	Low SES	High SES
65+ years	58.8%	67.2%
45-64 years	29.9%	22.9%
18-44 years	11.3%	9.9%

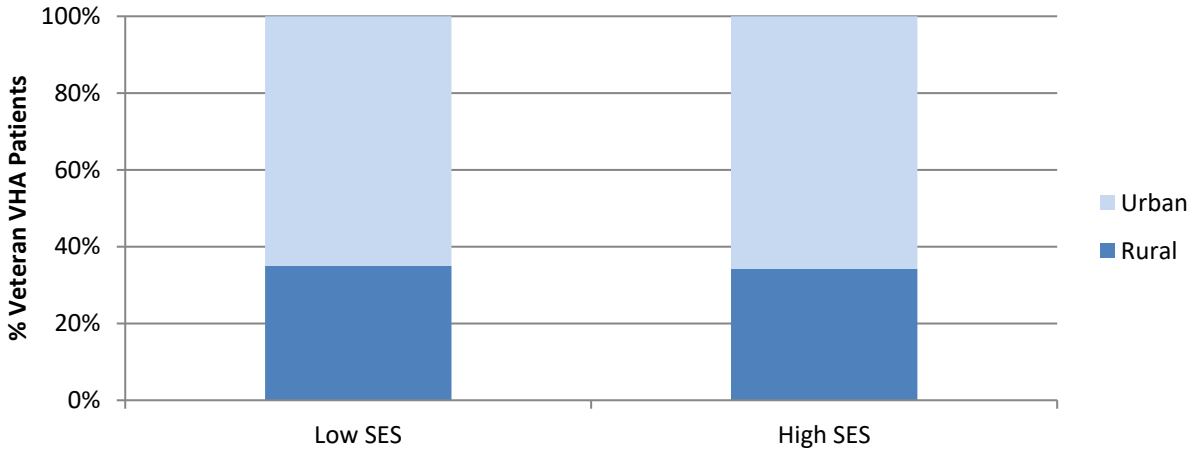
Note: SES denotes socio-economic status

Finding:

From FY16-FY19, Veterans age 65 years or older were more likely to be in the High SES category (67.2%) compared to those in middle age (45-64 years, 22.9%) or younger age (18-44 years, 9.9%).

Rurality by Socio-economic Status

Exhibit 6-5. Percent Distribution of Rural/Urban Status by Socio-economic Status among Veteran VHA Patients, FY16-FY19



Rural/Urban Status	Low SES	High SES
Urban	65.0%	65.8%
Rural	35.0%	34.2%

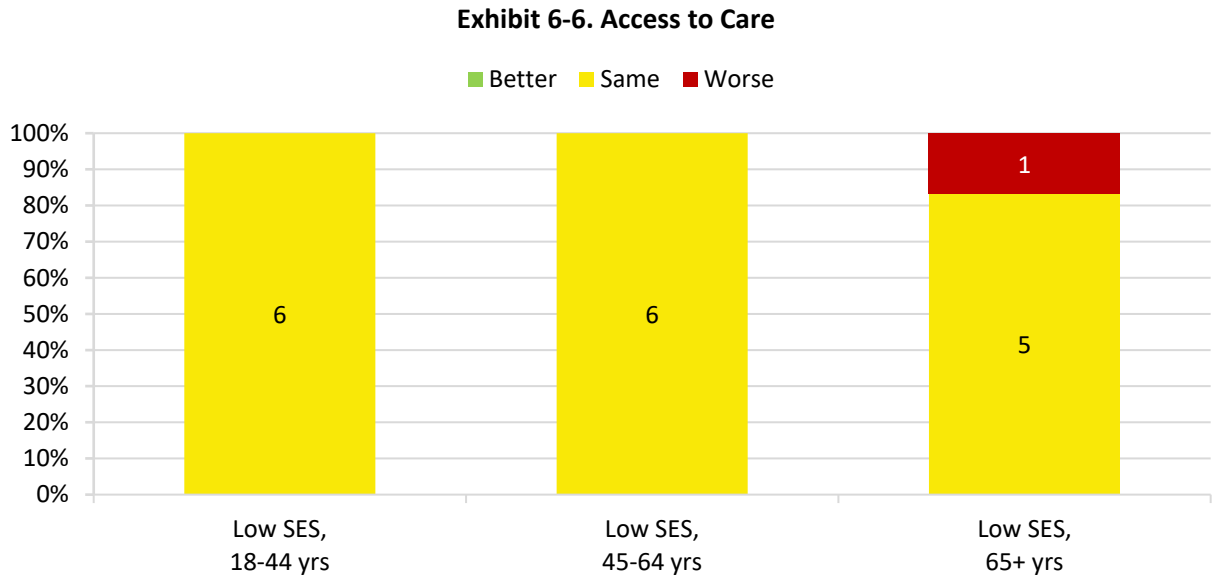
Finding:

From FY16-FY19, the distribution of SES was similar between those who resided in rural areas and those who resided in urban areas: rural Veterans (35.0% low SES compared to 34.2% high SES), urban counterparts (65.0% low SES compared to 65.8% high SES).

Section II: Patient Experiences

Variations in VHA Patient Experience of Access to Care by Veteran Socio-economic Status

Exhibit 6-6. Number and percentage of measures for which low socio-economic status Veteran VHA patients of specified age groups experienced better, same, or worse access to care compared with reference group



Comparison	Low SES, 18-44 years	Low SES, 45-64 years	Low SES, 65+ years
Worse	0	0	1
Same	6	6	5
Better	0	0	0

Reference group: High SES Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

Importance:

Access refers to the timely delivery of care, from receiving answers to calls and questions, obtaining appointments (both during routine and after-hours), and being seen on time. The timely receipt of care is important for addressing care issues as they arise and helping avoid the need for emergency or hospital care as well as assuring that preventive care is provided appropriately.[5]

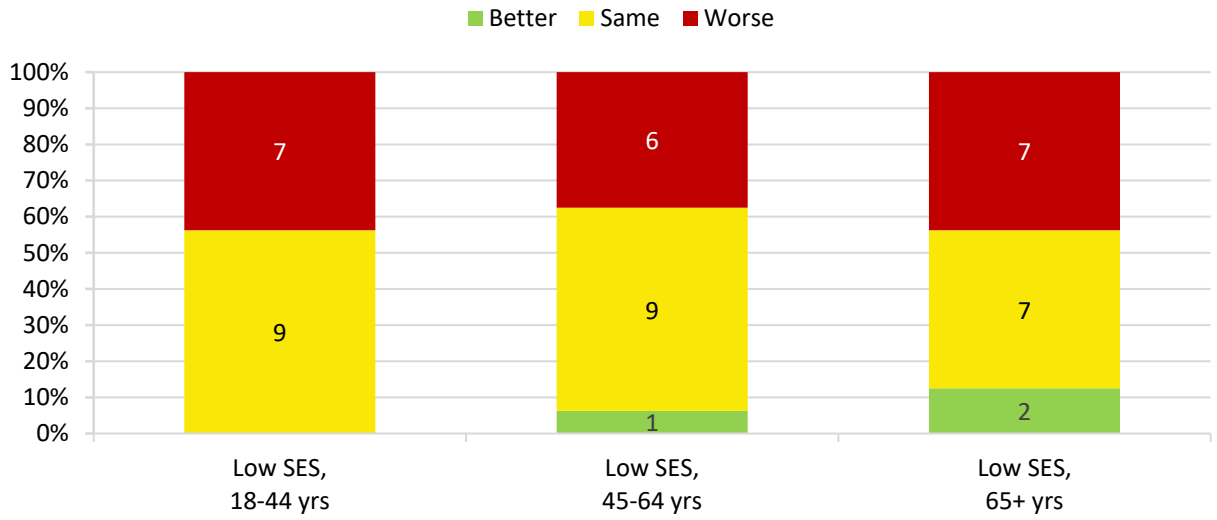
Findings:

- For the most part, regardless of age, high and low SES Veterans did not differ in their perceived access to care.
- Low SES and high SES Veterans age 18-44 years and age 45-64 years had similar ratings on 6 measures of access to care.
- Low SES Veterans age 65 years and older had worse ratings on 1 measure compared with high SES Veterans of that age group. For the other 5 measures, in the age 65 years and older Veteran group, ratings for low SES Veterans did not differ from ratings for high SES Veterans.

Variations in VHA Patient Experience of Person-centered Care by Veteran Socio-economic Status

Exhibit 6-7. Number and percentage of measures for which low socio-economic status Veteran VHA patients of specified age groups experienced better, same, or worse person-centered care compared with reference group

Exhibit 6-7. Person-centered Care



Comparison	Low SES, 18-44 years	Low SES, 45-64 years	Low SES, 65+ years
Worse	7	6	7
Same	9	9	7
Better	0	1	2

Reference group: High SES Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

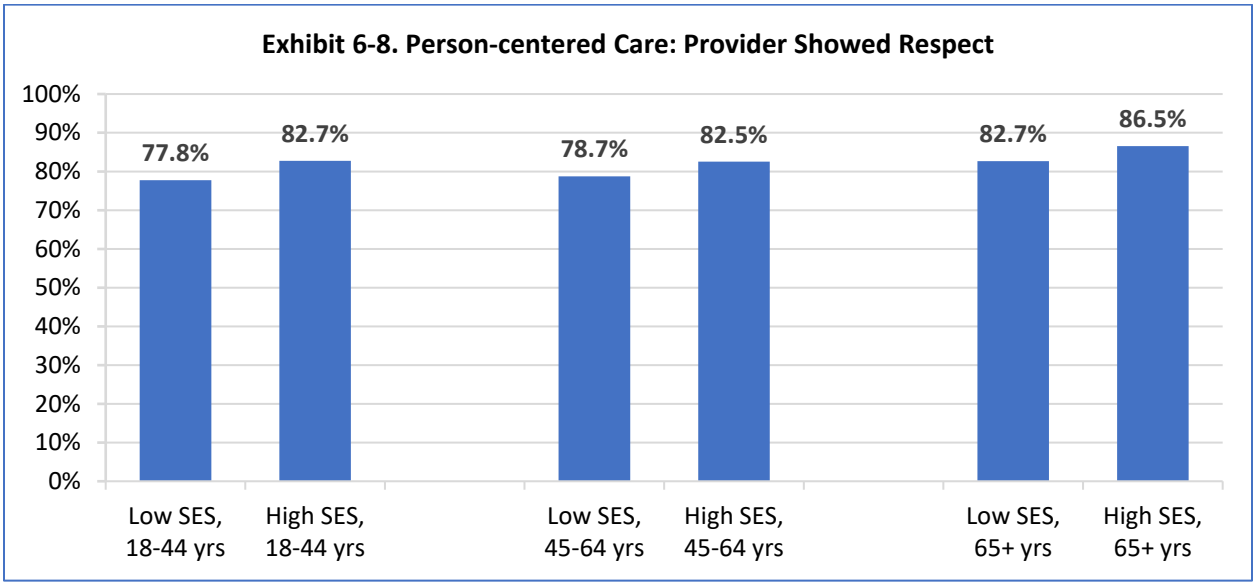
Importance:

Person-centered care is a broad domain that includes getting information about how the clinic works, appointment reminders, and good explanations from providers; and having a provider/care team that listened, knew you as a patient, was respectful, spent time with you, and asked about important personal goals and stressors. Greater receipt of person-centered care has been associated with greater patient engagement in care and ultimately better care outcomes.[6,7,8,9]

Findings:

- For the most part, regardless of age, low SES Veterans deemed their care as less person-centered than did high SES Veterans.
- The low SES 18-44 years age group reported worse person-centered care experiences on 7 of 16 measures compared with the high SES Veteran group.
- The low SES 45-64 years age group reported worse person-centered care experiences on 6 of 16 measures compared with the high SES Veteran group, and better care on 1 measure.
- The low SES age 65 years or older group reported worse person-centered care experiences on 7 of 16 measures compared with the high SES Veteran group, and better care on 2 measures.

Exhibit 6-8. VHA users who indicated, in the last 6 months, their provider always showed respect for what they had to say



Reference group: High SES Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

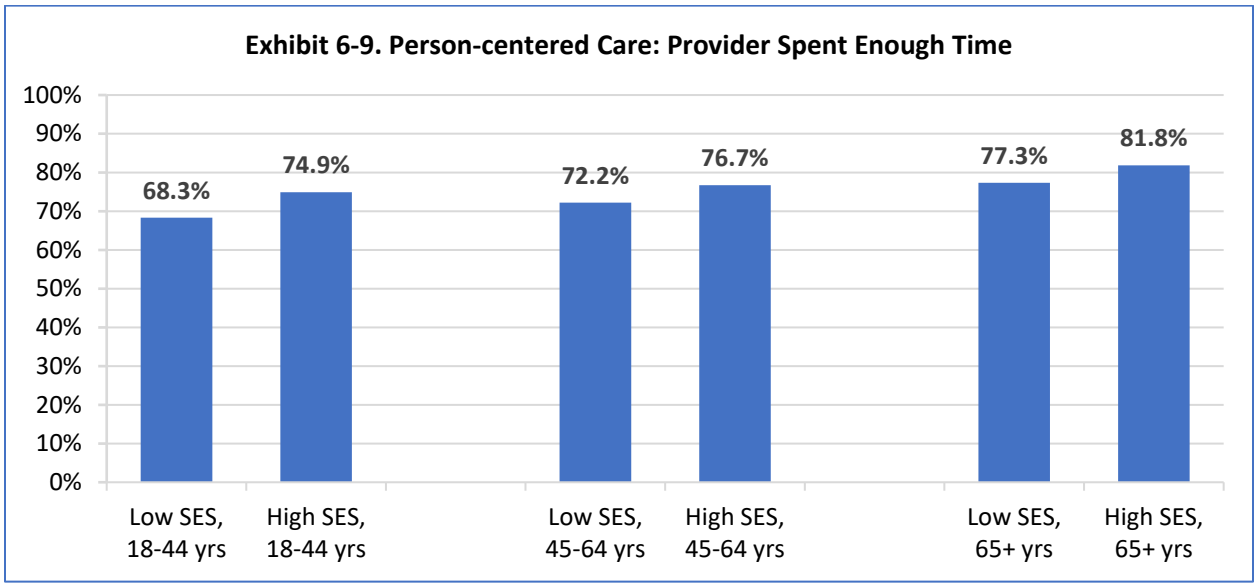
Importance:

Being treated with respect is considered a core element of a good patient-provider relationship. Good quality communication as measured by many items including being treated with respect has been shown to improve patient adherence and reduce perceptions of treatment burden.[10]

Findings:

- Among Veterans, regardless of age, low SES Veterans, as compared to high SES Veterans, were less likely to feel their providers showed respect for what they had to say.
- Among Veterans age 18-44 years, 77.8% of low SES compared with 82.7% of high SES Veterans always experienced their provider showing respect for what they had to say.
- Among Veterans age 45-64 years, 78.7% of low SES compared with 82.5% of high SES Veterans always experienced their provider showing respect for what they had to say.
- Among Veterans age 65 years or older, 82.7% of low SES compared with 86.5% of high SES Veterans always experienced their provider showing respect for what they had to say.

Exhibit 6-9. VHA users who indicated, in the last 6 months, their provider always spent enough time with them



Reference group: High SES Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

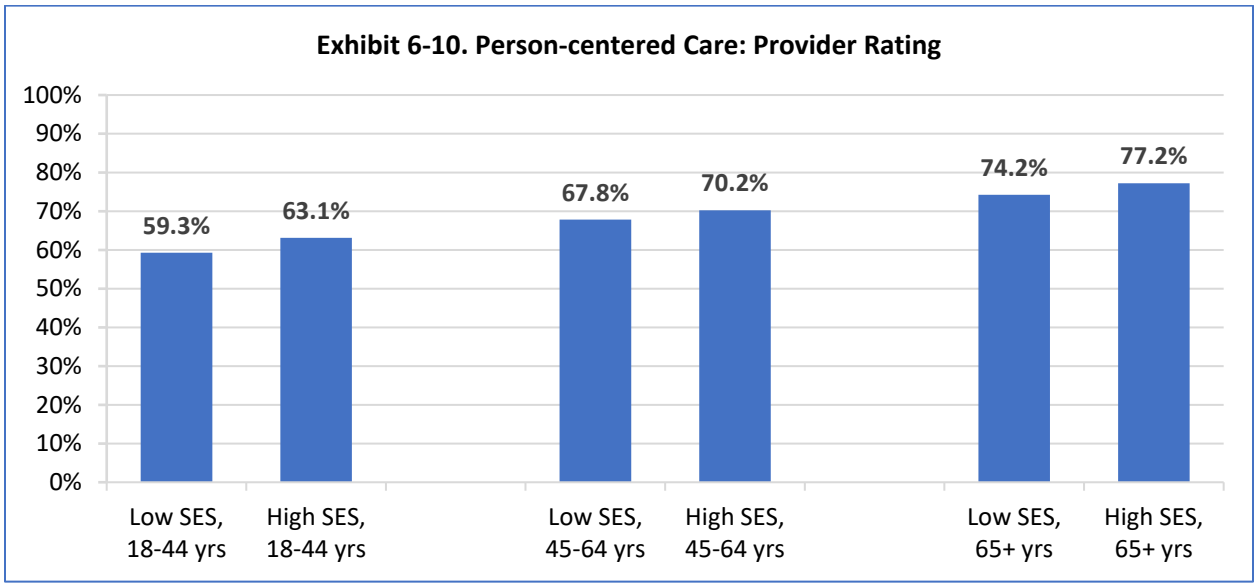
Importance:

Perceiving that one's provider has spent enough time is associated with provider satisfaction and potentially even receiving appropriate care such as cancer screening, especially if that time addresses patient questions.[11,12]

Findings:

- Among Veterans, regardless of age, low SES Veterans, as compared to high SES Veterans, were less likely to feel their providers spent enough time with them. However, with age, perceptions of time spent improved.
- Among Veterans age 18-44 years, 68.3% of low SES compared with 74.9% of high SES Veterans always experienced their provider spending enough time with them.
- Among Veterans age 45-64 years, 72.2% of low SES compared with 76.7% of high SES Veterans always experienced their provider spending enough time with them.
- Among Veterans age 65 years or older, 77.3% of low SES compared with 81.8% of high SES Veterans always experienced their provider spending enough time with them.

Exhibit 6-10. VHA users who indicated, using a number from 0 to 10, where 0 is the worst provider possible and 10 is the best provider possible, that they would rate their provider 9 or 10



Reference group: High SES Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

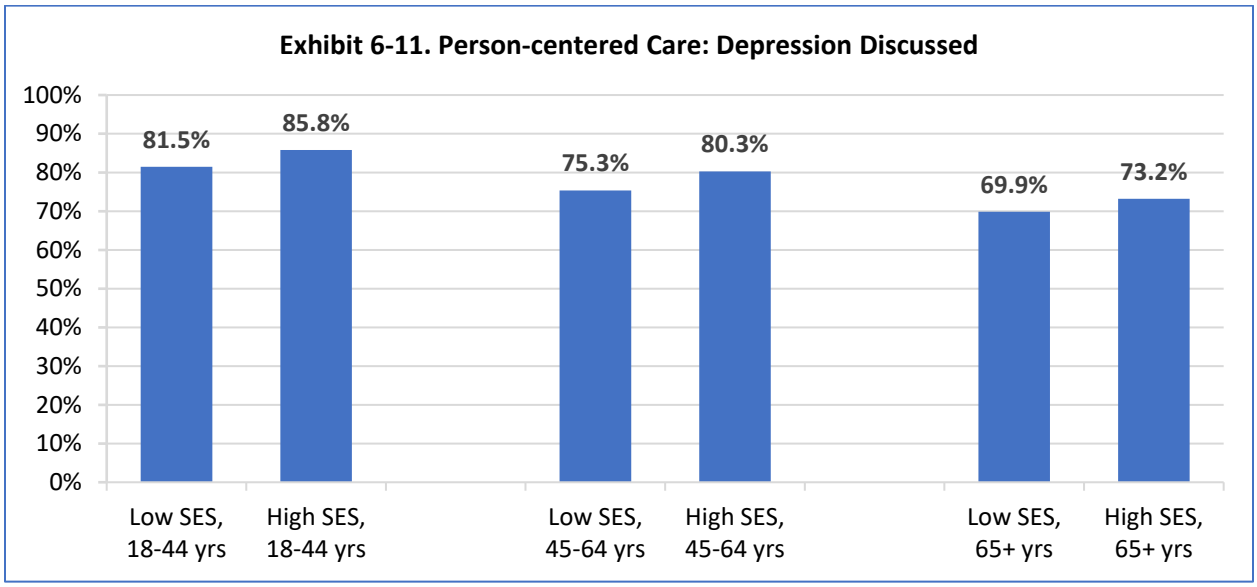
Importance:

Numerous studies have found satisfaction with, or ratings of, one's providers correlate to many important outcomes such as adherence to medications, completing recommended preventive care, and even appropriate resource uses.[13]

Findings:

- Disparities in provider ratings were present for low SES Veterans in the 65 years or older group, whereas provider ratings were similar between low SES and high SES Veterans of younger age groups.
- Among Veterans age 65 years or older, 74.2% of low SES compared with 77.2% of high SES Veterans rated their provider the highest rating (a rating of 9 or 10 on a 0-to-10 scale).

Exhibit 6-11. VHA users who indicated, in the last 6 months, that someone in their provider's office asked them if there was a period of time when they felt sad, empty, or depressed



Reference group: High SES Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

Importance:

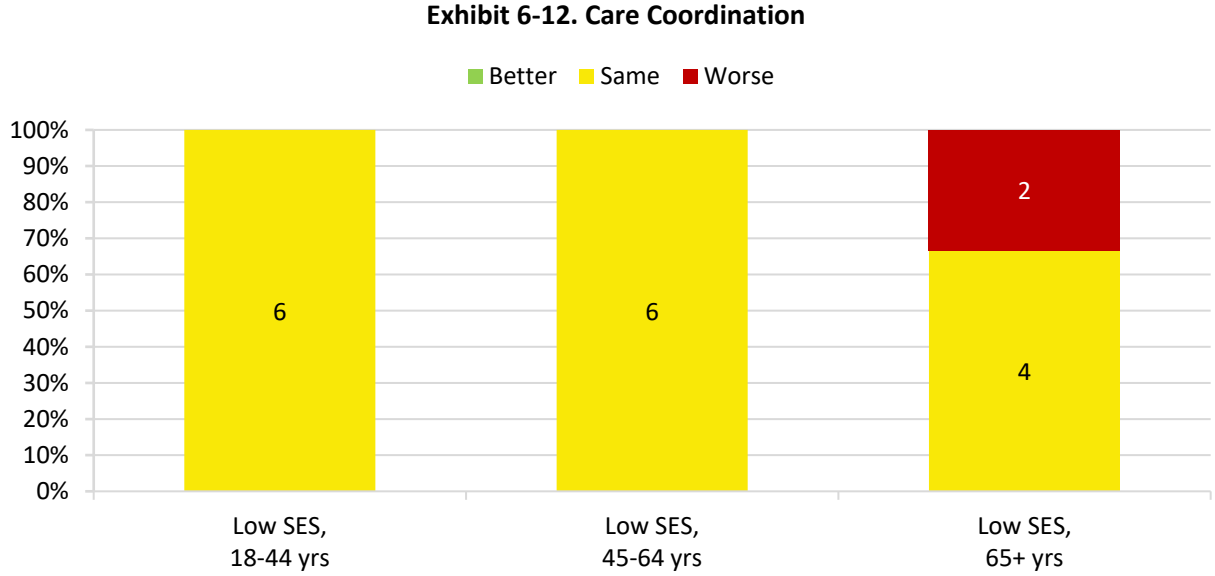
Depression leads to significant morbidity and is a risk factor for suicide. Suicide rates among Veterans is higher than among the general population, although the relative rate has been declining with Veterans accounting for 20% of all U.S. suicides in 2001 and only 14% in 2019.[14]

Findings:

- Across all age groups, low SES Veterans were less likely than high SES Veterans to have someone in their provider's office discuss symptoms of depression with them.
- Among Veterans age 18-44 years, 81.5% of low SES compared with 85.8% of high SES Veterans reported depression was discussed.
- Among Veterans age 45-64 years, 75.3% of low SES compared with 80.3% of high SES Veterans reported depression was discussed.
- Among Veterans age 65 years or older, 69.9% of low SES compared with 73.2% of high SES Veterans reported depression was discussed.

Variations in VHA Patient Experience of Care Coordination by Veteran Socio-economic Status

Exhibit 6-12. Number and percentage of measures for which low socio-economic status Veteran VHA patients of specified age groups experienced better, same, or worse care coordination compared with reference group



Comparison	Low SES, 18-44 years	Low SES, 45-64 years	Low SES, 65+ years
Worse	0	0	2
Same	6	6	4
Better	0	0	0

Reference group: High SES Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

Importance:

Care Coordination in this report refers to medication management, follow-up testing, and coordinating with specialists. Care coordination is another promising means to reducing acute care utilization and improving communication between patients and providers. A recent VA synthesis report highlights the promise of good care coordination models for the VA.[15]

Findings:

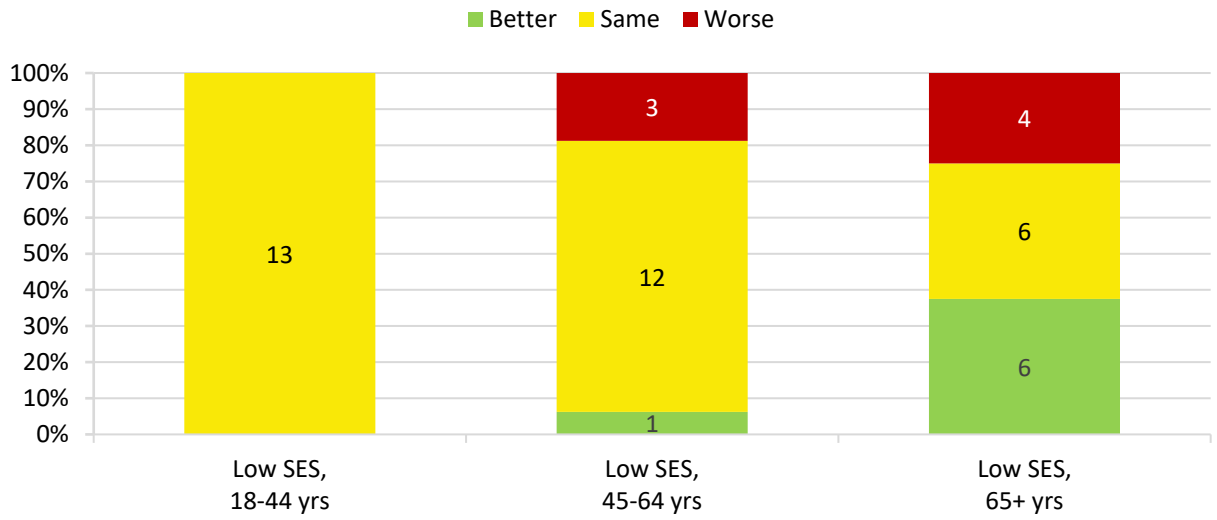
- For high and low SES Veterans age 18-44 years and age 45-64 years, there were no perceived differences in their care coordination.
- For two of 6 care coordination measures, low SES Veterans 65 years of age and older found their care coordination to be worse than high SES Veterans.

Section III: Health Care Quality

Variations in VHA Health Care Quality of Effective Treatment by Veteran Socio-economic Status

Exhibit 6-13. Number and percentage of measures for which low socio-economic status Veteran VHA patients of specified age groups experienced better, same, or worse effective treatment compared with reference group

Exhibit 6-13. Effective Treatment



Comparison	Low SES, 18-44 years	Low SES, 45-64 years	Low SES, 65+ years
Worse	0	3	4
Same	13	12	6
Better	0	1	6

Reference group: High SES Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

Importance:

Effective control of hypertension and diabetes is important for reducing long term complications of chronic diseases, such as myocardial infarction, stroke, heart and renal failure, blindness, amputations, and premature morality, to name a few. There is also extensive literature detailing disparities in control and outcomes of these diseases by race and SES.

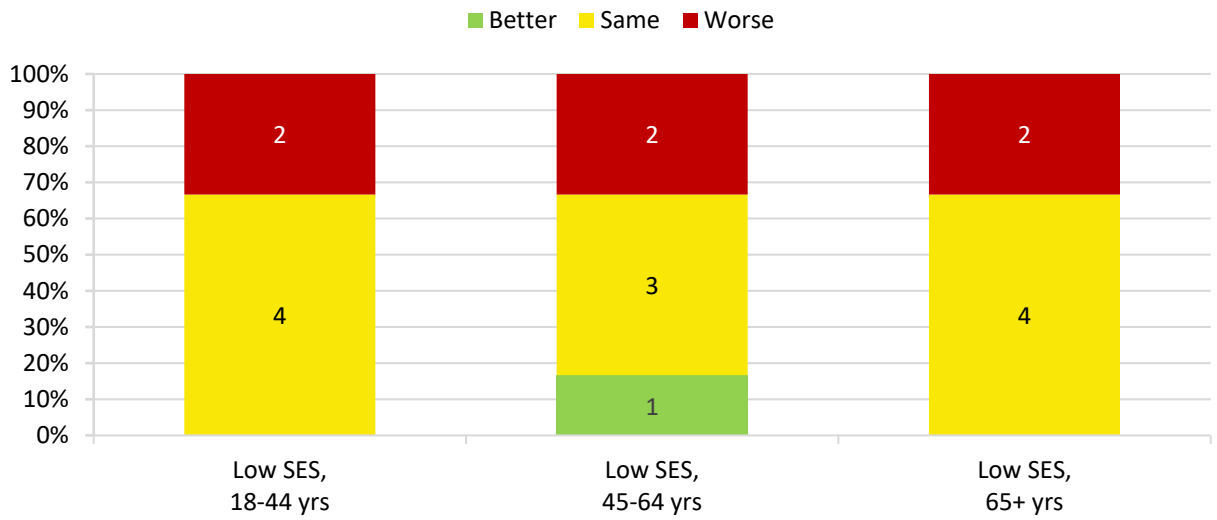
Findings:

- For Veterans age 18-44 years, high and low SES Veterans had similar rates of effective treatment. This contrasts with much of the quality literature outside of the VA.
- For Veterans age 45-64 years, low SES Veterans did better than high SES Veterans on 1 measure, the same on 12 measures, and worse on 3 measures.
- For Veterans 65 years of age or older, low SES Veterans did better than high SES Veterans on 6 measures, they did the same on 6 measures, and worse on 4 measures.

Variations in VHA Health Care Quality of Healthy Living – Lifestyle Modification by Veteran Socio-economic Status

Exhibit 6-14. Number and percentage of measures for which low socio-economic status Veteran VHA patients of specified age groups experienced better, same, or worse healthy living – lifestyle modification compared with reference group

Exhibit 6-14. Healthy Living – Lifestyle Modification



Comparison	Low SES, 18-44 years	Low SES, 45-64 years	Low SES, 65+ years
Worse	2	2	2
Same	4	3	4
Better	0	1	0

Reference group: High SES Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

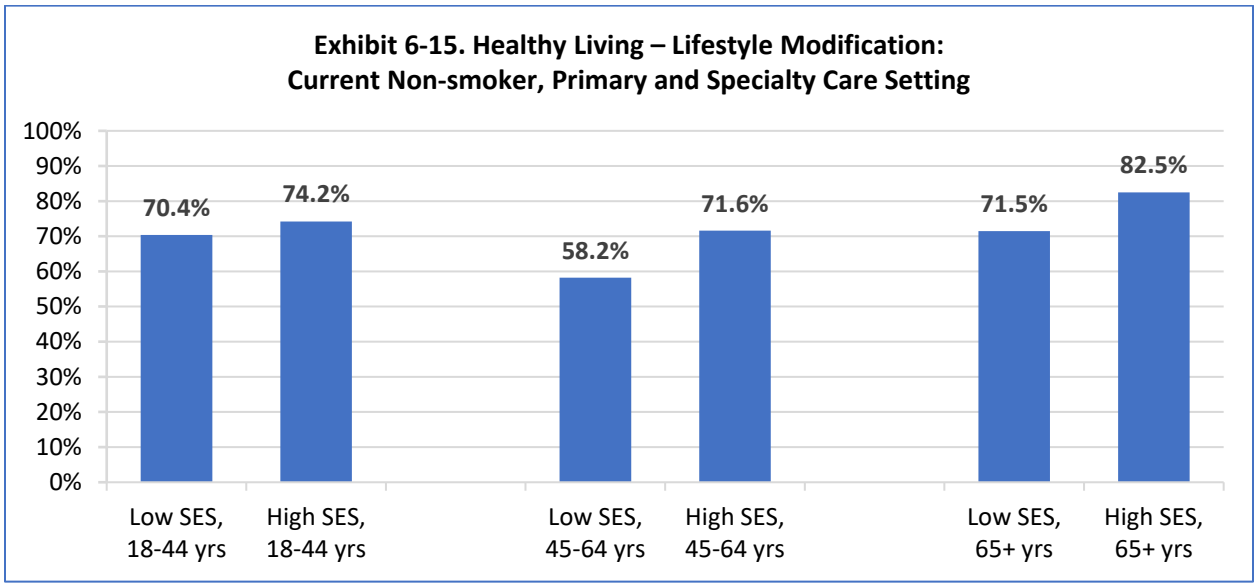
Importance:

Healthy living and lifestyle modification includes engaging in the VA weight management (MOVE) program and discussion by the provider of tobacco cessation, when eligible and appropriate. Obesity and tobacco use are much higher in low SES populations and are important to address to reduce disparities.

Findings:

- Across age groups, low SES Veterans were less likely to engage in and/or receive two of the 6 healthy living – lifestyle behaviors or aspects of care.
- However, among Veterans age 45-64 years, low SES Veterans did better on one of 6 healthy living – lifestyle behaviors or aspects of care.

Exhibit 6-15. VHA outpatients in a non-mental health clinic who were screened for tobacco use and did not use tobacco any time during the past 12 months



Reference group: High SES Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

Importance:

Smoking puts one at risk for a myriad of diseases including cancers and lung disease. According to the CDC, "Cigarette smoking remains the leading cause of preventable disease, disability, and death in the United States, accounting for more than 480,000 deaths every year, or about one in five deaths."[16] Screening for tobacco use helps identify current and new smokers who could benefit from evidence-based smoking cessation programs and treatments. Ascertaining who is a current or past heavy smoker, helps identify Veterans who may be appropriate for lung cancer screening. Supporting non-smokers promotes a healthy lifestyle.

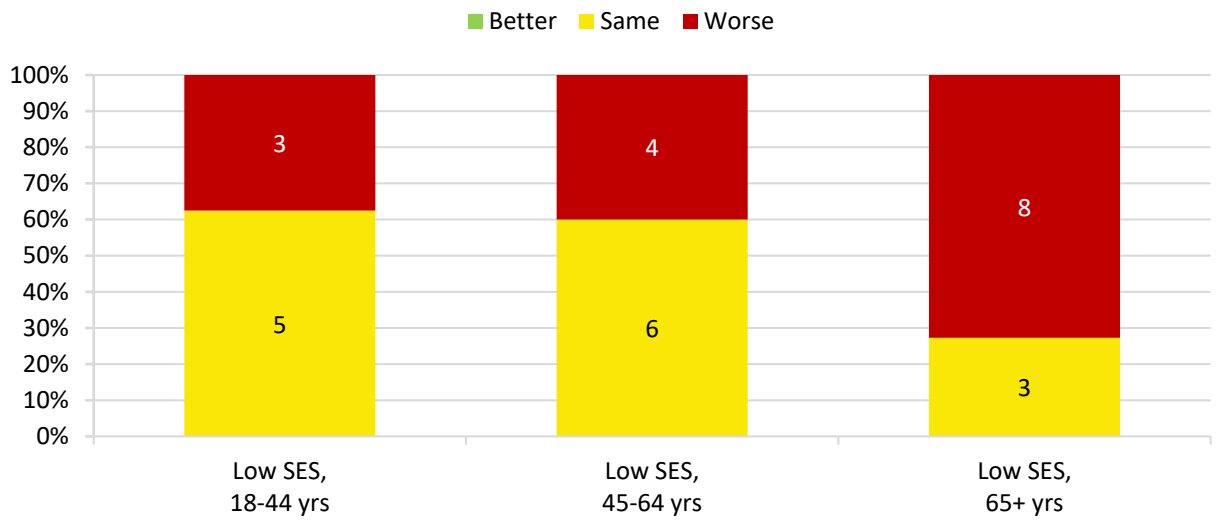
Findings:

- Low SES and high SES Veterans age 18-44 years had similar rates of non-smoking in the prior year, with approximately 70-74% being non-smokers.
- For Veterans age 45-64 years or age 65 years or older, low SES Veterans are less likely to be non-smokers compared with high SES Veterans.
- Among Veterans age 45-64 years, 58.2% of low SES compared with 71.6% of high SES Veterans were non-smokers in the prior year.
- Among Veterans age 65 years or older, 71.5% of low SES compared with 82.5% of high SES Veterans were non-smokers in the prior year.

Variations in VHA Health Care Quality of Healthy Living – Clinical Preventive Services by Veteran Socio-economic Status

Exhibit 6-16. Number and percentage of measures for which low socio-economic status Veteran VHA patients of specified age groups experienced better, same, or worse healthy living – clinical preventive services compared with reference group

Exhibit 6-16. Healthy Living – Clinical Preventive Services



Comparison	Low SES, 18-44 years	Low SES, 45-64 years	Low SES, 65+ years
Worse	3	4	8
Same	5	6	3
Better	0	0	0

Reference group: High SES Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

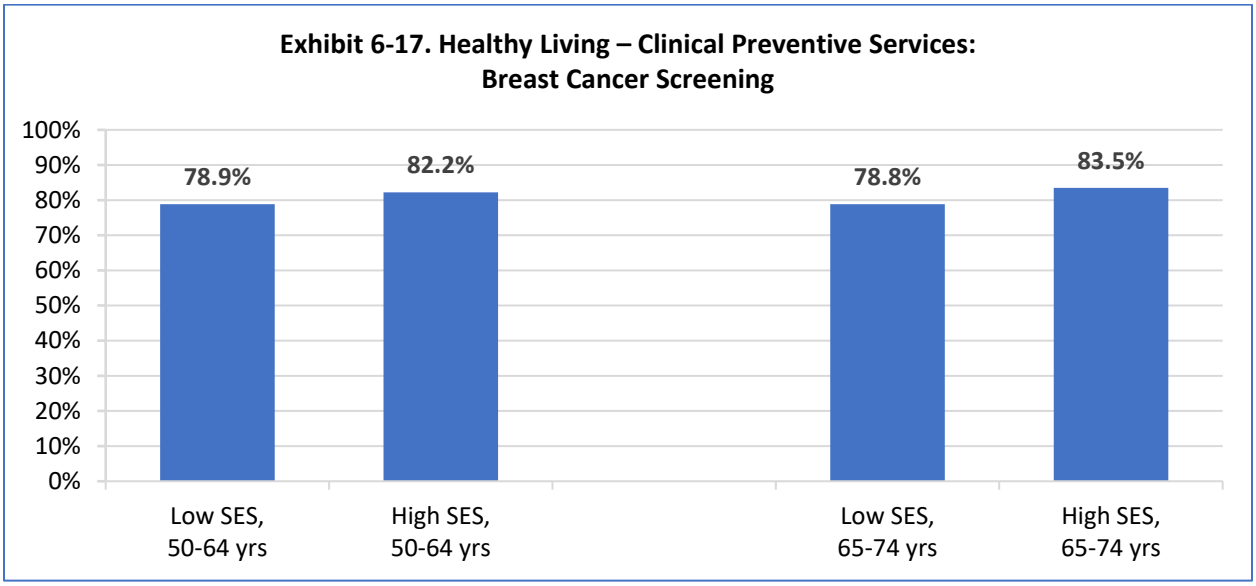
Importance:

Receiving preventive health care services such as breast cancer screening, colorectal cancer screening, vaccinations, and mental health screenings reduces the morbidity and mortality related to these diseases. Disparities by SES are known to exist outside the VA in relationship to these important preventive health services.

Findings:

- Across all age groups, low SES Veterans were less likely to receive preventive care services and these differences were magnified with age.
- For Veterans age 18-44 years, low SES Veterans did worse than high SES Veterans on 3 measures, and the same on 5 measures.
- For Veterans age 45-64 years, low SES Veterans did worse than high SES Veterans on 4 measures, and the same on 6 measures.
- For Veterans 65 years of age or older, low SES Veterans did worse than high SES Veterans on 8 measures, and the same on 3 measures.

Exhibit 6-17. Breast cancer screening for VHA women patients age 50-74, as evidenced by mammography screening in the prior 27 months among those age 52-74



Reference group: High SES Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

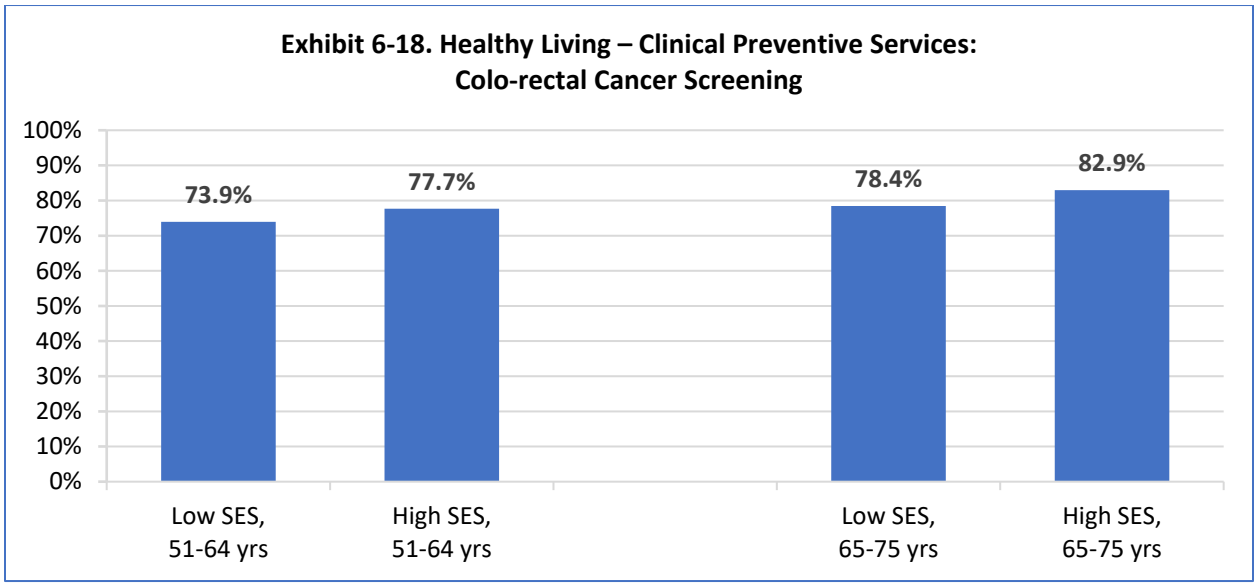
Importance:

Breast cancer screening helps to identify breast cancer early when it is easy to treat and cure.[17] In many health systems, individuals with low SES have lower rates of completing appropriate breast cancer screening compared with individuals with high SES.[18,19]

Findings:

- Low SES women Veterans have lower rates of completing breast cancer screening than high SES women Veterans.
- Among women Veterans age 50-64 years, 78.9% of low SES compared with 82.2% of high SES Veterans completed timely breast cancer screening.
- Among women Veterans age 65-74 years, 78.8% of low SES compared with 83.5% of high SES Veterans completed timely breast cancer screening.

Exhibit 6-18. VHA patients age 51-75, with documentation of colo-rectal cancer screening that is current based on the screening modality.
[Note: Timely screening includes colonoscopy within 10 years, CT colonography or flexible sigmoidoscopy within 5 years, fecal immunochemical-based (FIT)-DNA test or three-card guaiac fecal occult blood test (iFOBT/FIT) within 2 years]



Reference group: High SES Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

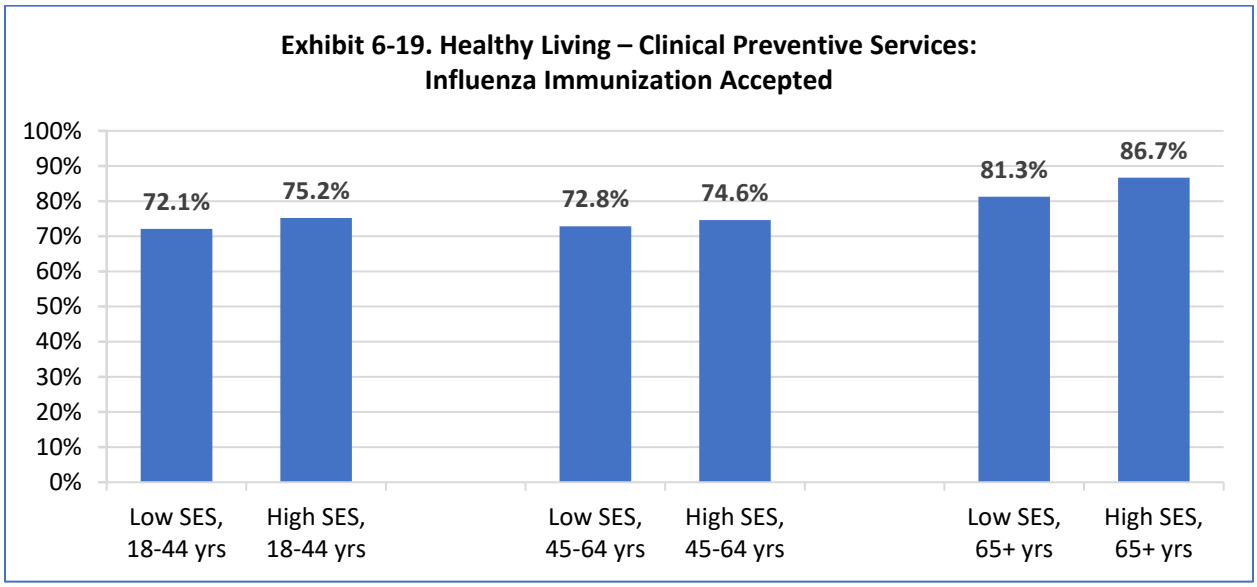
Importance:

Colo-rectal cancer (CRC) screening helps both to prevent the development of CRC as well as find CRC early when it is highly treatable and survivable. In many health systems, individuals with low SES have lower rates of completing appropriate CRC screening compared with individuals with high SES.[20] The COVID-19 pandemic has led to a dramatic decline in appropriate CRC screening as well as rising disparities in screening rates.[21,22,23]

Findings:

- As with many health systems, low SES Veterans have lower rates of completing appropriate CRC screening compared with high SES Veterans.
- Among Veterans age 51-64 years, 73.9% of low SES compared with 77.7% of high SES Veterans completed timely CRC screening.
- Among Veterans age 65-75 years, 78.4% of low SES compared with 82.9% of high SES Veterans completed timely CRC screening.

Exhibit 6-19. VHA patients who accepted influenza immunization.
[Note: This measure was assessed FY2017-FY2019]



Reference group: High SES Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

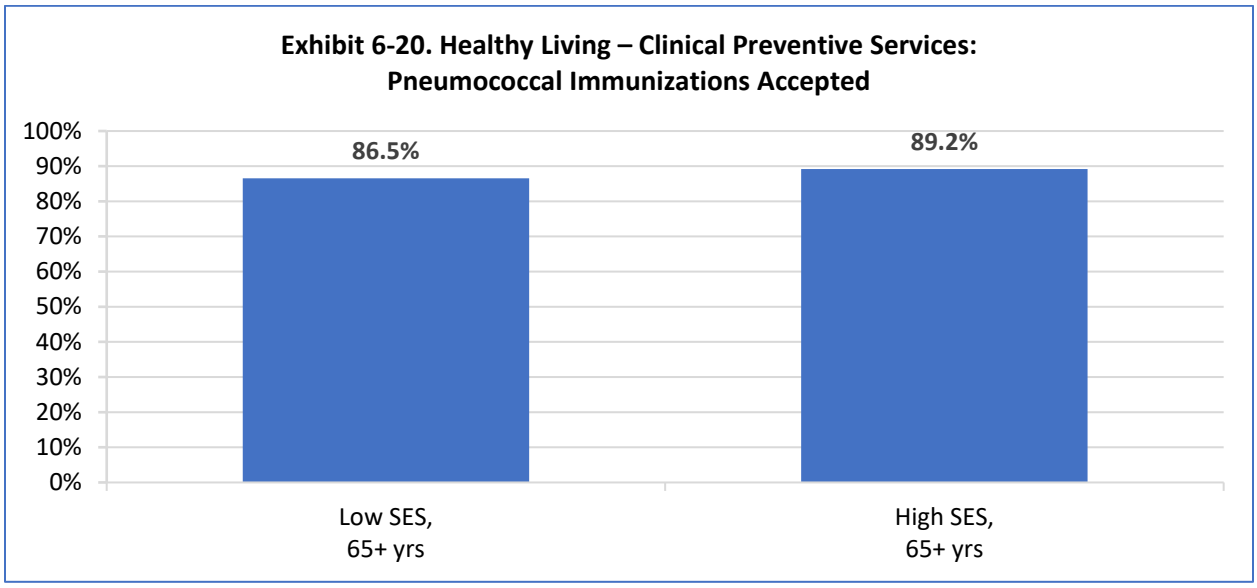
Importance:

Influenza vaccination helps reduce the risk of developing pneumonia - a leading cause of morbidity and mortality among people 65 years of age and older.[24] In the non-Veteran population, among those 19 years of age and older, the influenza vaccination rate was only 45% in 2017.[25]

Findings:

- There were disparities in acceptance of influenza vaccines, with low SES Veterans age 18-44 years and those age 65 years or older less likely than high SES Veterans of those age groups to receive influenza vaccination. While the rate of vaccination is highest among those 65 years of age or older, so too is the difference in vaccination rates between low and high SES Veterans (5.4%).
- Among Veterans age 18-44 years, 72.1% of low SES compared with 75.2% of high SES Veterans accepted an influenza vaccine.
- Among Veterans age 65 years or older, 81.3% of low SES compared with 86.7% of high SES Veterans accepted an influenza vaccine.
- Low SES and high SES Veterans age 45-64 years had similar rates of acceptance of influenza vaccination, with approximately 73% to 75% accepting the vaccine.

Exhibit 6-20. VHA patients age 65 or older who accepted pneumococcal immunizations



Reference group: High SES Veteran VHA patients of corresponding age group
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

Importance:

Pneumococcal vaccination helps reduce the risk of developing pneumonia - a leading cause of morbidity and mortality among people 65 years of age and older.[24] In the non-Veteran population, among those 65 years of age and older, the pneumococcal vaccination rate was 69% in 2017.[25]

Findings:

- Low SES Veterans are less likely to receive a pneumococcal vaccination than high SES Veterans.
- Among Veterans age 65 years or older, 86.5% of low SES compared with 89.2% of high SES Veterans accepted pneumococcal vaccination.

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Chapter 7

Patient Experiences and Health Care Quality for Veterans in VHA by Service-Connected Disability Rating

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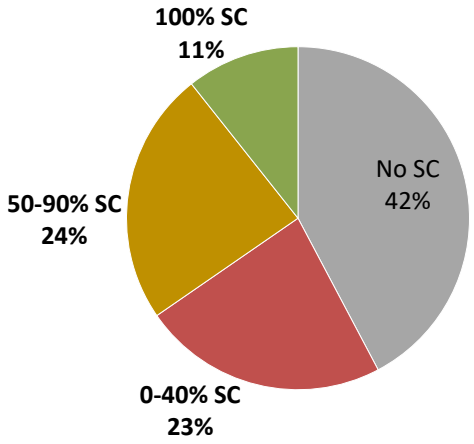
Section I: Background and Sociodemographic Characteristics

Individual enrollment into the VA healthcare system is based on a system in which Veterans with a military service-connected condition get precedence in care over other Veterans, such as Veterans without service-connected conditions.[1] "Service-connected" denotes conditions that were caused or aggravated by military service.[2] Compensation for the service-connected disability (SCD) is administered by the Veterans Benefits Administration, and the distributed monetary allowance is based on the severity of the service-connected disability evaluated.[2] The disability rating and compensation percentage is expressed on a scale, in increments of 10%, from 0% (least disabling) to 100% (most disabling).[3] Higher disability ratings allow for greater compensation and increased access to VA healthcare resources and benefits.[3] For some Veterans, service-connection and its accompanied benefits often represents the difference between access and no access to VA health care facilities.[1] Disparities in service-connected disability rating status can be found across several domains including race/ethnicity, gender, age, and geographical areas.

Service-connected Disability Rating in VHA

Exhibit 7-1. Percent Distribution of Service-connected Disability Rating among Veteran VHA Patients, FY16-19



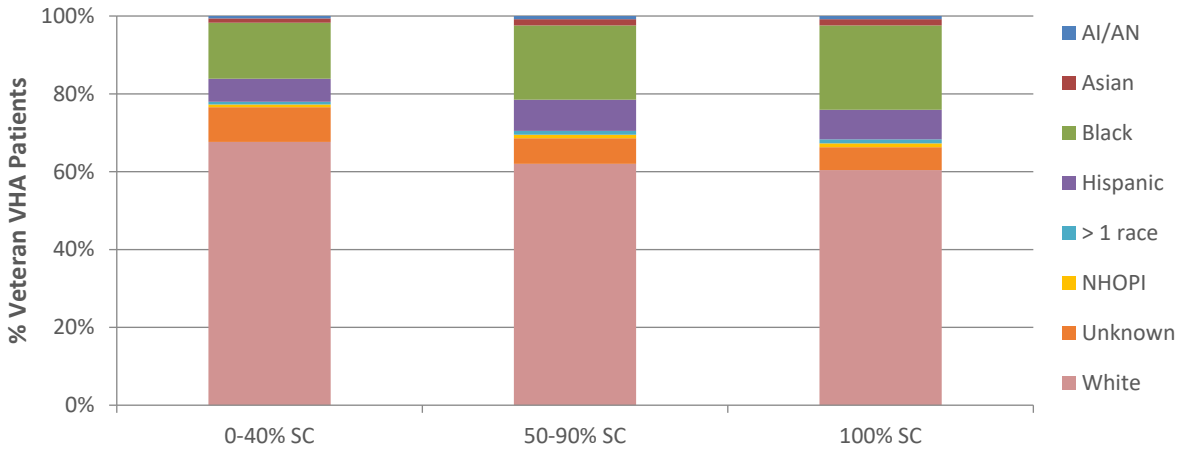
Service-connected Disability Rating	No SC	0-40% SC	50-90% SC	100% SC
Percentage	42%	23%	24%	11%

Findings:

- Overall, among FY2016 – FY2019 Veteran VA healthcare users, more than half (58%) of Veteran patients had service-connected disabilities. Overall, 11% have 100% service-connected disability, 24% have between 50-90% service-connected disability, and 23% have less than 50% service-connected disability.
- This chapter focuses on comparisons among Veteran VHA patients with service-connected disabilities.

Race/Ethnicity by Service-connected Disability Rating

Exhibit 7-2. Percent Distribution of Race/Ethnicity by Service-connected Disability Rating among Veteran VHA Patients, FY16-FY19



Race/Ethnicity	0-40% SC	50-90% SC	100% SC
AI/AN	0.6%	0.8%	0.8%
Asian	1.1%	1.6%	1.6%
Black	14.4%	19.1%	21.7%
Hispanic	5.9%	8.0%	7.6%
More than one race	0.7%	1.0%	1.0%
NHOPI	0.7%	0.9%	1.0%
Unknown	8.9%	6.6%	5.9%
White	67.6%	62.0%	60.4%

Note: AI/AN denotes American Indian or Alaskan Native; NHOPI denotes Native Hawaiian or other Pacific Islander; Unknown denotes unknown, declined, or missing race/ethnicity

Importance:

Having a service-connected disability (SCD) rating is an essential facilitator of VA healthcare access especially for racial/ethnic minority groups customarily underserved in non-VA healthcare settings.[4,5]

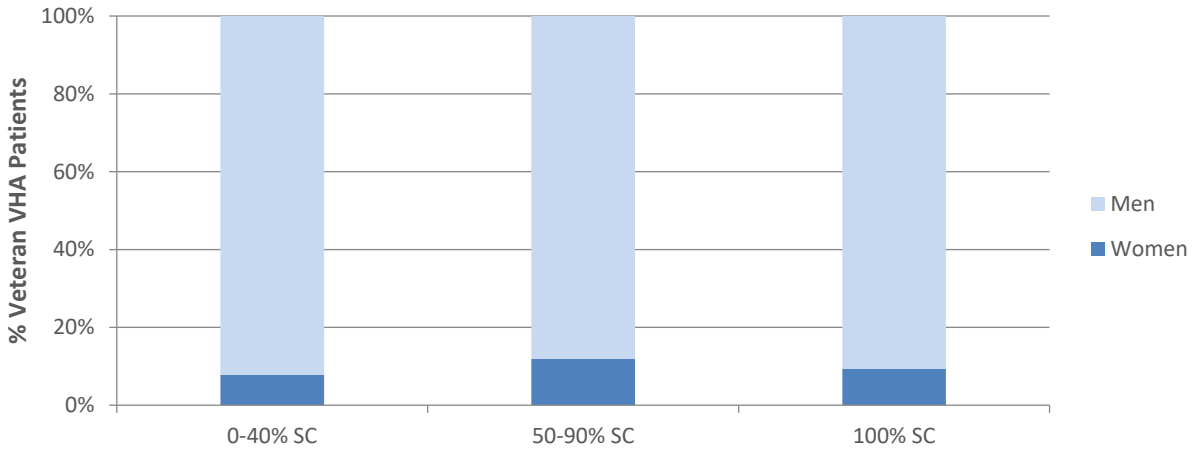
Findings:

- The racial/ethnic distribution of the VHA patient population varies by service-connected disability rating. For example, the 0-40% service-connected patient category has the highest proportion of Veterans who identify as non-Hispanic White (67.6%), versus 60.4% identifying as non-Hispanic White among 100% service-connected VHA patients.
- The proportion of White Veterans and Veterans for whom race/ethnicity is unknown decreases as SCD ratings increase, while other racial/ethnic groups have greater representation as SDC ratings increase. For the 0-40% SCD group, White Veterans make up most of the group at 67.6% but have a decrease in proportionate representation to 62.0% for the 50-90% SCD group, and a further decrease in proportionate representation to 60.4% for the 100% SCD group.
- The unknown race/ethnicity group also decreases in proportionate representation as the SCD ratings increase, from 8.9% to 6.6% to 5.9%, respectively, as SCD group increases from 0-40% to 100%.

- NHOPI Veterans are present in increasing proportions from 0.7% to 0.9% to 1.0% as the SCD ratings increase, while the greater than one race, AI/AN, and Asian race/ethnicity groups have increasing proportions from 0-40% to 50-90% SCD group (and 100% SCD group remaining the same percentage as the 50-90% SCD group).
- For the greater than one race group, the proportions increase from 0.7% for the 0-40% SCD group, to 1.0% for both the 50-90% SCD and 100% SCD groups.
- AI/AN Veterans comprise 0.6%, 0.8%, and 0.8% of the SCD groups, respectively; Asian Veterans comprise 1.1%, 1.6%, and 1.6%, respectively.
- Hispanic Veterans increase in proportion from the 0-40% SCD group to the 50-90% SCD group but have a slight decrease in representation in the 100% SCD group, with percentages being 5.9% to 8.0% to 7.6%, respectively.

Gender by Service-connected Disability Rating

Exhibit 7-3. Percent Distribution of Gender by Service-connected Disability Rating among Veteran VHA Patients, FY16-FY19



Gender	0-40% SC	50-90% SC	100% SC
Men	92.2%	88.1%	90.7%
Women	7.8%	11.9%	9.3%

Importance:

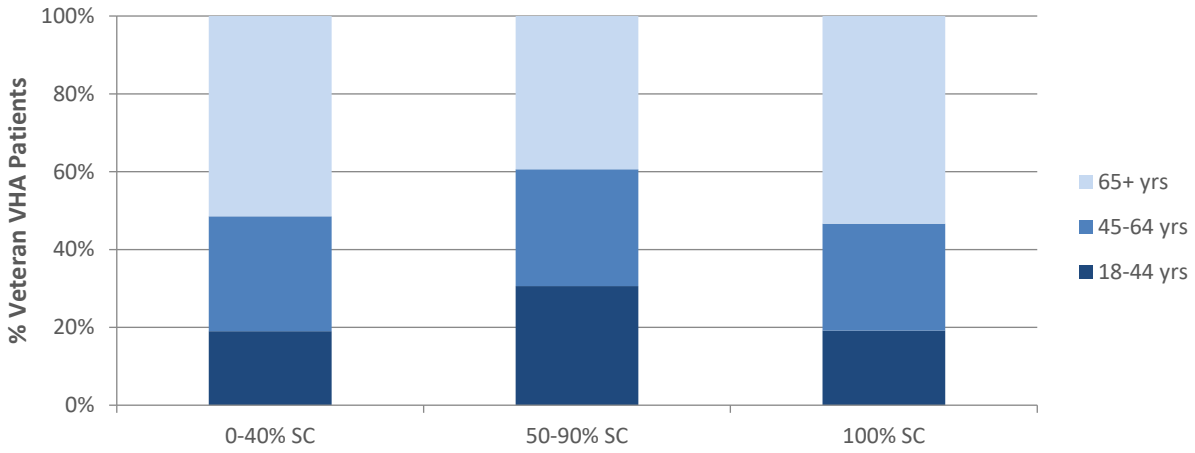
The representation of women versus men highlights the need for VA healthcare services to continue to direct attention to identifying the factors influencing women Veteran health care decision making and reasons for seeking non-VA versus VA healthcare.[6]

Findings:

- Women Veterans have greater representation in the 50-90% SCD and 100% SCD groups, compared with their representation in the 0-40% SCD group.
- Overall, among Veteran VHA patients with a 50% or greater SCD, more than one in 10 are women.

Age Group by Service-connected Disability Rating

Exhibit 7-4. Percent Distribution of Age by Service-connected Disability Rating among Veteran VHA Patients, FY16-FY19



Age	0-40% SC	50-90% SC	100% SC
65+ years	51.4%	39.4%	53.4%
45-64 years	29.5%	30.0%	27.5%
18-44 years	19.0%	30.6%	19.2%

Importance:

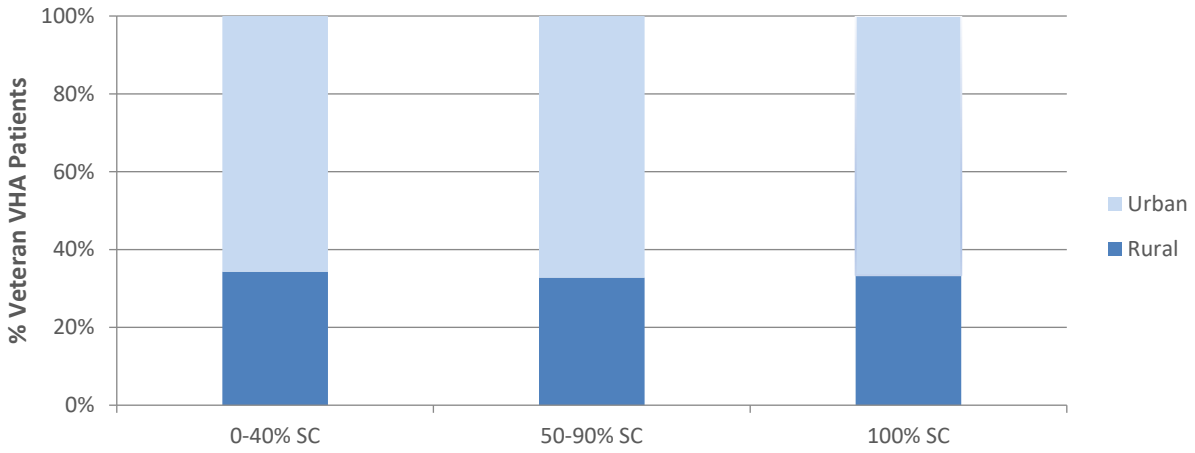
Although Veterans age 65 years and older continue to be the largest cohort of utilizers of VA healthcare, there is an increasing influx of younger Veterans. Direct focus and attention on the needs, risk behaviors and psychosocial challenges of this younger Veteran population group should continue.

Findings:

- Across SCD groups, VHA patients who have a 50-90% SCD rating have the highest proportion of Veterans under the age of 65 (60.6%), and Veterans age 18-44 years make up a greater proportion of the 50-90% SCD group than of the other SCD groups (i.e., 30.6% versus 19.0%-19.2%).
- Veterans age 45-64 years comprise 27.5%-30.0% of the SCD groups.
- The 65+ age group comprises the highest proportion of each of the SCD categories and have the greatest representation in the 100% SCD category.

Rurality by Service-connected Disability Rating

Exhibit 7-5. Percent Distribution of Rural/Urban Status by Service-connected Disability Rating among Veteran VHA Patients, FY16-FY19



Rural/Urban Status	0-40% SC	50-90% SC	100% SC
Urban	65.7%	67.2%	66.6%
Rural	34.3%	32.8%	33.4%

Importance:

Geographic challenges to accessing healthcare continue to exist for rural residing residents. VA should continue identifying approaches to tackle healthcare access and care coordination toward rural-residing Veteran patients.

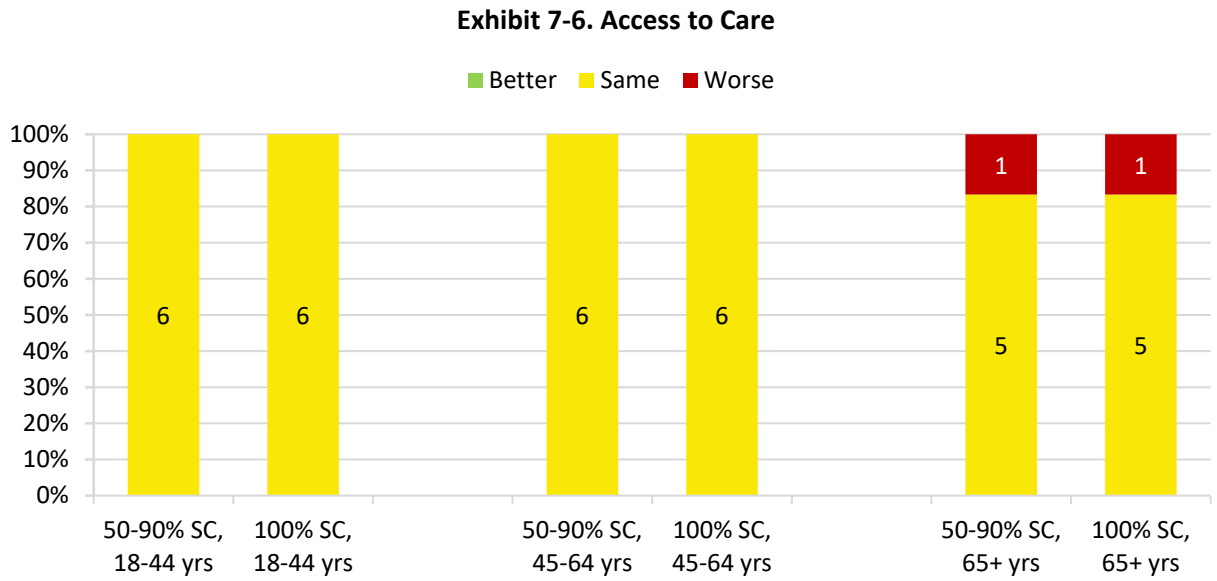
Findings:

- Veterans who reside in rural areas comprise about one-third (32.8%-34.3%) in each of the SCD categories, which is consistent with the proportion of Veterans who reside in rural areas.
- Veterans who reside in urban areas comprise two-thirds (65.7%-67.2%) of each of the SCD categories.

Section II: Patient Experiences

Variations in VHA Patient Experience of Access to Care by Veteran Service-connected Disability Rating

Exhibit 7-6. Number and percentage of measures for which Veteran VHA patients of selected groups experienced better, same, or worse access to care compared with reference group



Comparison	50-90% SC, 18-44 years	100% SC, 18-44 years	50-90% SC, 45-64 years	100% SC, 45-64 years	50-90% SC, 65+ years	100% SC, 65+ years
Worse	0	0	0	0	1	1
Same	6	6	6	6	5	5
Better	0	0	0	0	0	0

Reference group: Veteran VHA patients with 0-40% service-connected disability rating of corresponding age group.
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

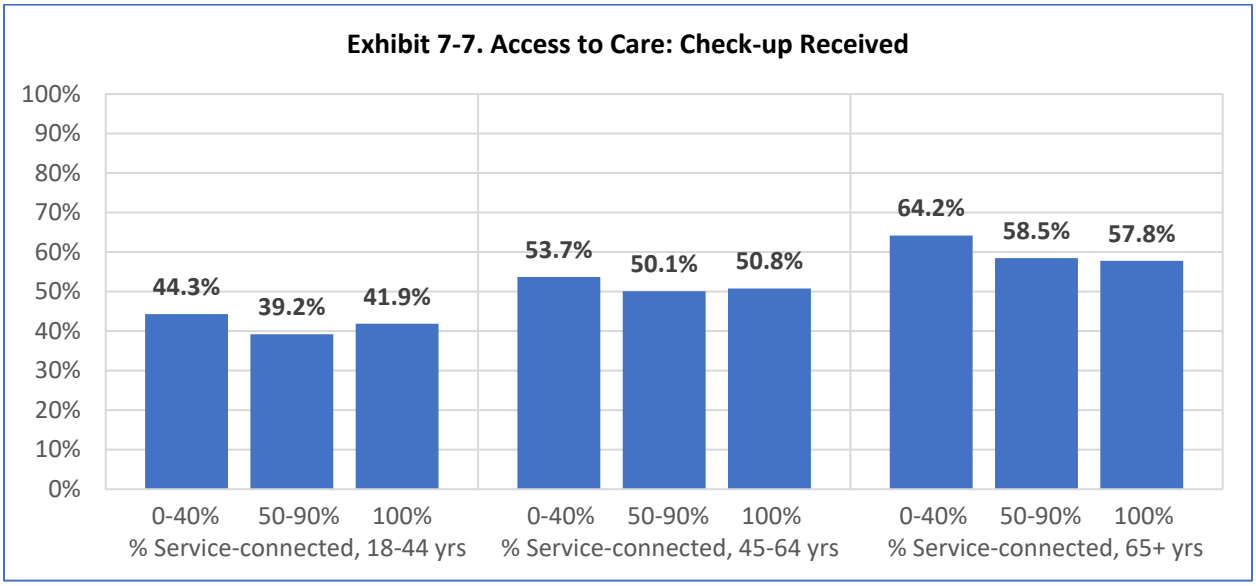
Importance:

Service-connected disability (SCD) ratings are important for health care access as a Veterans' priority rating may depend, at least partially, on their degree of SCD.[7] Additionally, those with lower SCD may have higher cost sharing for medical care.[8] For some Veterans, service-connection and its accompanied benefits often represents the difference between access and no access to VA health care facilities.[1] Veterans with disabilities also experienced a delay in getting care compared to Veterans without disabilities.[9]

Findings:

- Overall Veterans within the age groups of 18-44 years and 45-64 years with either 50-90% or 100% SCD reported the same experiences of VHA access as compared to the reference group of Veteran VA users with 0-40% SCD rating within the corresponding age groups.
- Veterans who are age 65 years or older with either 50-90% or 100% SCD reported the same access experience across 5 measures and worse access in 1 measure compared to Veteran VA users with 0-40% SCD.

Exhibit 7-7. VHA users who indicated in the last 6 months that when they made an appointment with their provider for a check-up or routine care, they always received an appointment as soon as needed



Reference group: Veteran VHA patients with 0-40% service-connected disability rating of corresponding age group.
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

Importance:

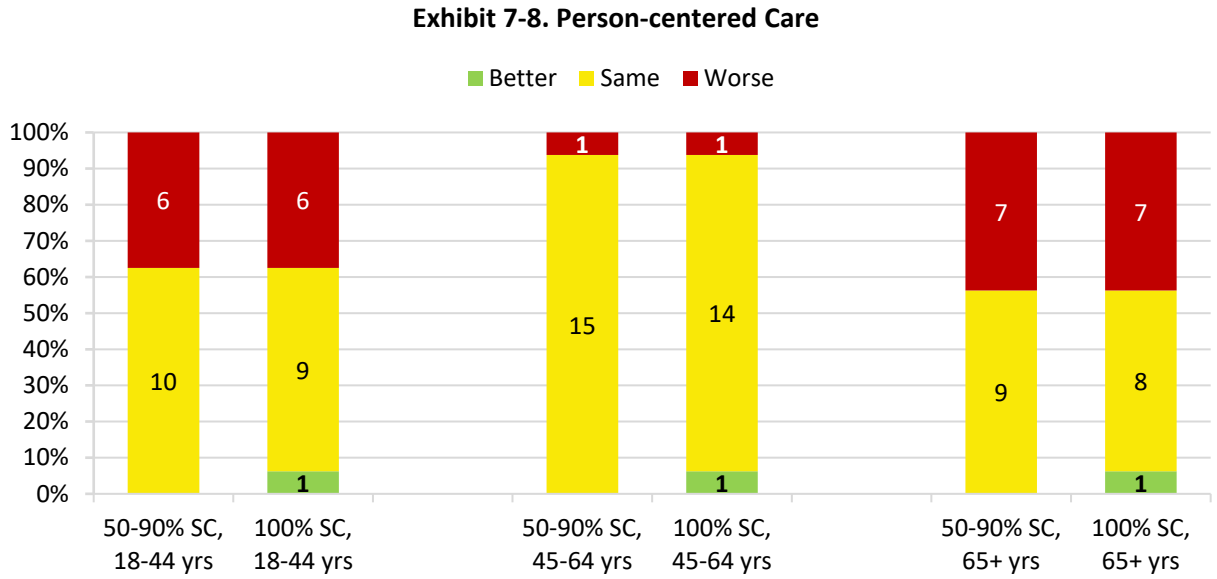
Service-connected disability (SCD) ratings are important for health care access as a Veterans' priority rating may depend, at least partially, on their degree of SCD.[7] For some Veterans, service-connection and its accompanied benefits often represents the difference between access and no access to VA health care facilities.[1] Longer Veteran wait time for outpatient care leads to small decreases in utilization and are related to poorer health outcomes.[18] Veterans with disabilities experienced a delay in getting care compared to Veterans without disabilities.[9]

Findings:

- Veterans who are age 65 years and older that have 50-90% SCD or 100% SCD reported lower ratings for access to care related to receiving an appointment for routine care as soon as needed, in comparison to the ratings for their 65 years and older age group counterparts with a 0-40% SCD.
- For the other groups of Veterans age 18-44 years or 45-64 years, there are not significant differences among Veterans with higher SCD ratings compared to those with a 0-40% SCD rating.
- Across SCD ratings, approximately 40% of Veterans age 18-44 years were able to make an appointment when they wanted to, compared to approximately 50% of Veterans age 45-64 years and approximately 60% of Veterans age 65 years and older.

Variations in VHA Patient Experience of Person-centered Care by Veteran Service-connected Disability Rating

Exhibit 7-8. Number and percentage of measures for which Veteran VHA patients of selected groups experienced better, same, or worse Person-centered care compared with reference group



Comparison	50-90% SC, 18-44 years	100% SC, 18-44 years	50-90% SC, 45-64 years	100% SC, 45-64 years	50-90% SC, 65+ years	100% SC, 65+ years
Worse	6	6	1	1	7	7
Same	10	9	15	14	9	8
Better	0	1	0	1	0	1

Reference group: Veteran VHA patients with 0-40% service-connected disability rating of corresponding age group.

Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

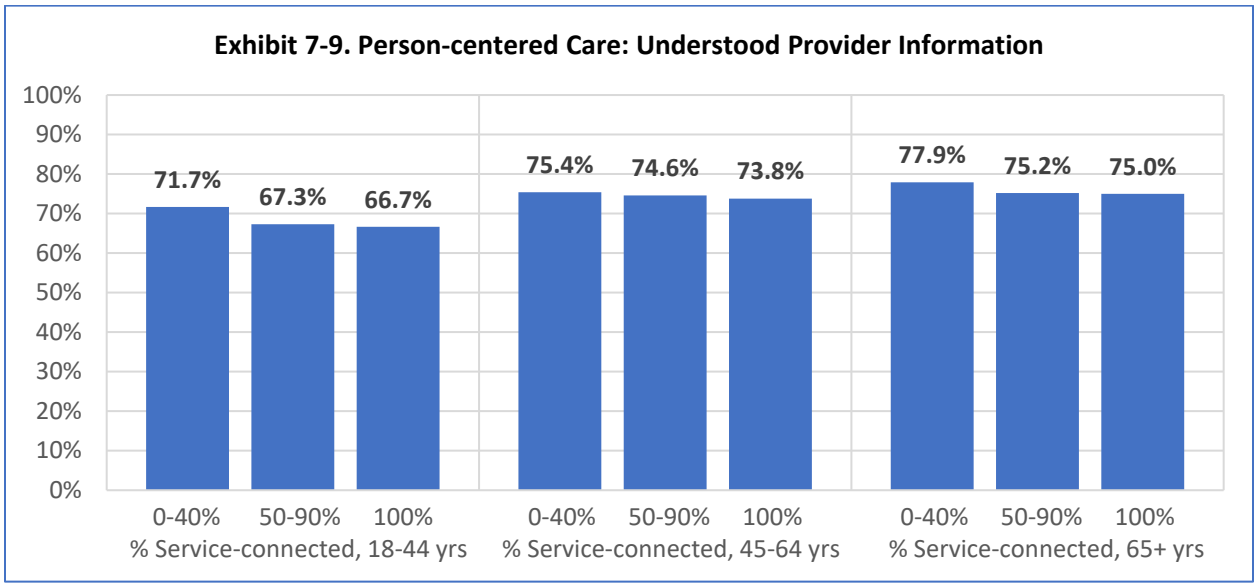
Importance:

Person-centered care is an important aspect related to health literacy in the ability to obtain and apply basic health information to make important health-related decisions throughout the lifespan.[9] One study showed Veterans with disabilities, compared to Veterans without disabilities, felt less likely that person-centered care metrics were met, such as physicians listened to their concerns, explained care so they understood, treated them with respect, and spent enough time with them.[9] Veterans with a service-connected disability (SCD) may have increased complexity of medical conditions with concurrent mental health, substance use, or physical comorbidities. Health care professionals should keep these unique aspects in mind during their person-centered communications.

Findings:

- The 18-44 years age group and the 65 years and older age group each had a large number of person-centered care measures with worse ratings for the 50-90% SCD and the 100% SCD groups in comparison to the 0-40% SCD group. By contrast, in the 45-64 years age group, the vast majority of measures received the same ratings across SCD groups.
- For the 18-44 years age group, 6 measures received worse ratings for both the 50-90% and 100% SCD groups compared to the 0-40% SCD group.
- The middle-aged group of 45-64 years rated 1 measure worse in both the 50-90% SCD and 100% SCD groups as compared to the 0-40% SCD group.
- For the 65 years and older age group, 7 measures received worse ratings from both the 50-90% and 100% SCD groups, compared with the 0-40% SCD group.
- Across all age ranges, 1 measure was rated better in each of the 100% SCD groups as compared to the 0-40% SCD Veteran groups.

Exhibit 7-9. VHA users who indicated, in the last 6 months, their provider always explained things in a way that was easy to understand



Reference group: Veteran VHA patients with 0-40% service-connected disability rating of corresponding age group.
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

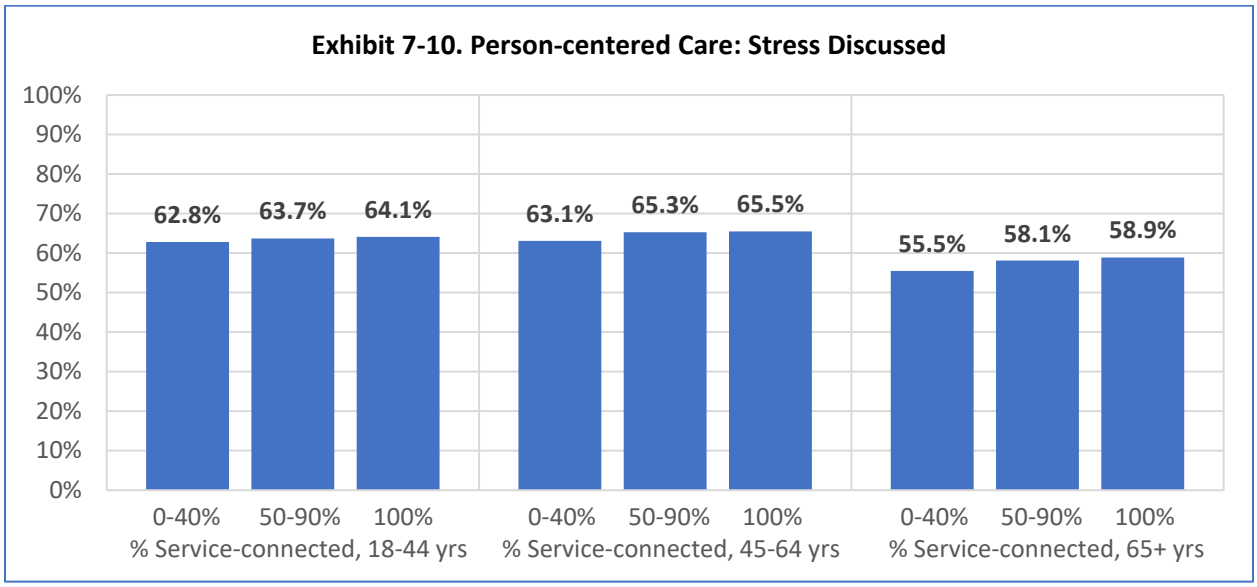
Importance:

Person-centered care is an important aspect related to health literacy in the ability to obtain and apply basic health information to make important health-related decisions throughout the life-span,[9] and low health literacy is associated with poorer health outcomes.[19] Veterans with disabilities felt less likely compared to Veterans without disabilities that person-centered care metrics were met, such as physicians listened to their concerns, explained care so that they understood, treated them with respect, and spent enough time with them.[9] Veterans with a service-connected disability (SCD) may have increased complexity of medical conditions with concurrent mental health, substance use, or physical comorbidities. Health care professionals should keep these unique aspects in mind during their person-centered communications.

Findings:

- For Veterans in the 18-44 years and the 65 years and older age groups, those with SCD of 50-90% or 100% had lower ratings than those with SCD 0-40% on the person-centered care measure of provider always explaining things in way that they understood.
- For Veterans in the 45-64 years age group, ratings were similar among the SCD groups for this aspect of person-centered care.

Exhibit 7-10. VHA users who indicated, in the last 6 months, that they talked with someone in their provider's office about things in their life that worry them or cause them stress



Reference group: Veteran VHA patients with 0-40% service-connected disability rating of corresponding age group.
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

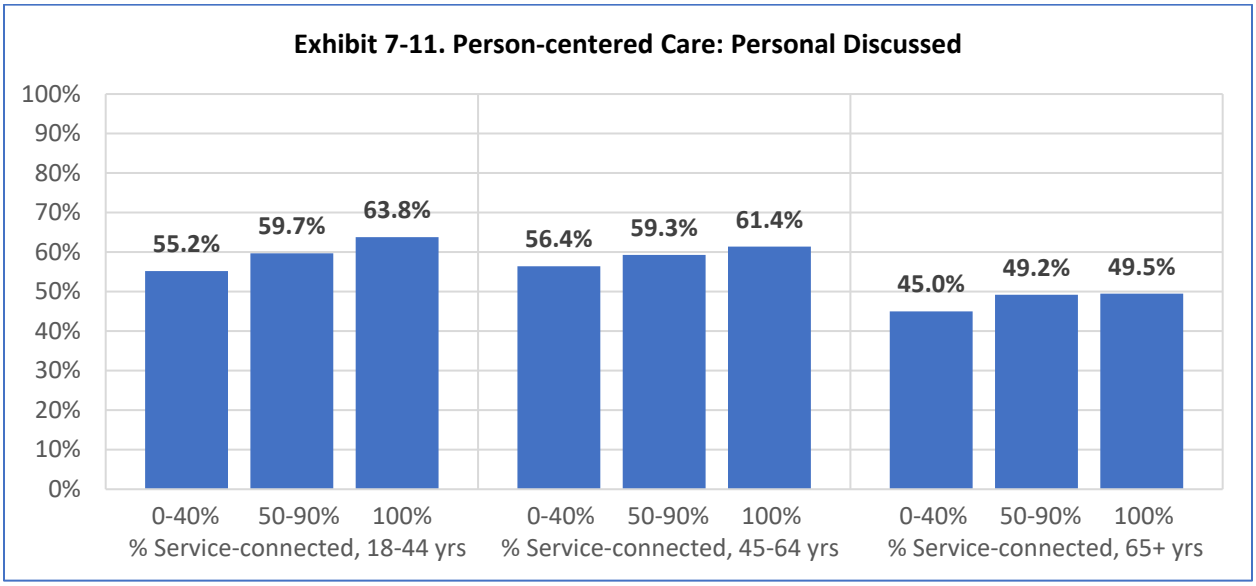
Importance:

Veterans with disabilities, compared to Veterans without disabilities, felt less likely that person-centered care metrics were met, such as physicians listened to their concerns, explained care so they understood, treated them with respect, and spent enough time with them.[9] Veterans who have a higher SCD have a higher likelihood of using the VA for health care[10] with about one third of VHA health care users service-connected for posttraumatic stress disorder.[20] Mental illnesses are associated with poor health outcomes and integrating mental health treatment into primary care may be associated with a lower risk of poorer health outcomes,[21] hence universally asking about stress in primary care clinic is important.

Finding:

There were no differences in the experience of stress discussed among Veterans across SCD categories for any of the age groups. Veterans age 18-44 years across SCD categories rated similarly around 63%, while Veterans age 45-64 years across SCD categories also rated similarly around 65%, and Veterans age 65+ years rated similarly around 58%. This shows that provider's offices are discussing stress at similar proportions regardless of SCD status.

Exhibit 7-11. VHA users who indicated, in the last 6 months, that they and someone in their provider's office talked about a personal problem, family problem, alcohol use, drug use, or a mental or emotional illness



Reference group: Veteran VHA patients with 0-40% service-connected disability rating of corresponding age group.
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

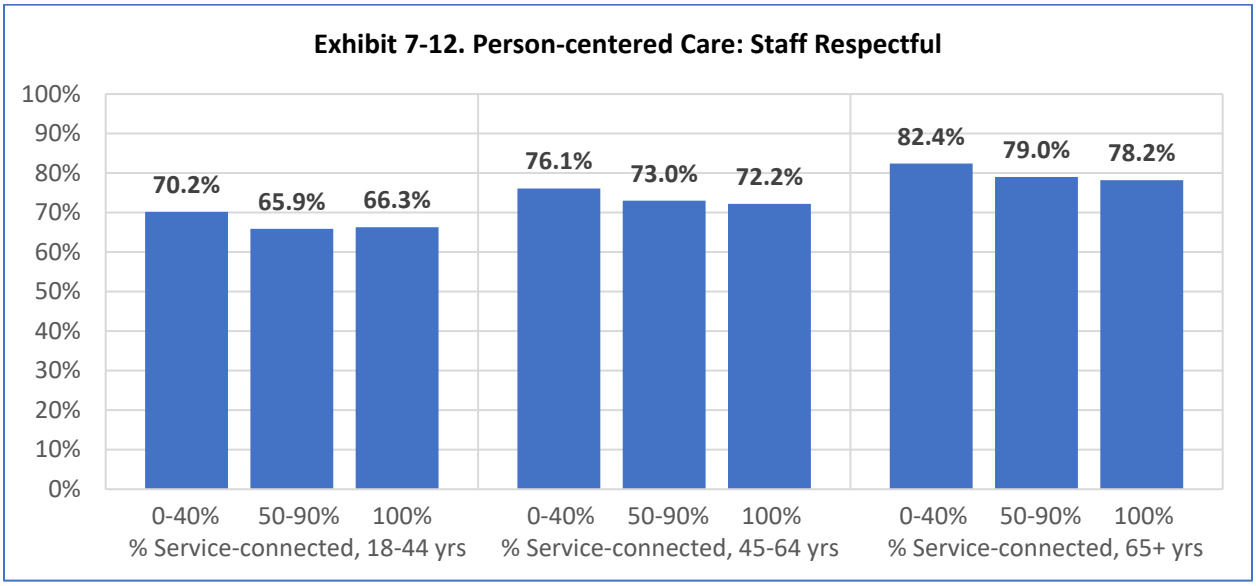
Importance:

Veterans with disabilities felt less likely that person-centered care metrics were met such as physicians listened to their concerns, explained care so they understood, treated them with respect, and spent enough time with them compared to Veterans without disabilities.[9] Veterans who have a higher SCD have a higher likelihood of using the VA for health care[10] with about one third of VHA health care users service-connected for posttraumatic stress disorder.[20] Mental illnesses are associated with poor health outcomes and integrating mental health treatment into primary care may be associated with a lower risk of poorer health outcomes,[21] hence universally asking about personal problems is important.

Findings:

- Dependent on the SCD rating and age group, between 45.0% to 63.8% of Veterans had someone in their provider's office ask them about a personal problem.
- For Veterans under age 65, the proportion of Veterans receiving this aspect of person-centered care was higher for the 100% SCD group compared with the 0-40% SCD group. This shows that having a higher SCD rating is a positive factor for receiving this aspect of care for younger patients (below 65 years) who are 100% SCD.

Exhibit 7-12. VHA users who indicated, in the last 6 months, clerks and receptionists at their provider's office always treated them with courtesy and respect



Reference group: Veteran VHA patients with 0-40% service-connected disability rating of corresponding age group.
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

Importance:

Person-centered care is an important aspect related to health literacy in the ability to obtain and apply basic health information to make important health related decisions throughout the life-span,[9] and low health literacy is associated with poorer health outcomes.[18] Veterans with disabilities, compared to Veterans without disabilities, felt less likely that person-centered care metrics were met, such as physicians listened to their concerns, explained care so they understood, treated them with respect, and spent enough time with them.[9] Veterans with a service-connected disability may have increased complexity of medical conditions with concurrent mental health, substance use or physical comorbidities. Health care professionals should keep these unique aspects in mind during their person-centered communications.

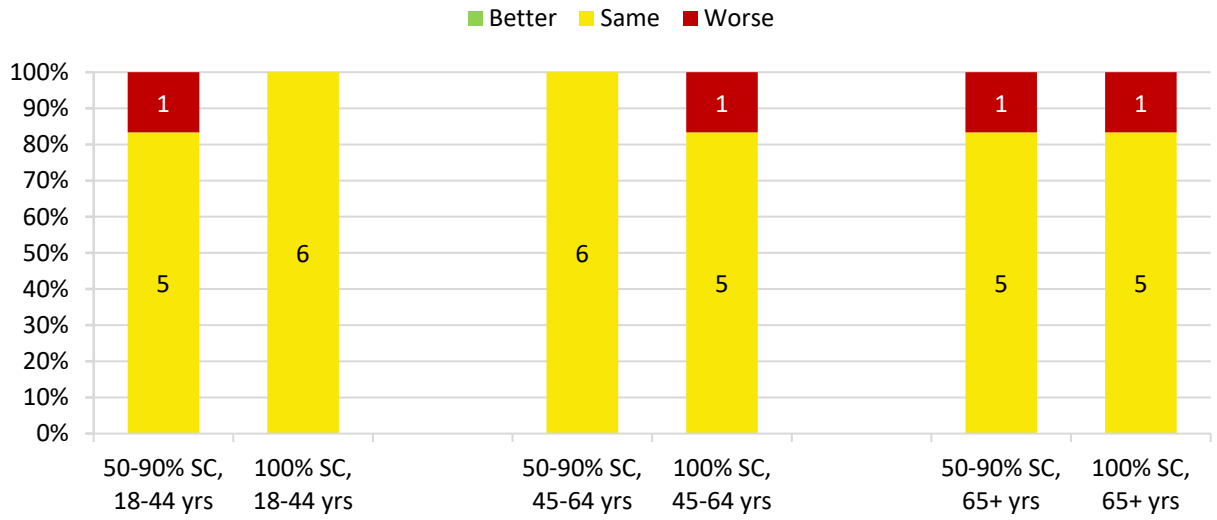
Findings:

- Across age groups, compared to Veterans with SCD ratings of 0-40%, among those with SCD ratings of 50-90% or 100%, a lower proportion of Veterans indicated staff treated them with respect.
- Of Veterans age 18-44 years, 70.2% of those with 0-40% SCD said staff always treated them with respect, in contrast to 65.9% and 66.3% of the 50-90% SCD and 100% SCD groups, respectively.
- Of Veterans age 45-64 years, 76.1% of those with 0-40% SCD said staff always treated them with respect, versus 73.0% and 72.2% of the 50-90% SCD and 100% SCD groups, respectively.
- Of Veterans age 65 years or older, 82.4% of those with 0-40% SCD said staff always treated them with respect, in contrast to 79.0% and 78.2% of the 50-90% SCD and 100% SCD groups, respectively.

Variations in VHA Patient Experience of Care Coordination by Veteran Service-connected Disability Rating

Exhibit 7-13. Number and percentage of measures for which Veteran VHA patients of selected groups experienced better, same, or worse care coordination compared with reference group

Exhibit 7-13. Care Coordination



Comparison	50-90% SC, 18-44 years	100% SC, 18-44 years	50-90% SC, 45-64 years	100% SC, 45-64 years	50-90% SC, 65+ years	100% SC, 65+ years
Worse	1	0	0	1	1	1
Same	5	6	6	5	5	5
Better	0	0	0	0	0	0

Reference group: Veteran VHA patients with 0-40% service-connected disability rating of corresponding age group.
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

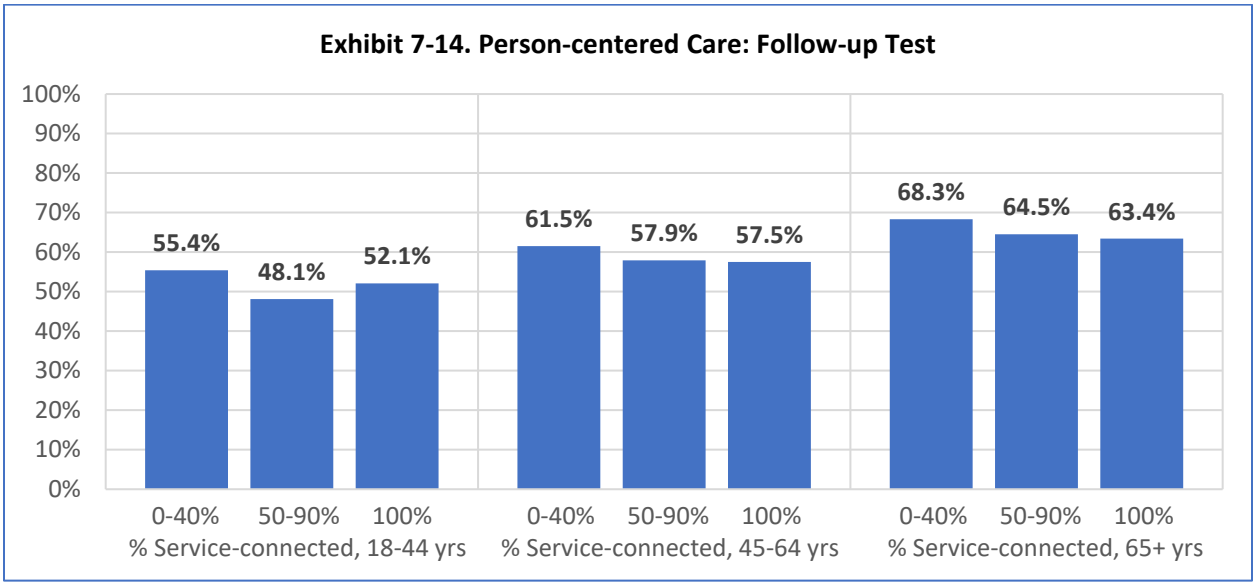
Importance:

Veterans with a service-connected disability (SCD) may have increased complexity of medical conditions with concurrent mental health, substance use or physical comorbidities. One study showed care coordination metrics such as patient can help decide treatment, and physician explains treatment options to patients, did not have a statistically significant difference between Veterans with and without disabilities.[9] Ensuring appropriate provider training and staffing to address the unique challenges this may present is vital to promote appropriate and timely care coordination.

Findings:

- Within age groups, most measures of patient experience of care coordination were rated the same across SCD categories.
- The 18-44 years age group with 50-90% SCD had 1 measure rated worse than those with 0-40% SCD, but the other 5 measures rated the same; among those with 100% SCD, all 6 measures were rated the same as for those with 0-40% SCD.
- Within the 45-64 years age group, care coordination ratings were the same for all 6 measures for those with 50-90% SCD compared with those with 0-40% SCD. Among those with 100% SCD, 1 measure was rated worse, and 5 measures were rated the same compared to those with 0-40% SCD.
- For the 65 years and older group, both those with 50-90% SCD and 100% SCD rated 1 measure worse compared to the 0-40% SCD group.

Exhibit 7-14. VHA users who indicated, in the last 6 months, that when their provider ordered a blood test, x-ray, or other test for them, someone in their provider's office always followed up to give them the results



Reference group: Veteran VHA patients with 0-40% service-connected disability rating of corresponding age group.
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

Importance:

Veterans with a SCD may have increased complexity of medical conditions with concurrent mental health, substance use or physical comorbidities. One study showed care coordination metrics such as patient can help decide treatment, and physician explains treatment options to patients, did not have a statistically significant difference between Veterans with and without disabilities.[9] Ensuring appropriate provider training and staffing to address the unique challenges this population may present is vital to promote appropriate and timely care coordination.

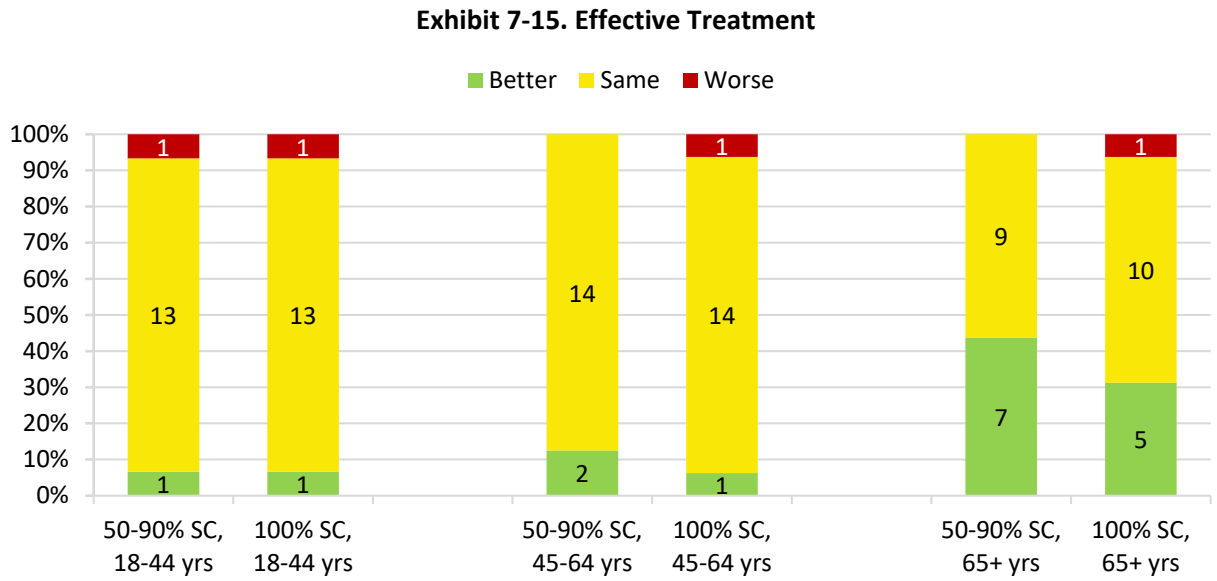
Findings:

- Across age groups, with higher SCD ratings, there is a lower proportion of Veterans who indicated a provider followed up on a test result.
- For Veterans age 18-44 years, 55% of Veterans with 0-40% SCD stated someone in their provider's office followed up on a test result, and this differs compared to Veterans with 50-90% SCD (in whom 48% reported provider's office followed up) but does not differ from those with 100% SCD.
- For Veterans age 45-64 years, 61.5% of Veterans with 0-40% SCD stated someone in their provider's office followed up on a test result, and this differs compared to Veterans with 100% SCD, for whom 57.5% reported provider's office followed up.
- For Veterans age 65 years and older, there is a higher proportion of Veterans with 0-40% SCD who stated someone in their provider's office followed up on a test result (68%), compared to Veterans with 50-90% SCD (64.5%) and Veterans with 100% SCD (63.4%).

Section III: Health Care Quality

Variations in VHA Health Care Quality of Effective Treatment by Veteran Service-connected Disability Rating

Exhibit 7-15. Number and percentage of measures for which Veteran VHA patients of selected groups experienced better, same, or worse effective treatment compared with reference group



Comparison	50-90% SC, 18-44 years	100% SC, 18-44 years	50-90% SC, 45-64 years	100% SC, 45-64 years	50-90% SC, 65+ years	100% SC, 65+ years
Worse	1	1	0	1	0	1
Same	13	13	14	14	9	10
Better	1	1	2	1	7	5

Reference group: Veteran VHA patients with 0-40% service-connected disability rating of corresponding age group.

Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

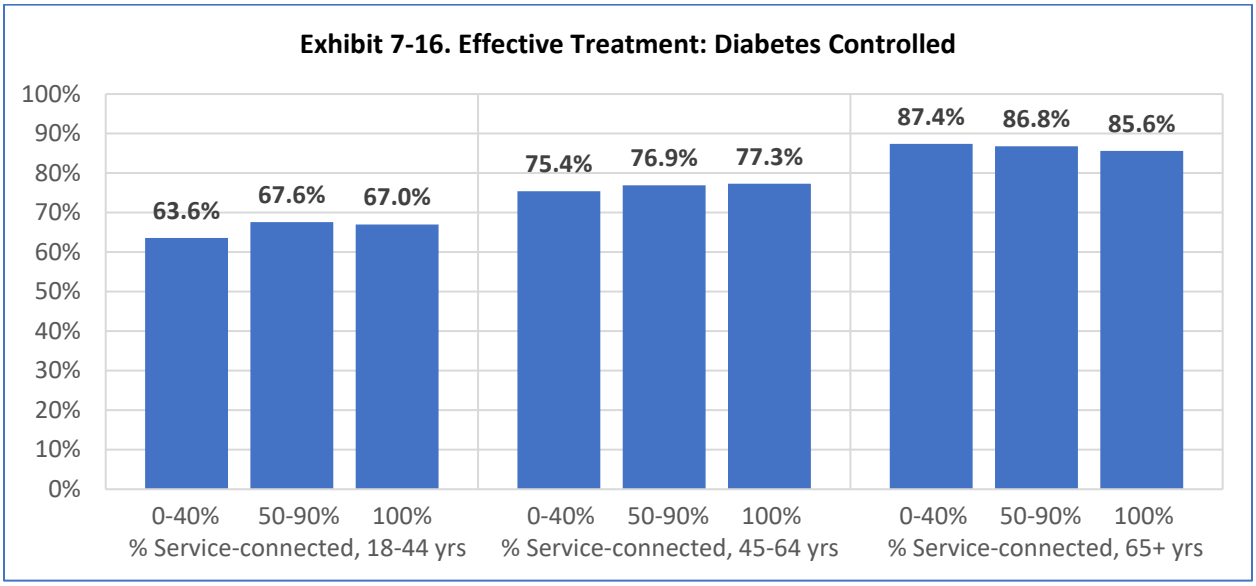
Importance:

Veterans who have a higher SCD have a higher likelihood of using the VA for health care[10] however one study showed Veterans with disabilities were unable to get necessary care and experienced a delay in getting care compared to Veterans without disabilities.[9]

Findings:

- Across the three age groups with either 50-90% SCD or 100% SCD, most measures for effective treatment were rated about the same as the ratings by the reference group of Veteran VA users with 0-40% SCD rating within the corresponding age groups.
- For the 18-44 years age group, both the 50-90% and 100% SCD groups had 13 measures that were rated the same as those with 0-40% SCD, 1 measure rated worse, and 1 measure rated better.
- The 45-64 years age group with 50-90% SCD had 14 measures rated the same and two rated better than those with 0-40% SCD, whereas the 45-64 years age group with 100% SCD had 14 measures rated the same, one better, and one worse.
- The 65 years and older age group with 50-90% SCD had 9 measures rated the same and 7 measures rated better than those with 0-40% SCD, and the 100% SCD group had 10 measures rated the same, 5 measures rated better and one worse compared with those with 0-40% SCD.

Exhibit 7-16. VHA patients with diagnosed diabetes whose glycosylated hemoglobin (HbA1C) was measured in the prior year, and was less than 9%



Reference group: Veteran VHA patients with 0-40% service-connected disability rating of corresponding age group.
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

Importance:

Veterans who have a higher SCD have a higher likelihood of using the VA for health care.[10] However one study showed Veterans with disabilities were unable to get necessary care and experienced a delay in getting care compared to Veterans without disabilities.[9] Over 70% of Veterans who have SCD for diabetes mellitus use the VA, and diabetes mellitus is also associated with higher VA use.[20]

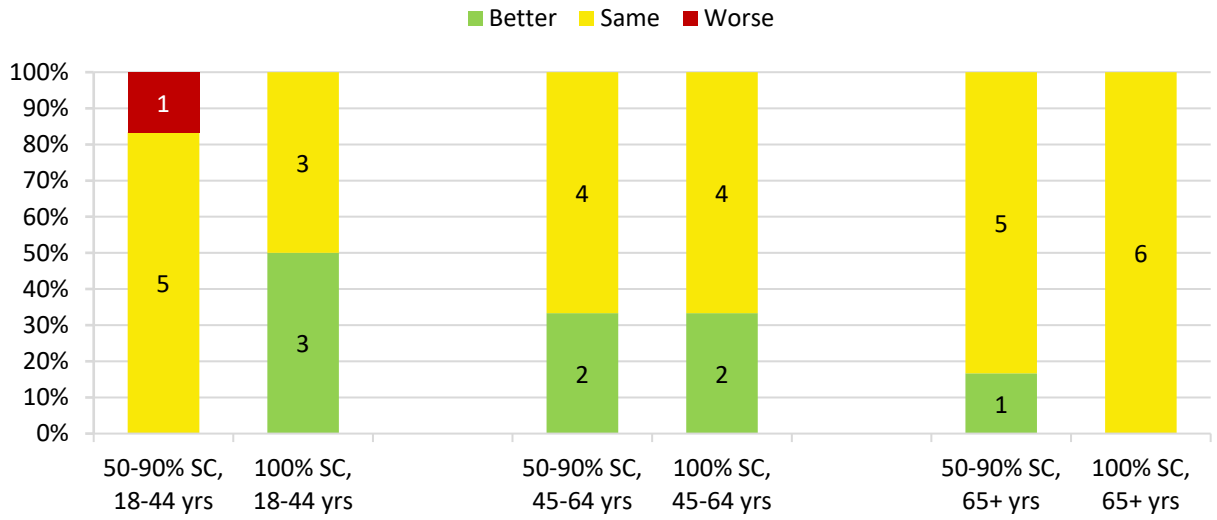
Findings:

- Older Veterans are more likely to have their HbA1C measured and for their HbA1C to be < 9%. However, within age group differences varied by SCD rating category.
- Of Veterans age 18-44 years, 63.6% of those with 0-40% SCD have had their HbA1C measured and be < 9%, whereas a higher proportion of those with 50-90% SCD (67.6%) met this metric.
- Of Veterans age 45-64 years, 75.4% of those with 0-40% SCD have had their HbA1C measured and be < 9%, with similar findings compared to those with 50-90% SCD (for whom it is 76.9%) and for those with 100% SCD (for whom it is 77.3%).
- Of Veterans age 65 years and older, a higher proportion of Veterans with 0-40% SCD have had their HbA1C measured and be < 9% (with 87.4% meeting this metric), compared to Veterans with 100% SCD (for whom 85.6% met this metric).

Variations in VHA Health Care Quality of Healthy Living – Lifestyle Modification by Veteran Service-connected Disability Rating

Exhibit 7-17. Number and percentage of measures for which Veteran VHA patients of selected groups experienced better, same, or worse healthy living – lifestyle modification compared with reference group

Exhibit 7-17. Healthy Living – Lifestyle Modification



Comparison	50-90% SC, 18-44 years	100% SC, 18-44 years	50-90% SC, 45-64 years	100% SC, 45-64 years	50-90% SC, 65+ years	100% SC, 65+ years
Worse	1	0	0	0	0	0
Same	5	3	4	4	5	6
Better	0	3	2	2	1	0

Reference group: Veteran VHA patients with 0-40% service-connected disability rating of corresponding age group.
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

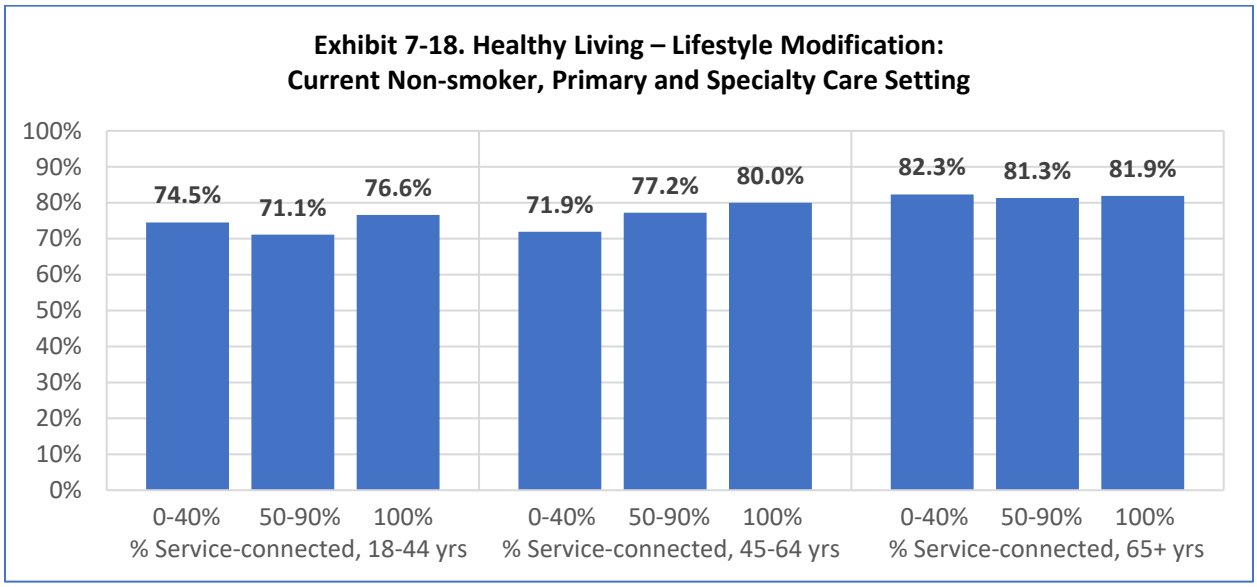
Importance:

Veterans who have SCD ratings are in the highest priority group in determining who receives care at the VA. Veterans who have a higher SCD have a higher likelihood of using the VA for health care.[10] Having disabilities did not seem to be a barrier to receiving appropriate preventive care.[11] There is one study that shows patients who have 100% SCD have a higher rate of 1-year mortality,[12] while other studies show that there are disparities and discordance for those who are awarded service-connection[1,13,14,15] and Veterans without SCD may have poorer health.[16,17]

Findings:

- For all but 1 measure, across age groups, Veterans with 50-90% SCD and those with 100% SCD experienced the same or better healthy living-lifestyle modification metrics as Veterans with 0-40% SCD.
- For the 18-44 years age group who have 50-90% SCD, 1 measure received worse ratings compared with those with 0-40% SCD, whereas 5 measures received the same ratings. Among those with 100% SCD, 3 measures received the same ratings and 3 measures received better ratings compared with those with 0-40% SCD.
- For the 45-64 years age group, both those with 50-90% SCD and those with 100% SCD have 4 measures receiving the same ratings and 2 measures receiving better ratings compared with those with 0-40% SCD.
- For the 65 years and older age group who have 50-90% SCD, 5 measures received the same ratings and 1 measure received better ratings compared with those with 0-40% SCD, whereas among those who have 100% SCD, all 6 measures received the same rating as those with 0-40% SCD.

Exhibit 7-18. VHA outpatients in a non-mental health clinic who were screened for tobacco use and did not use tobacco any time during the past 12 months



Reference group: Veteran VHA patients with 0-40% service-connected disability rating of corresponding age group.

Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

Importance:

VA users are more likely to have ever smoked. However, having a service-connected disability is a factor associated with being a never smoker.[22]

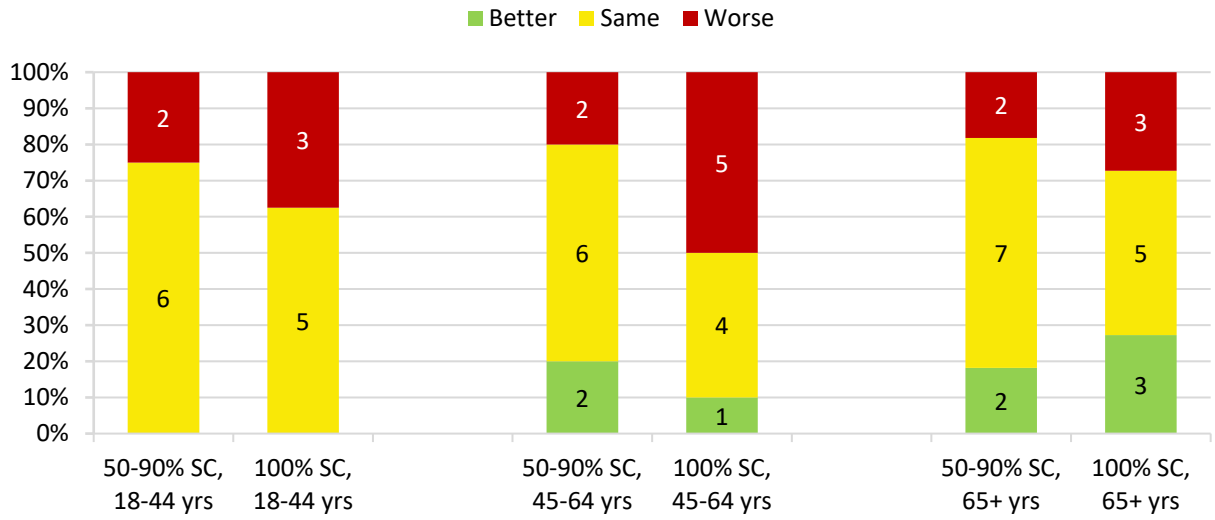
Findings:

- Dependent on age group and SCD rating, between 71.1% and 82.3% of Veterans are not current smokers.
- Of Veterans age 18-44 years with 0-40% SCD, 74.5% are not current smokers, compared to a lower proportion of Veterans with 50-90% SCD at 71.1%.
- Of Veterans age 45-64 years with 0-40% SCD, 71.9% are not current smokers, compared to a higher proportion of Veterans with 50-90% SCD at 77.2%, and a higher proportion of Veterans with 100% SCD at 80%.
- Of Veterans age 65 years or older with 0-40% SCD, 82.3% are not current smokers, with no relative difference compared to Veterans with other SCD ratings.

Variations in VHA Health Care Quality of Healthy Living – Clinical Preventive Services by Veteran Service-connected Disability Rating

Exhibit 7-19. Number and percentage of measures for which Veteran VHA patients of selected groups experienced better, same, or worse healthy living – clinical preventive services compared with reference group

Exhibit 7-19. Healthy Living – Clinical Preventive Services



Comparison	50-90% SC, 18-44 years	100% SC, 18-44 years	50-90% SC, 45-64 years	100% SC, 45-64 years	50-90% SC, 65+ years	100% SC, 65+ years
Worse	2	3	2	5	2	3
Same	6	5	6	4	7	5
Better	0	0	2	1	2	3

Reference group: Veteran VHA patients with 0-40% service-connected disability rating of corresponding age group.
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

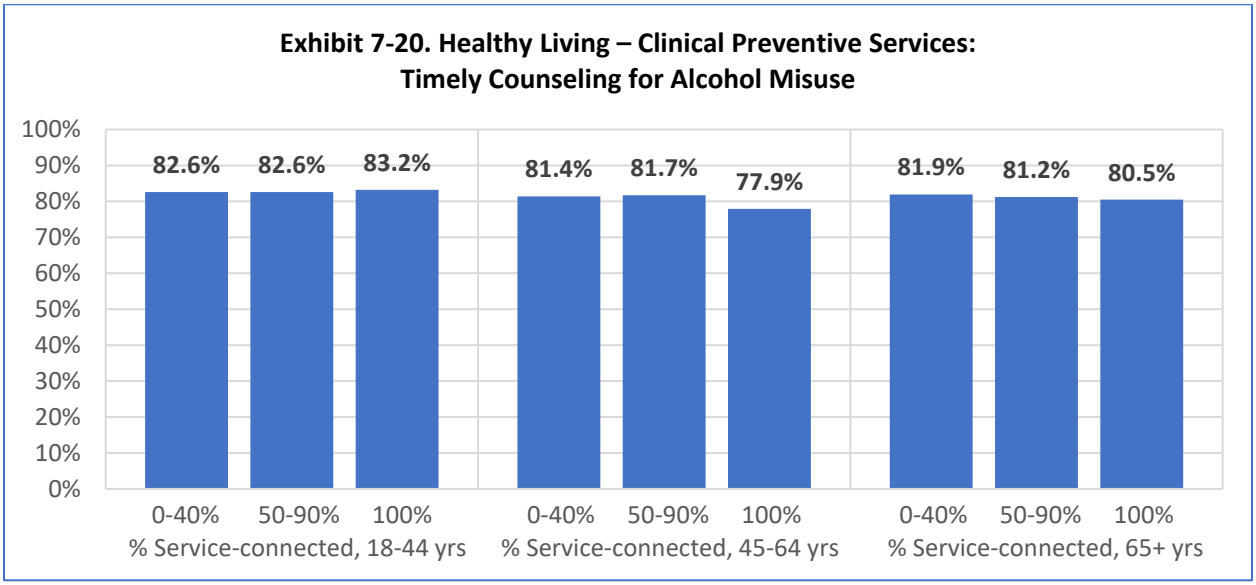
Importance:

Veterans who have SCD ratings are in the highest priority group in determining who receives care at the VA. Veterans who have a higher SCD have a higher likelihood of using the VA for health care,[10] and having disabilities did not seem to be a barrier to receiving appropriate preventive care.[11] There is one study that shows patients who are 100% SCD have a higher rate of 1-year mortality,[12] while other studies show that there are disparities and discordance for those who are awarded service-connection[1,13,14,15] and Veterans without SCD may have poorer health.[16,17]

Findings:

- Disparities were present in healthy living – clinical preventive services for several comparisons across SCD groups.
- For the 18-44 years age group, those with 50-90% SCD have 6 measures receiving the same ratings and 2 measures receiving worse ratings compared to those with 0-40% SCD. Among Veterans with 100% SCD, 5 measures received the same rating and 3 measures receiving worse ratings compared to those with 0-40% SCD.
- For the 45-64 years age group, those with 50-90% SCD have 6 measures receiving the same ratings, 2 measures receiving better ratings, and 2 measures receiving worse ratings compared to those with 0-40% SCD. Among Veterans with 100% SCD, 4 measures received the same rating, 1 measure received a better rating, and 5 measures receiving worse ratings compared to those with 0-40% SCD.
- For the 65 years or older age group, those with 50-90% SCD have 7 measures receiving the same ratings, 2 measures receiving better ratings, and 2 measures receiving worse ratings compared to those with 0-40% SCD. Among Veterans with 100% SCD, 5 measures received the same rating, 3 measures received better ratings, and 3 measures received worse ratings compared to those with 0-40% SCD.

Exhibit 7-20. VHA patients who screened positive for alcohol misuse who had a brief alcohol intervention documented within 14 days of their positive screen



Reference group: Veteran VHA patients with 0-40% service-connected disability rating of corresponding age group.
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

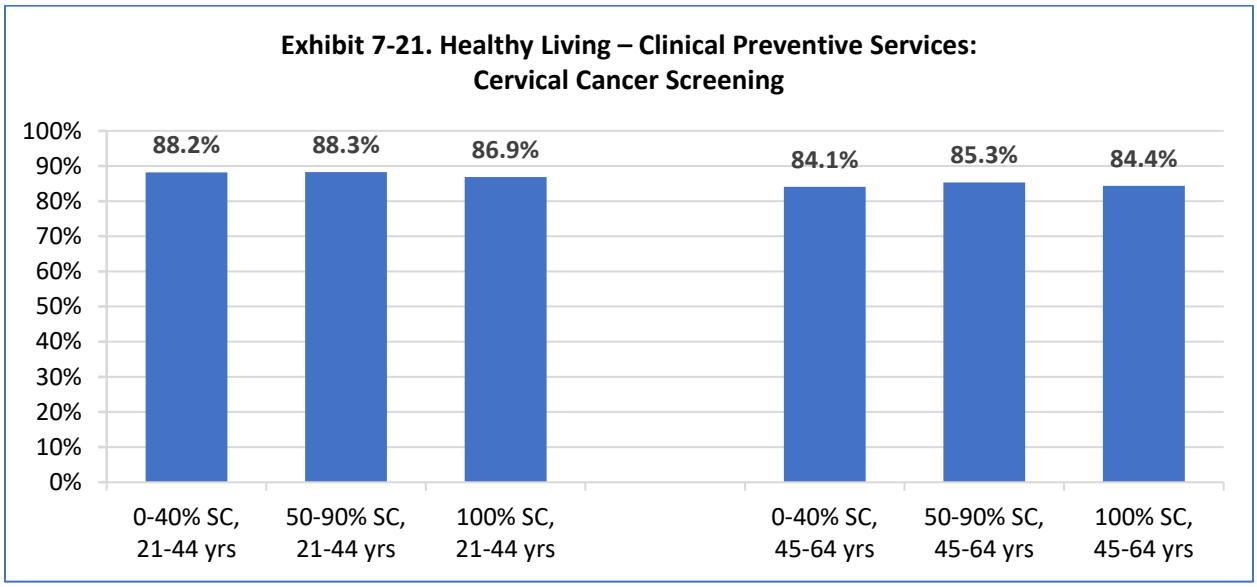
Importance:

Having disabilities does not seem to be a barrier to receiving appropriate preventive care, with no difference in one study between having disability or not for fecal occult blood test, human immunodeficiency virus testing, and cervical cancer screening.[11] In that study, Veterans with disability were also more likely to receive influenza and pneumococcal vaccinations, weight management counseling, mammography, and serum cholesterol screening.[11] Although there is a high prevalence of alcohol use disorders among Veterans, primary care providers often do not recognize patients with alcohol use disorder without screening; screening can be used to identify patients for brief alcohol counseling.[23] From medical record review, 25% of patients screened were positive for alcohol use disorder.[23] In another study, for Veterans with unhealthy alcohol use, Veterans who received a brief intervention reported receiving high-quality care compared to Veterans who did not receive an intervention.[24]

Findings:

- Across different age groups and SCD categories, between 77.9% and 83.2% of Veterans who screen positive for alcohol misuse had a brief alcohol intervention documented within 14 days.
- For Veterans in both the 18-44 years and 65 years or older age groups, ratings were similar across the SCD categories.
- For Veterans in the 45-64 years age group, those with 100% SCD had lower ratings compared to those with 0-40% SCD, with ratings being 77.9% and 81.4%, respectively.

Exhibit 7-21. Cervical cancer screening for VHA women patients age 21-64, as evidenced by Papanicolaou test (Pap smear) in the prior 3 years or Pap test plus HPV test in the prior 5 years among those age 24-64



Reference group: Veteran VHA patients with 0-40% service-connected disability rating of corresponding age group.
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

Importance:

Having disabilities does not seem to be a barrier to receiving appropriate preventive care, with no difference between having disability or not in one study for fecal occult blood test, human immunodeficiency virus testing, and cervical cancer screening.[11] In that study, Veterans with disability were more likely to receive influenza and pneumococcal vaccinations, weight management counseling, mammography, and serum cholesterol screening.[11]

Findings:

- Overall, across 21-44 years and 45-64 years age groups and SCD categories, 84.1%-88.3% of women Veterans had timely receipt of cervical cancer screening.
- For Veterans ages 21-44 years, those with 100% SCD were less likely to receive cervical cancer screening compared to those with 0-40% SCD, with ratings being 86.9% and 88.2%, respectively.
- For Veterans ages 45-64 years, there were no differences across the SCD categories.

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Chapter 8

Patient Experiences and Health Care Quality for Veterans in VHA by Cardiovascular Disease Risk Factors

Melissa M. Farmer, PhD
Bevanne Bean-Mayberry, MD, MHS

Section I: Background – Cardiovascular Disease Risk Factors

Cardiovascular disease (CVD), which includes both heart disease and stroke, is the leading cause of death for American men and women, most racial and ethnic subgroups, and Veterans.[1-4] Contributing to CVD morbidity and mortality are the traditional risk conditions of hypertension, hyperlipidemia, and diabetes. Smoking, the number one preventable risk factor contributing to chronic disease and death, as well as other lifestyle risk factors such as overweight and obese status, poor diet, and physical inactivity all contribute to CV risk and mortality.[5-8] Recent data also point to additional risk-enhancing factors (e.g., chronic kidney disease, chronic inflammatory disease, adverse pregnancy outcomes, premature menopause) contributing to cardiovascular disease.[8,9,10]

Within the Veterans Health Administration (VHA), cardiovascular disease is a quality improvement area with measures focused both on screening and management of risk conditions such as hypertension, hyperlipidemia, and diabetes in addition to control of these same conditions in Veterans with known ischemic heart disease and other diagnoses. In the VHA, levels of CV risk prevention and management among all Veterans remain comparable or higher than among civilians.[11,12,13]

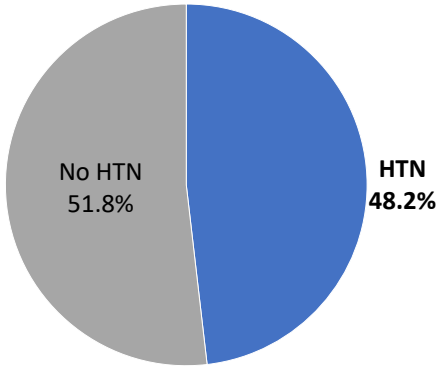
In this chapter, we focus on the three chronic conditions of hypertension, hyperlipidemia and diabetes that contribute significantly to cardiovascular mortality among Veterans. For each condition, we present the sociodemographic variations in prevalence, discuss results of VA composite quality measures, and present a few examples of individual quality measures that illustrate the disparities that exist between Veterans with and without the diagnosed condition.

Section II.1: Sociodemographic Characteristics – Hypertension

Hypertension, defined as a systolic blood pressure ≥ 130 mmHg or a diastolic blood pressure ≥ 80 mmHg or taking medication for hypertension, contributes directly to stroke, heart disease and other vascular disease.[10] Hypertension affects 45% of the adults in the U.S. (108 million), and only one in four adults (24%) has their condition controlled.[14] Among those with uncontrolled hypertension, nearly half have a blood pressure of 140/90 mmHg or higher.[14]

Hypertension (HTN) in VHA

Exhibit 8-1. Distribution of Hypertension among Veteran VHA Patients, FY16-FY19



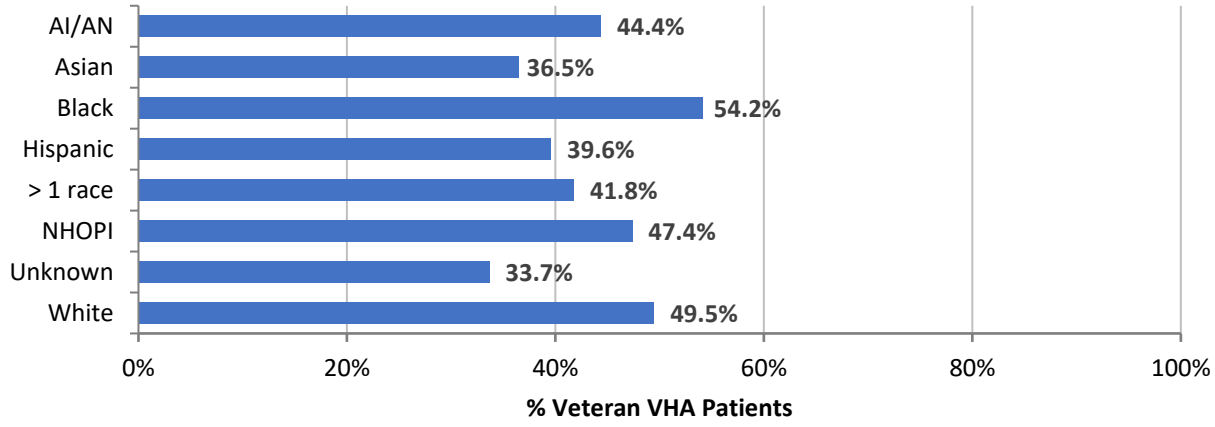
HTN	No HTN
48.2%	51.8%

Finding:

In VHA FY2016-2019, the prevalence of hypertension was 48.2% among Veteran patients.

Hypertension by Race/Ethnicity

Exhibit 8-2. Percent Distribution of Hypertension by Race/Ethnicity among Veteran VHA Patients, FY16-FY19



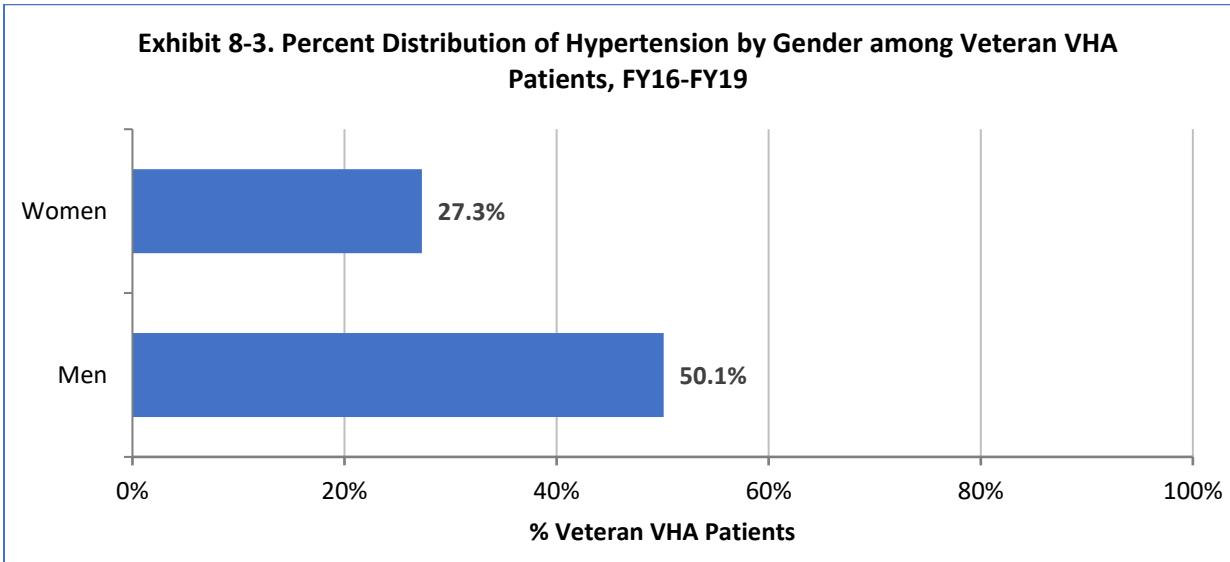
Note: AI/AN denotes American Indian or Alaska Native; NHOPI denotes Native Hawaiian or other Pacific Islander; Unknown denotes unknown, declined, or missing race/ethnicity

Finding:

Prevalence of hypertension was highest among Blacks at 54.2%, followed by White (49.5%) and Native Hawaiian or Other Pacific Islanders (47.4%). For Hispanics, the prevalence of hypertension was 39.6%. Asians had the lowest prevalence rate (36.5%) among the identified racial/ethnic groups.

Hypertension by Gender

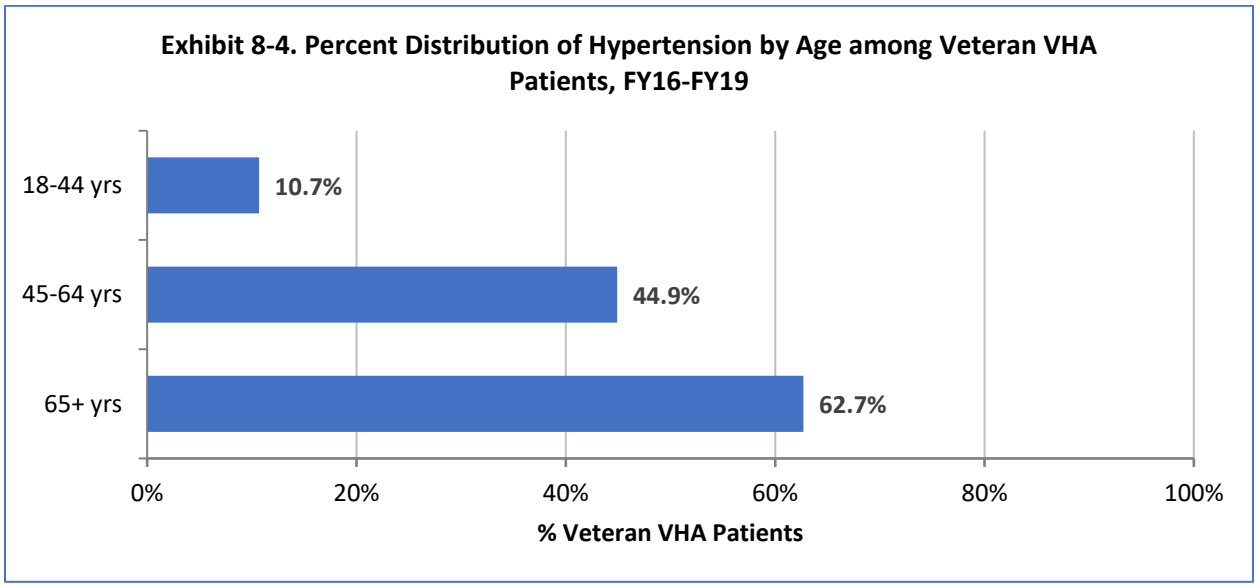
Exhibit 8-3. Percent Distribution of Hypertension by Gender among Veteran VHA Patients, FY16-FY19



Finding:

Prevalence of hypertension was 27.3% among female Veterans and 50.1% among male Veterans.

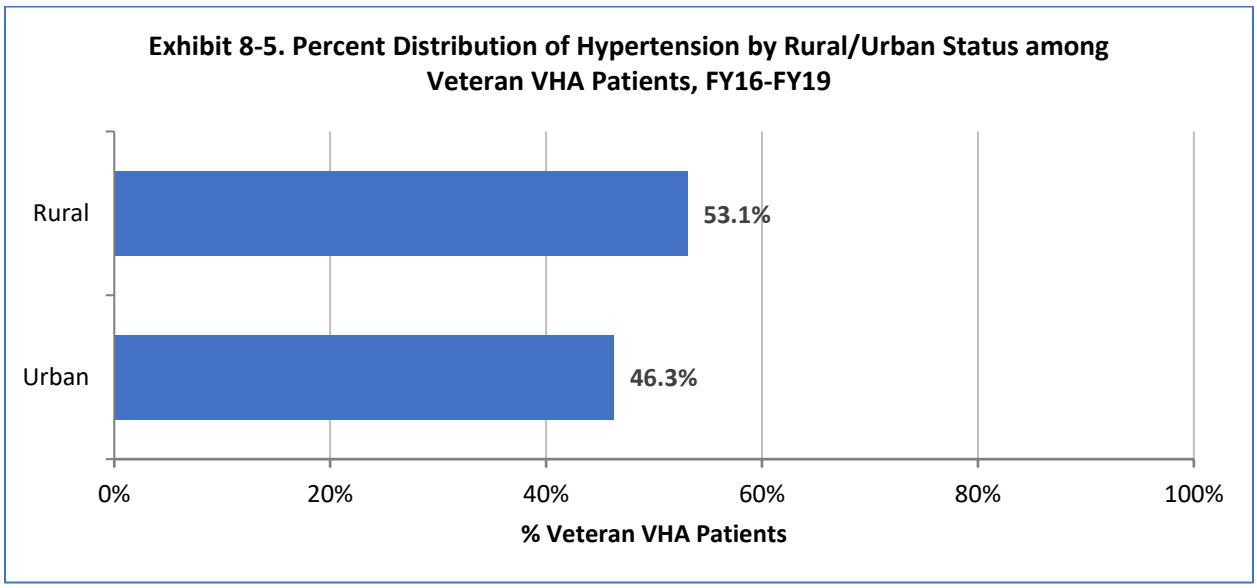
Hypertension by Age Group



Finding:

Across all Veterans, prevalence of hypertension increased with age: lowest for age 18-44 years (10.7%), followed by age 45-64 years (44.9%), and highest for age 65 years and older (62.7%).

Hypertension by Rurality

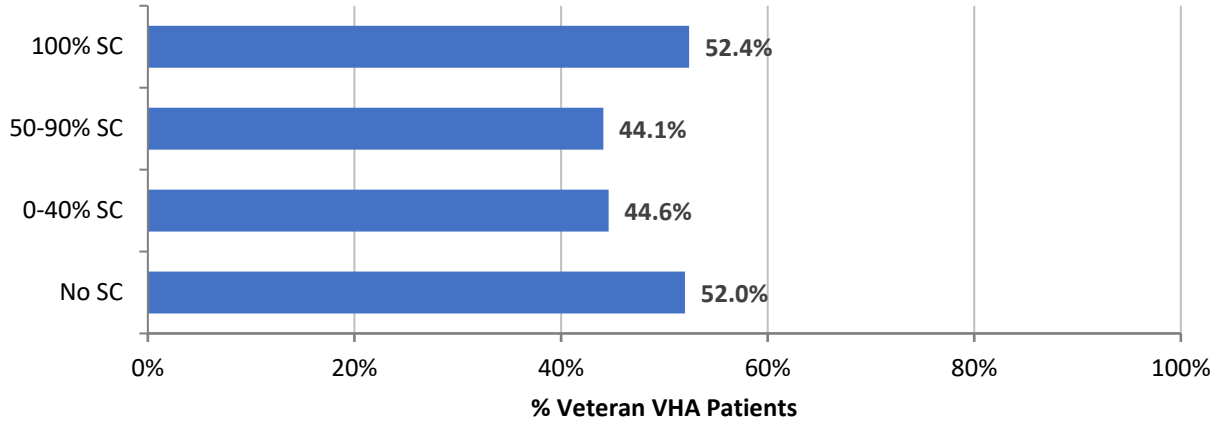


Finding:

Rural Veterans were more likely to be diagnosed with hypertension (53.1%) compared to Veterans in urban areas (46.3%).

Hypertension by Service-connected Disability Rating

Exhibit 8-6. Percent Distribution of Hypertension by Service-connected Disability Rating among Veteran VHA Patients, FY16-FY19



Note: SC denotes service-connected disability rating

Finding:

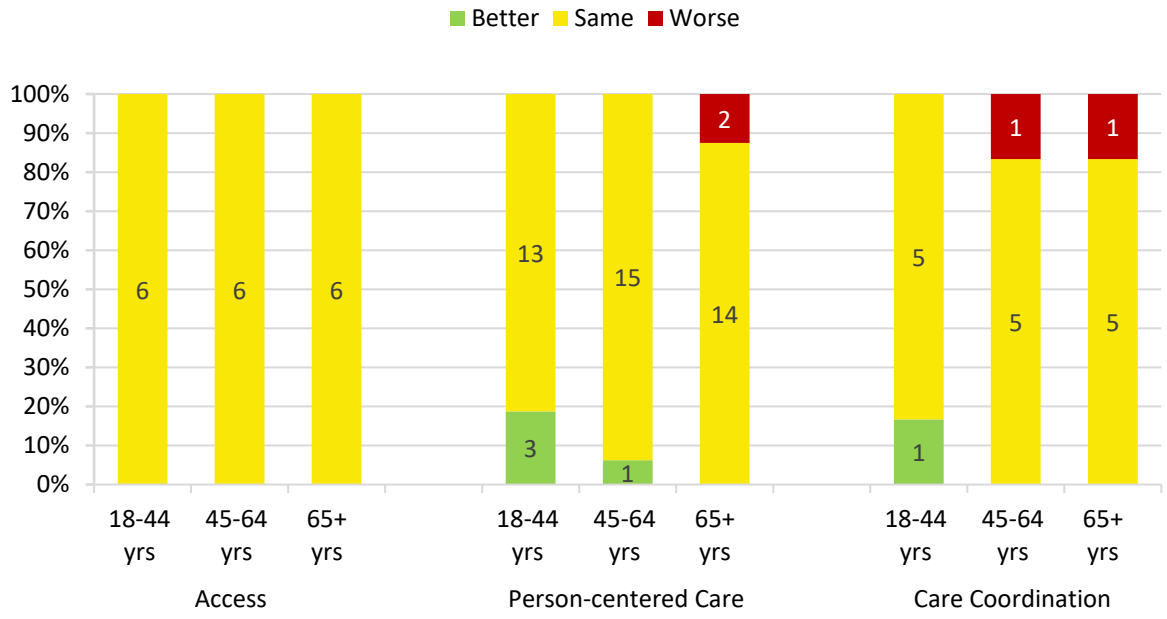
Over half (52.4%) of Veterans with 100% service connection had a diagnosis of hypertension, and 52% of Veterans without a service connection.

Section II.2: Patient Experiences – Hypertension

Variations in VHA Patient Experience by Veteran Diagnosed Hypertension

Exhibit 8-7. Number and percentage of measures for which Veteran VHA patients with diagnosed hypertension experienced better, same, or worse patient experiences compared with reference group

Exhibit 8-7. Patient Experiences By Age Group (Hypertension)



Patient Experience	Access			Person-centered Care			Care Coordination		
Comparison	18-44	45-64	65+	18-44	45-64	65+	18-44	45-64	65+
Worse	0	0	0	0	0	2	0	1	1
Same	6	6	6	13	15	14	5	5	5
Better	0	0	0	3	1	0	1	0	0

Reference group: Veteran VHA patients of the corresponding age group who do not have diagnosed hypertension

Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

Importance:

The goal of quality improvement is to provide access to care, person-centered care and care coordination to ultimately improve patient outcomes and patient experiences for all patients, regardless of their health status.

Findings:

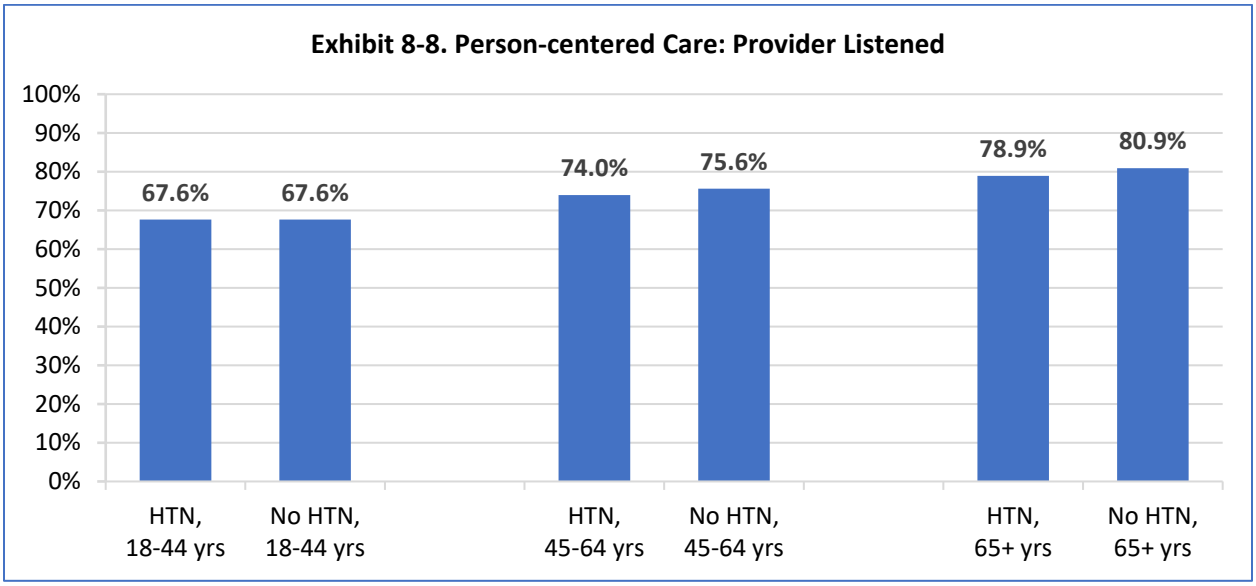
Findings show no disparities in access and only a few disparities in person-centered care and care coordination for patients with hypertension compared to their counterparts without a hypertension diagnosis.

- Access:
  - There were no disparities in access measures across all age groups between VHA users with and without hypertension.

- Person-centered care:
  - VHA users age 18-44 years with hypertension reported better person-centered care on 3 measures (18.8%) and the same on 13 measures (81.3%) than those without hypertension.
  - VHA users age 45-64 years with hypertension experienced better person-centered care on 1 measure (6.3%) and the same on 15 measures (93.8%) than those without hypertension.
  - VHA uses age 65+ years with hypertension experienced similar person-centered care on 14 measures (87.5%) and reported worse for 2 measures (12.5%) than those without hypertension.

- Care coordination:
  - VHA users age 18-44 years with hypertension reported better care coordination on 1 measure (16.7%) and the same on 5 measures (83.3%) than those without hypertension.
  - VHA users age 45-64 years experienced similar care coordination on 5 measures (83.3%), and worse on 1 measure (16.7%) than those without hypertension.
  - VHA users age 65+ years experienced similar care coordination on 5 measures (83.3%), and worse on 1 measure (16.7%) than those without hypertension.

Exhibit 8-8. VHA users who indicated, in the last 6 months, that their provider always listened carefully to them



Reference group: Veteran VHA patients of the corresponding age group who do not have diagnosed hypertension

Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

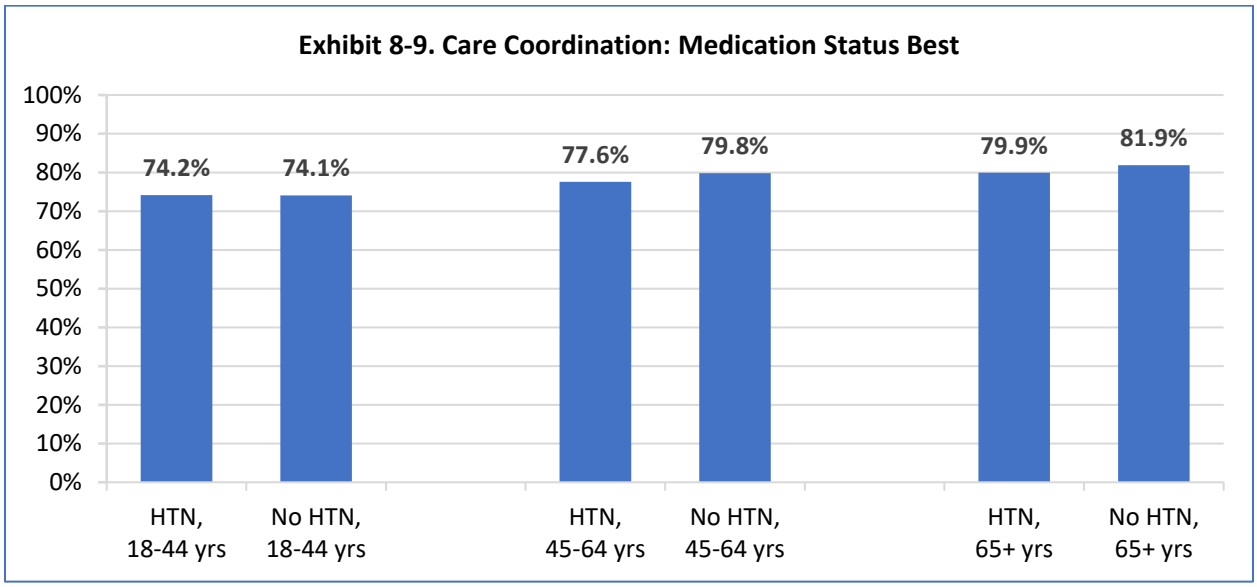
Importance:

Patient perceptions of provider communication may influence quality of care and overall satisfaction with care.

Findings:

- For age 65 years and older, patients without hypertension were more likely to report that their provider always listened to them carefully (80.9%) than their counterparts with hypertension (78.9%).
- There were no disparities for those patients with and without hypertension in age groups 18-44 years or 45-64 years.

Exhibit 8-9. VHA users who indicated that when they talked about starting or stopping a prescription medication, the provider asked them what they thought was best for them



Reference group: Veteran VHA patients of the corresponding age group who do not have diagnosed hypertension
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

Importance:

Patient perceptions of communication about medication for care coordination is important for patient and provider agreement and decision-making about care.

Findings:

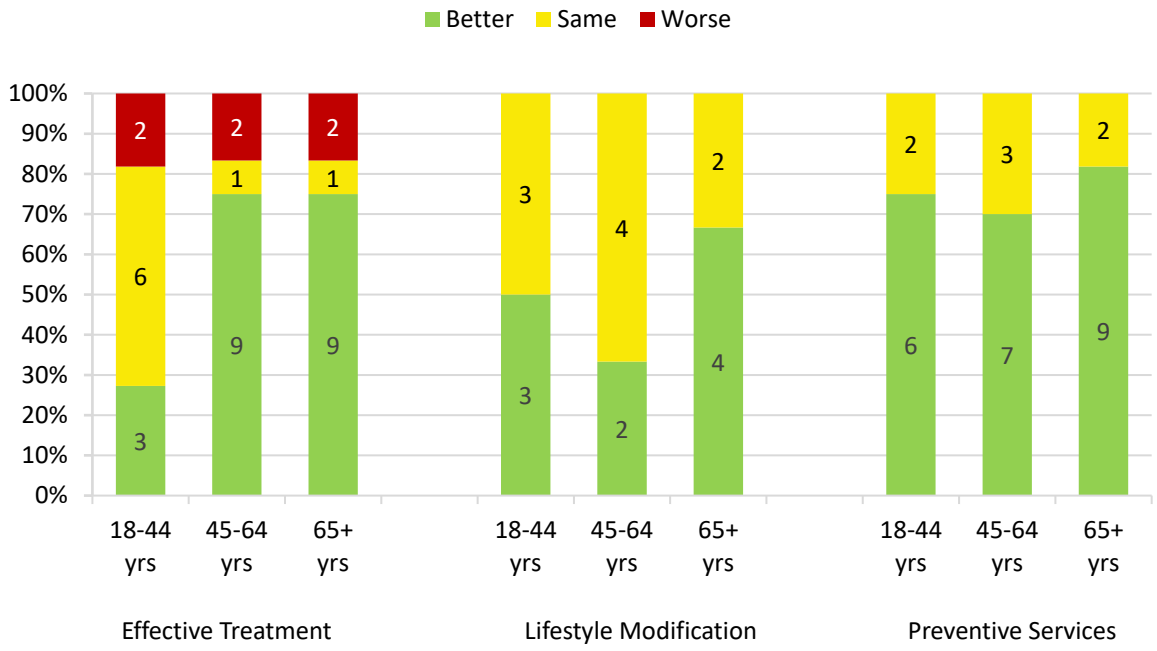
- For age 18-44 years, there were no disparities between patients with and without hypertension in reporting that when talking about starting or stopping a prescription medication, the provider asked what they thought was best for them.
- For age 45-64 years, 77.6% of patients with hypertension reported discussing what was best (medication status) compared to 79.8% of patients without hypertension.
- For age 65 years and older, 79.9% of patients with hypertension reported discussing what was best (medication status) compared to 81.9% of patients without hypertension.

Section II.3: Health Care Quality – Hypertension

Variations in VHA Health Care Quality by Veteran Diagnosed Hypertension

Exhibit 8-10. Number and percentage of measures for which Veteran VHA patients with diagnosed hypertension experienced better, same, or worse health care quality compared with reference group

Exhibit 8-10. Health Care Quality by Age Group (Hypertension)



Health Care Quality	Effective Treatment			Lifestyle Modification			Preventive Services		
Comparison	18-44	45-64	65+	18-44	45-64	65+	18-44	45-64	65+
Worse	2	2	2	0	0	0	0	0	0
Same	6	1	1	3	4	2	2	3	2
Better	3	9	9	3	2	4	6	7	9

Reference group: Veteran VHA patients of the corresponding age group who do not have diagnosed hypertension
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

Importance:

Treatment management, healthy lifestyle behaviors and prevention are necessary for the reduction of morbidity and mortality related to cardiovascular and other chronic diseases.

Findings:

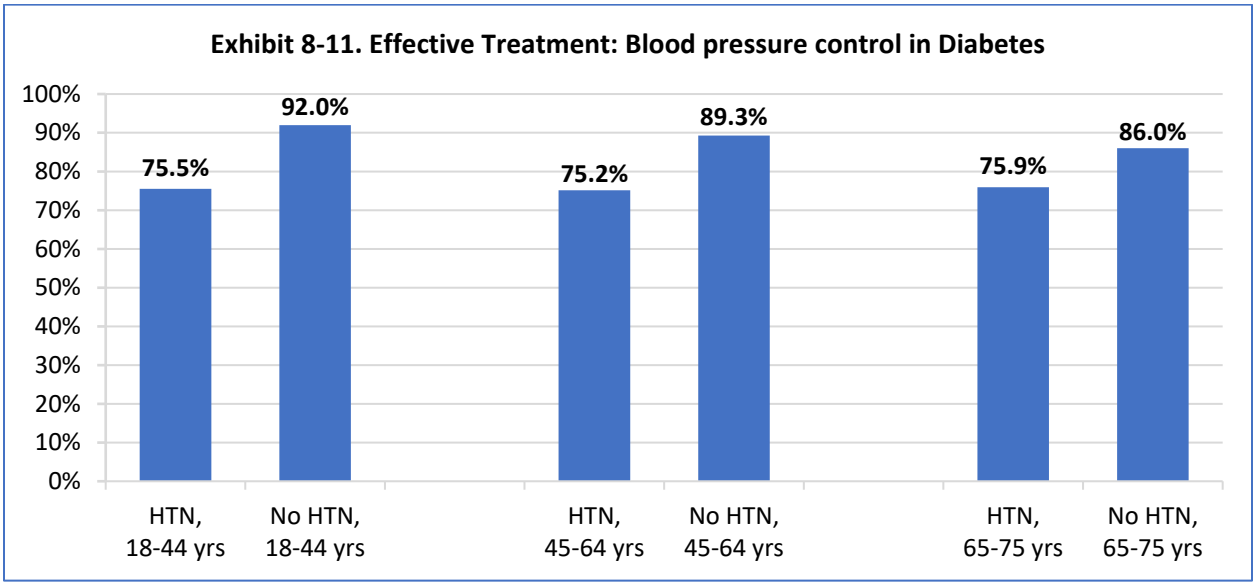
- Findings show disparities in effective treatment measures for patients with hypertension. For lifestyle modifications and preventive services, patients with hypertension reported similar or better than the patients without hypertension.

- Effective Treatment:
    - VHA users age 18-44 years with hypertension reported better effective treatment on 3 measures (27.3%), the same on 6 measures (54.5%), and worse on 2 measures (18.2%) compared to those without hypertension.
    - VHA users age 45-64 years with hypertension reported better effective treatment on 9 measures (75%), the same on 1 measure (8.3%), and worse on 2 measures (16.7%) compared to those without hypertension.
    - VHA users age 65+ years with hypertension reported better effective treatment on 9 measures (75%), the same on 1 measure (8.3%), and worse on 2 measures (16.7) compared to those without hypertension.

- Lifestyle Modification:
    - VHA users age 18-44 years with hypertension reported better lifestyle modification on 3 measures (50%) and the same on 3 measures (50%) compared to those without hypertension.
    - VHA users age 45-64 years with hypertension experienced better lifestyle modification on 2 measures (33.3%) and the same on 4 measures (66.7%) compared to those without hypertension.
    - VHA users age 65+ years with hypertension experienced better lifestyle modification on 4 measures (66.7%) and the same on 2 measures (33.3%) compared to those without hypertension.

- Preventive Services:
    - VHA users age 18-44 years with hypertension experienced better preventive services on 6 measures (75%) and the same on 2 measures (25%) compared to those without hypertension.
    - VHA users age 45-64 years with hypertension experienced better preventive services on 7 measures (70%) and the same on 3 measures (30%) compared to those without hypertension.
    - VHA users age 65+ years with hypertension experienced better preventive services on 9 measures (81.8%) and the same on 2 measures (18.2%) compared to those without hypertension.

Exhibit 8-11. VHA patients with diagnosed diabetes whose most recent blood pressure was less than 140/90 mmHg



Reference group: Veteran VHA patients of the corresponding age group who do not have diagnosed hypertension
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

Importance:

Blood pressure control in diabetic and non-diabetic patients is important for reducing cardiovascular morbidity and mortality.

Findings:

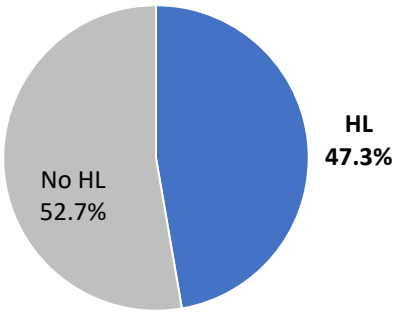
- For all age groups, diabetic patients with a diagnosis of hypertension were less likely to have their blood pressure under control (less than 140/90) than diabetic patients without a diagnosis of hypertension.
- Specifically, among VHA users with a diagnosis of diabetes:
    - For age 18-44 years, patients with hypertension were less likely to have blood pressure control (less than 140/90 mmHg) (75.5%), than patients without hypertension (92%).
    - For age 45-64 years, patients with hypertension were less likely to have blood pressure control (less than 140/90 mmHg) (75.2%), than patients without hypertension (89.3%).
    - For age 65 years and older, patients with hypertension were less likely to have blood pressure control (less than 140/90 mmHg) (75.9), than patients without hypertension (86%).

Section III.1: Sociodemographic Characteristics – Hyperlipidemia

Serum cholesterol and its lipoprotein carriers or components (low density lipoprotein, LDL, and very low density lipoprotein, VLDL) contribute to atherosclerotic vascular disease such as coronary heart disease and stroke.[15] In 2015-2016, the prevalence of hyperlipidemia in adults was over 12% for those having an LDL cholesterol above 240 mg/dl, and over 93 million adults had a total cholesterol level above 200 mg/dl.[16]

Hyperlipidemia (HL) in VHA

Exhibit 8-12. Distribution of Hyperlipidemia among Veteran VHA Patients, FY16-FY19



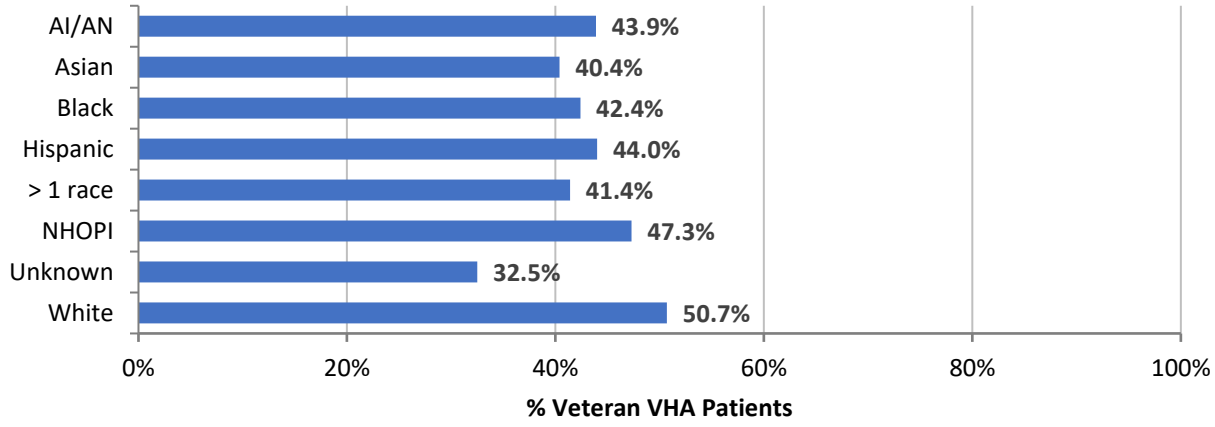
HL	No HL
47.3%	52.7%

Finding:

In VHA, the prevalence of hyperlipidemia was 47.3% among Veteran patients.

Hyperlipidemia by Race/Ethnicity

Exhibit 8-13. Percent Distribution of Hyperlipidemia by Race/Ethnicity among Veteran VHA Patients, FY16-FY19



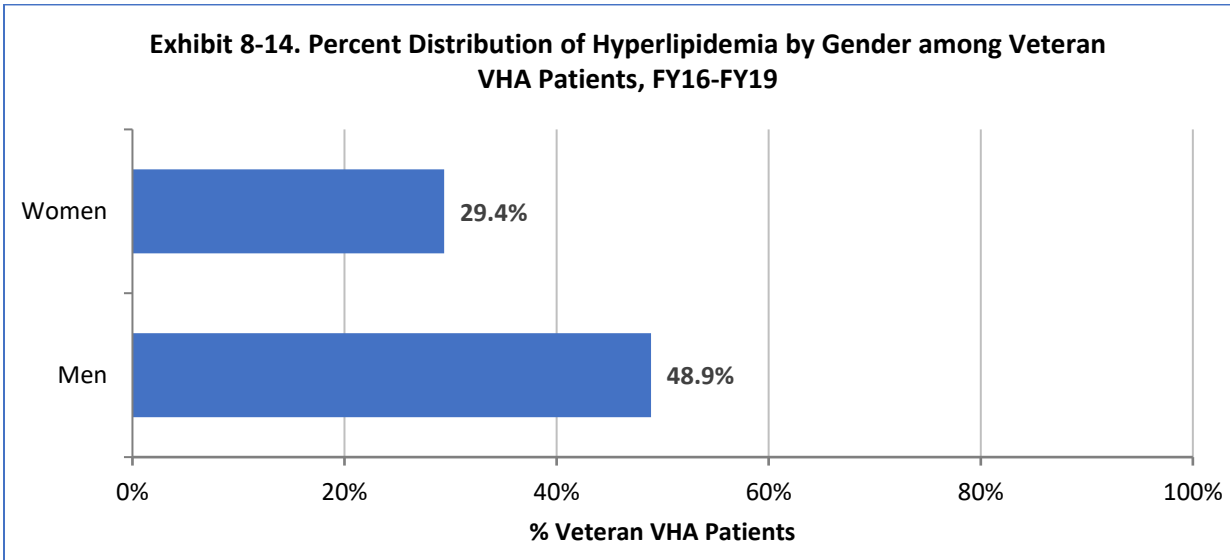
Note: AI/AN denotes American Indian or Alaska Native; NHOPI denotes Native Hawaiian or other Pacific Islander; Unknown denotes unknown, declined, or missing race/ethnicity

Finding:

The prevalence of hyperlipidemia was above 40% for all identified racial and ethnic groups and highest among Whites (50.7%) and Native Hawaiian or Other Pacific Islanders (47.3%).

Hyperlipidemia by Gender

Exhibit 8-14. Percent Distribution of Hyperlipidemia by Gender among Veteran VHA Patients, FY16-FY19

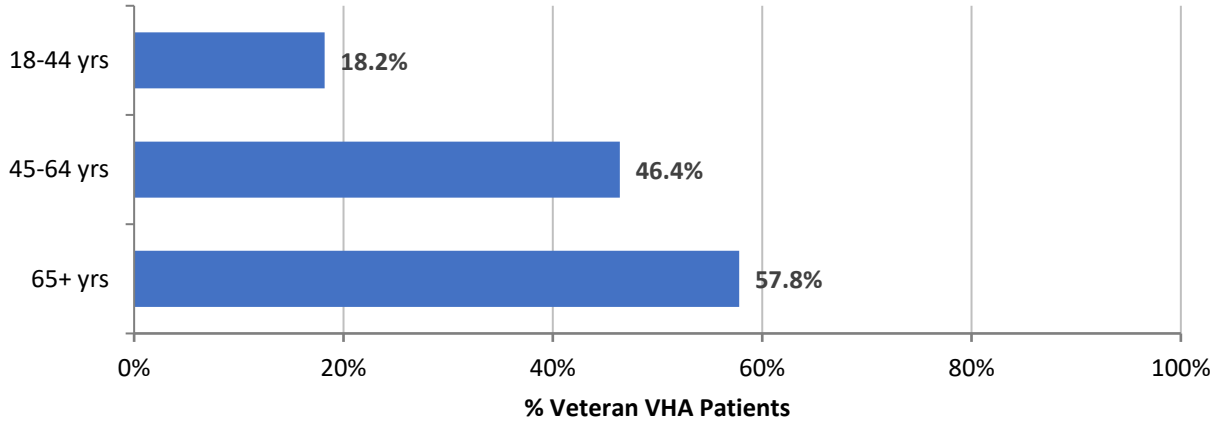


Finding:

Prevalence of hyperlipidemia was 29.4% among female Veterans and 48.9% among male Veterans.

Hyperlipidemia by Age Group

Exhibit 8-15. Percent Distribution of Hyperlipidemia by Age among Veteran VHA Patients, FY16-FY19

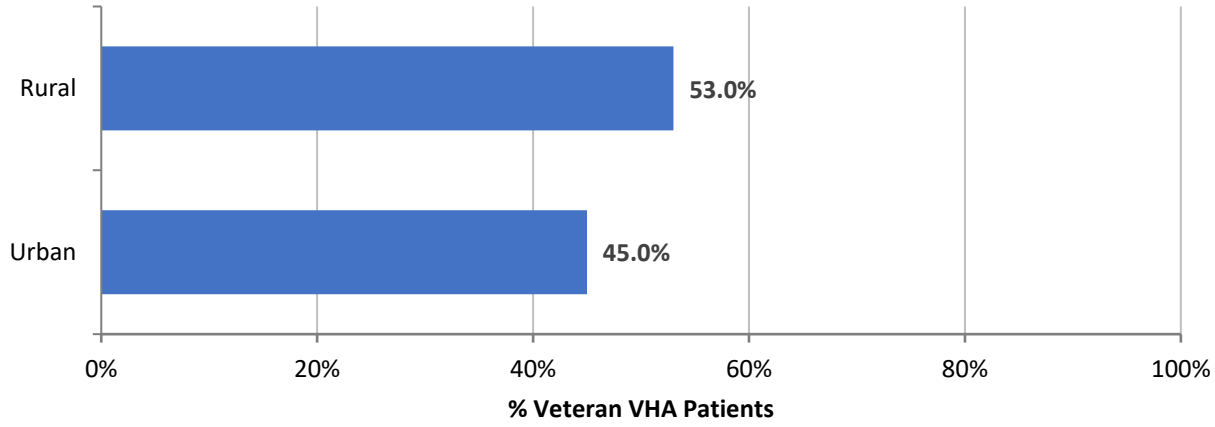


Finding:

Prevalence of hyperlipidemia increased with age: lowest for 18-44 years (18.2%), followed by 45-64 years (46.4%), and highest for age 65 years and older (57.8%).

Hyperlipidemia by Rurality

Exhibit 8-16. Percent Distribution of Hyperlipidemia by Rural/Urban Status among Veteran VHA Patients, FY16-FY19

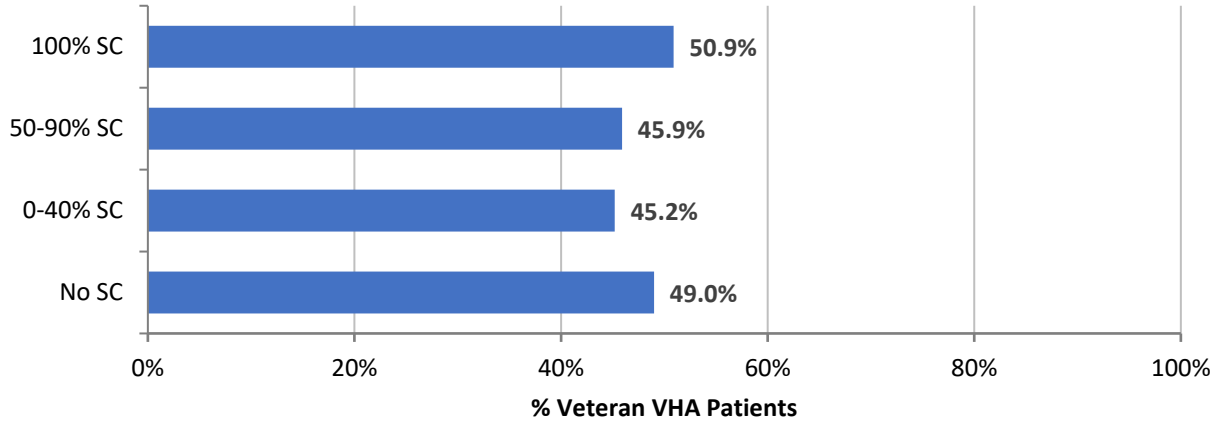


Finding:

Rural Veterans were more likely to be diagnosed with hyperlipidemia (53%) compared to Veterans in urban areas (45%).

Hyperlipidemia by Service-connected Disability Rating

Exhibit 8-17. Percent Distribution of Hyperlipidemia by Service-connected Disability Rating among Veteran VHA Patients, FY16-FY19



Note: SC denotes service-connected disability rating

Finding:

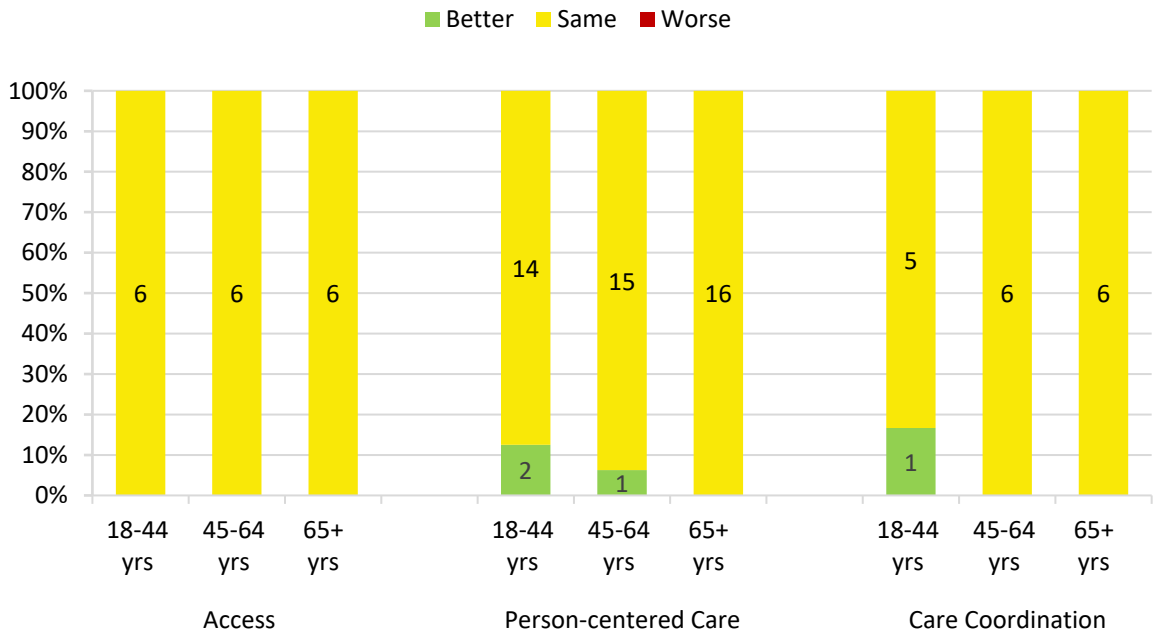
Half of Veterans with 100% service connection (50.9%) had a diagnosis of hyperlipidemia, and nearly half (49%) of Veterans without service connection.

Section III.2: Patient Experiences – Hyperlipidemia

Variations in VHA Patient Experience by Veteran Diagnosed Hyperlipidemia

Exhibit 8-18. Number and percentage of measures for which Veteran VHA patients with diagnosed hyperlipidemia experienced better, same, or worse patient experiences compared with reference group

Exhibit 8-18. Patient Experiences by Age Group (Hyperlipidemia)



Patient Experience	Access			Person-centered Care			Care Coordination		
Comparison	18-44	45-64	65+	18-44	45-64	65+	18-44	45-64	65+
Worse	0	0	0	0	0	0	0	0	0
Same	6	6	6	14	15	16	5	6	6
Better	0	0	0	2	1	0	1	0	0

Reference group: Veteran VHA patients of the corresponding age group who do not have diagnosed hyperlipidemia
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

Importance:

The goal of quality improvement is to provide access to care, person-centered care and care coordination to ultimately improve patient outcomes and patient experiences for all patients, regardless of their health status.

Findings:

- Findings show that patients with hyperlipidemia did not do worse on any measures of access, person-centered care or care coordination than patients without hyperlipidemia.

- Access:
    - VHA users of all age groups with hyperlipidemia reported the same on all access measures as patients without hyperlipidemia.

- Person-centered care:
    - VHA users age 18-44 years with hyperlipidemia experienced better person-centered care on 2 measures (12.5%) and the same on 14 measures (87.5%) compared to patients without hyperlipidemia.
    - VHA users age 45-64 years with hyperlipidemia experienced better person-centered care on 1 measure (6.3%) and the same on 15 measures (93.8%) compared to patients without hyperlipidemia.
    - VHA users age 65+ years with hyperlipidemia experienced the same person-centered care on all 16 measures (100%) as patients without hyperlipidemia.

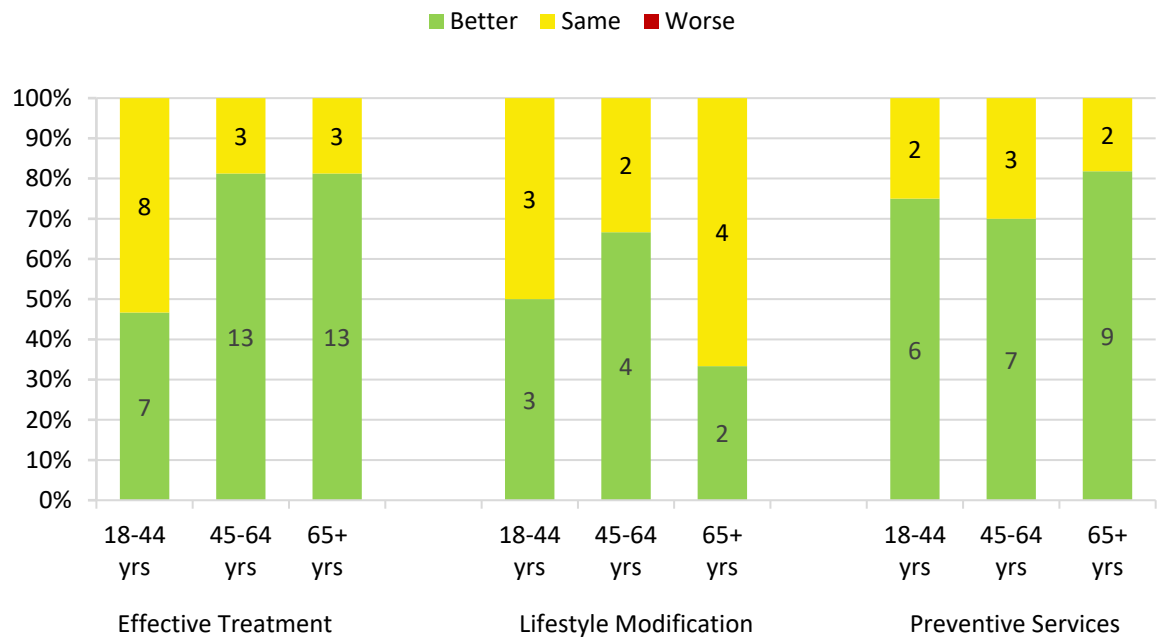
- Care coordination:
    - VHA users age 18-44 years with hyperlipidemia reported better care coordination on 1 measure (16.7%) and the same on 5 measures (83.3%) compared to patients without hyperlipidemia.
    - VHA users age 45-64 years with and without hyperlipidemia experienced similar care coordination on all 6 measures (100%).
    - VHA users age 65+ years with and without hyperlipidemia experienced similar care coordination on all 6 measures (100%).

Section III.3: Health Care Quality – Hyperlipidemia

Variations in VHA Health Care Quality by Veteran Diagnosed Hyperlipidemia

Exhibit 8-19. Number and percentage of measures for which Veteran VHA patients with diagnosed hyperlipidemia experienced better, same, or worse health care quality compared with reference group

Exhibit 8-19. Health Care Quality by Age Group (Hyperlipidemia)



Health Care Quality	Effective Treatment			Lifestyle Modification			Preventive Services		
Comparison	18-44	45-64	65+	18-44	45-64	65+	18-44	45-64	65+
Worse	0	0	0	0	0	0	0	0	0
Same	8	3	3	3	2	4	2	3	2
Better	7	13	13	3	4	2	6	7	9

Reference group: Veteran VHA patients of the corresponding age group who do not have diagnosed hyperlipidemia

Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

Importance:

Treatment management, healthy lifestyle behaviors and prevention are necessary for the reduction of morbidity and mortality related to cardiovascular and other chronic diseases.

Findings:

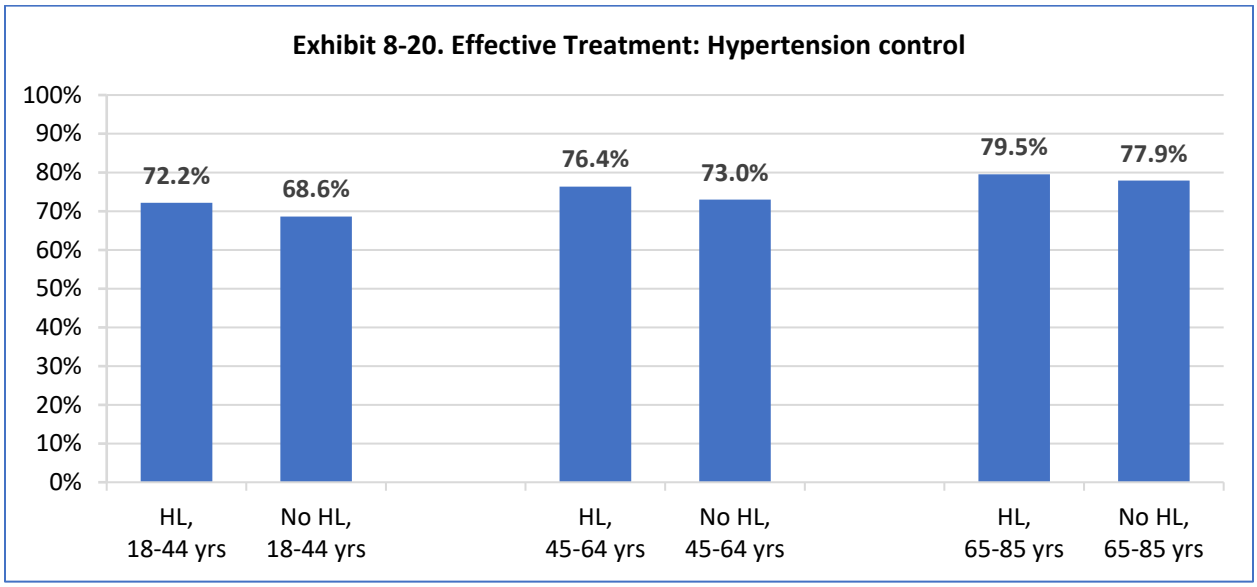
- Patients with hyperlipidemia experienced the same or better health care quality compared to patients without hyperlipidemia.

- Effective Treatment:
    - VHA users age 18-44 years with hyperlipidemia experienced better effective treatment on 7 measures (46.7%) and the same effective treatment on 8 measures (53.3%) compared to patients without hyperlipidemia.
    - VHA users age 45-64 years with hyperlipidemia experienced better effective treatment on 13 measures (81.3%) and the same effective treatment on 3 measures (18.8%) compared to patients without hyperlipidemia.
    - VHA users age 65+ years with hyperlipidemia experienced better effective treatment on 13 measures (81.3%) and the same effective treatment on 3 measures (18.8%) compared to patients without hyperlipidemia

- Lifestyle Modification:
    - VHA users age 18-44 years with hyperlipidemia experienced better lifestyle modification on 3 measures (50%) and the same effective treatment on 3 measures (50%) compared to patients without hyperlipidemia.
    - VHA users age 45-64 years with hyperlipidemia experienced better lifestyle modification on 4 measures (66.7%) for the same effective treatment on 2 measures (33.3%) compared to patients without hyperlipidemia.
    - VHA users age 65+ years with hyperlipidemia experienced better lifestyle modification on 2 measures (33.3%) and similar on 4 measures (66.7%) compared to patients without hyperlipidemia.

- Preventive Services:
    - VHA users age 18-44 years with hyperlipidemia experienced better preventive services for 6 measures (75%) and the same on 2 measures (25%) compared to patients without hyperlipidemia.
    - VHA users age 45-64 years with hyperlipidemia experienced better preventive services on 7 measures (70%) and the same on 3 measures (30%) compared to patients without hyperlipidemia.
    - VHA users age 65+ years with hyperlipidemia experienced better preventive services on 9 measures (81.8%) and the same on 2 measures (18.2%) compared to patients without hyperlipidemia.

Exhibit 8-20. VHA patients with diagnosed hypertension whose most recent blood pressure was less than 140/90 mmHg (or less than 150/90 mmHg for patients age 60-85 without a diagnosis of diabetes)



Reference group: Veteran VHA patients of the corresponding age group who do not have diagnosed hyperlipidemia
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

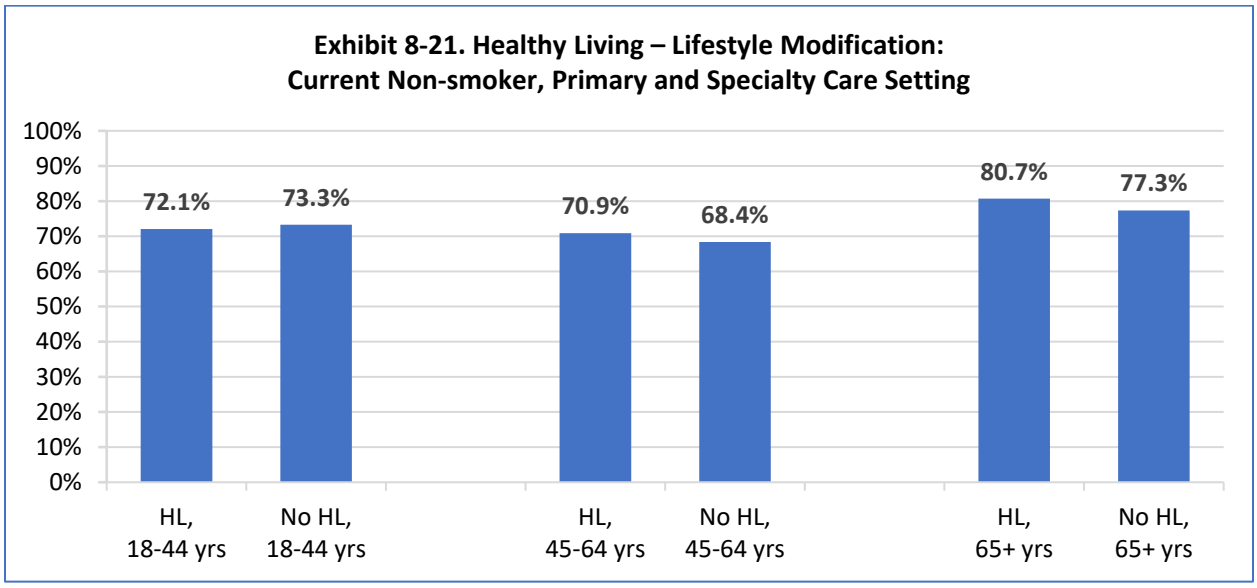
Importance:

Blood pressure control in patients with or without hyperlipidemia is important for reducing cardiovascular morbidity and mortality.

Findings:

- With the exception of VHA users age 65-85 years, patients without hyperlipidemia were less likely to have their blood pressure under control than Veterans with hyperlipidemia.
- Specifically, among VHA users diagnosed with hypertension:
    - For age 18-44 years, patients with hyperlipidemia were more likely to have their blood pressure under control (less than 140/90 mmHg) (72.2%), than patients without hyperlipidemia the same age (68.6%).
    - For age 45-64 years, patients with hyperlipidemia were more likely to have their blood pressure under control (less than 140/90 mmHg) (76.4%), than patients without hyperlipidemia the same age (73.0%).
    - There were no disparities for patients age 65-85 years for hypertension control (less than 150/90) between those with and without hyperlipidemia.

Exhibit 8-21. VHA outpatient users in a non-mental health clinic who were screened for tobacco use and did not use tobacco any time during the past 12 months



Reference group: Veteran VHA patients of the corresponding age group who do not have diagnosed hyperlipidemia
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

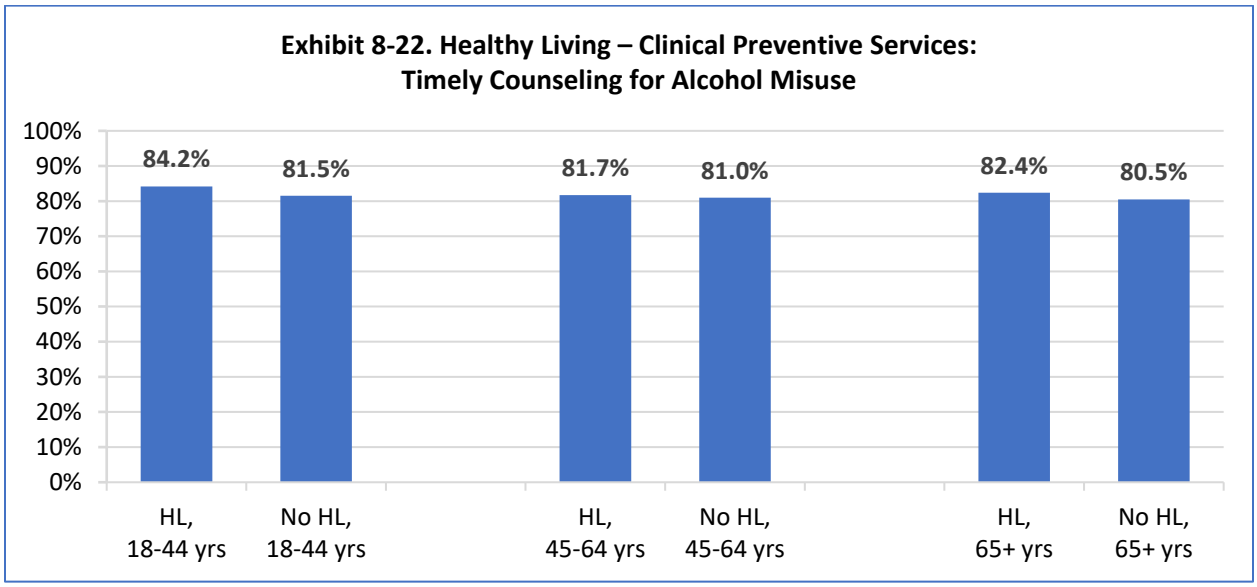
Importance:

Current tobacco smoking is the number one preventable cause of mortality and morbidity from cardiovascular disease. Screening for current smoking is necessary for all patients in multiple care settings to ensure the broadest impact of education, informed decision-making, and health behavior change.

Findings - Among patients screened for current tobacco use:

- There were no disparities in non-smoking rates for patients with or without hyperlipidemia for VHA users age 18-44 or age 45-64 years.
- For patients age 65 years and older, the non-smoking rate was higher for patients with hyperlipidemia (80.7%) compared to those without hyperlipidemia (77.3%). In other words, patients without hyperlipidemia were more likely to be current smokers than patients with hyperlipidemia.

Exhibit 8-22. VHA patients who screened positive for alcohol misuse who had a brief alcohol intervention documented within 14 days of their positive screen



Reference group: Veteran VHA patients of the corresponding age group who do not have diagnosed hyperlipidemia
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

Importance:

Alcohol use disorder is associated with cardiovascular disease, gastrointestinal diseases, and multiple cancers. Screening for alcohol use disorder is necessary for all primary care patients to ensure the broadest impact of education, informed decision-making, and health behavior change.

Findings - Among VHA patients who screened positive for alcohol misuse:

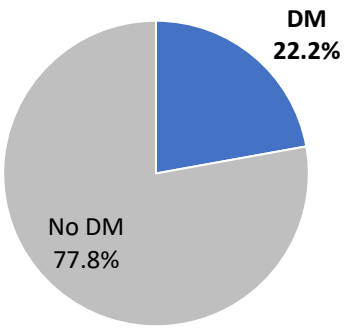
- For age 18-44 years, patients with hyperlipidemia had a higher rate of brief alcohol intervention documented within 14 days of their positive screen (84.2%) compared to those without hyperlipidemia (81.5%).
- In the other age categories, there were no disparities in brief alcohol intervention documented within 14 days of their positive screen between patients with and without hyperlipidemia.

Section IV.1: Sociodemographic Characteristics – Diabetes Mellitus

Diabetes mellitus, commonly known as diabetes, is a chronic disease in which the body's ability to produce or respond to the hormone insulin is impaired, resulting in abnormal metabolism of carbohydrates and elevated levels of glucose in the blood and urine. Data using estimates from NHANES 2013-2016 indicated at least 26 million adults (9.8%) had a diagnosis of diabetes, with an additional 9.4 million adults (3.7%) undiagnosed with diabetes, and 91.8 million adults had pre-diabetes.[17] More recent data indicate 34.2 million adults have diabetes, and 88 million adults have prediabetes.[18] Diabetes is more prevalent among Veterans than the general population with prevalence estimates from NHANES 2013-2014, with 20.5% of Veterans diagnosed and 3.4% undiagnosed with diabetes.[19]

Diabetes Mellitus in VHA

Exhibit 8-23. Distribution of Diabetes Mellitus among Veteran VHA Patients, FY16-FY19

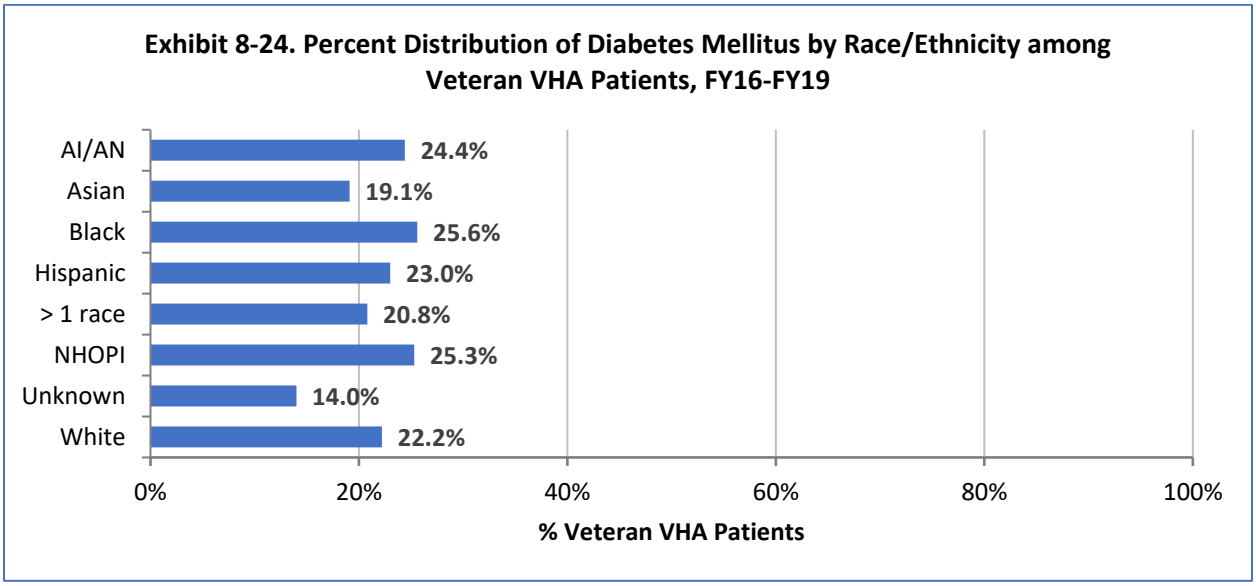


DM	No DM
22.2%	77.8%

Finding:

In VHA, the prevalence of diabetes was 22.2% among Veteran patients.

Diabetes Mellitus by Race/Ethnicity

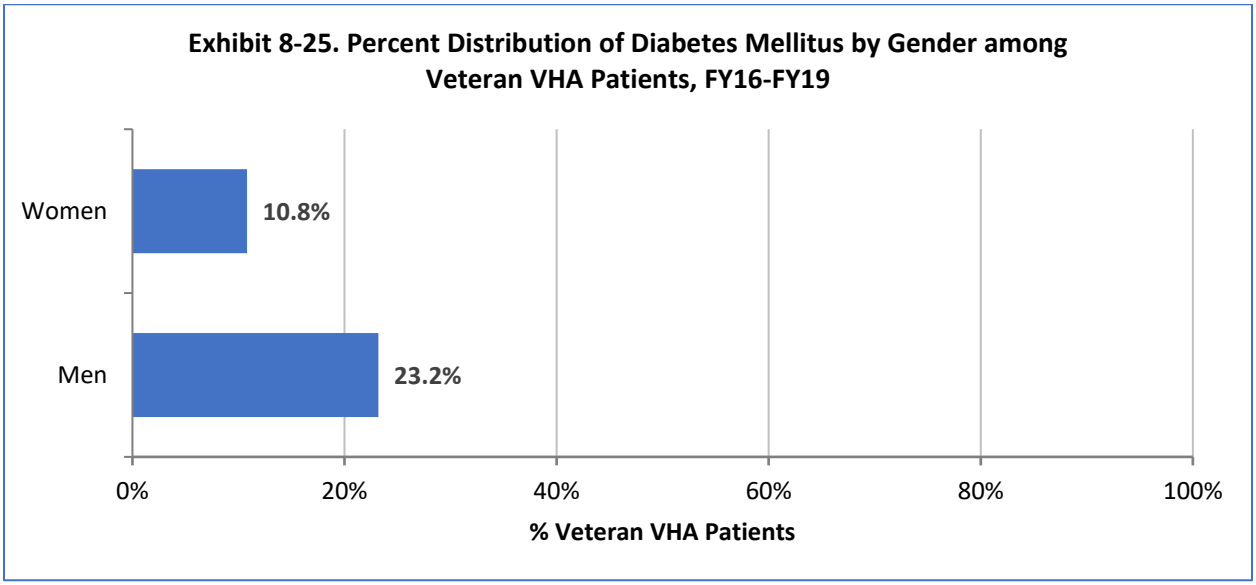


Note: AI/AN denotes American Indian or Alaska Native; NHOPI denotes Native Hawaiian or other Pacific Islander; Unk denotes unknown, declined, or missing race/ethnicity

Finding:

The prevalence of diagnosed diabetes was highest among Blacks (25.6%) and Native Hawaiian or Other Pacific Islanders (25.3%), followed closely by American Indians and Alaska Natives (24.4%). Twenty-three percent of Hispanics had diagnosed diabetes. Asians had the lowest prevalence at 19.1%.

Diabetes Mellitus by Gender

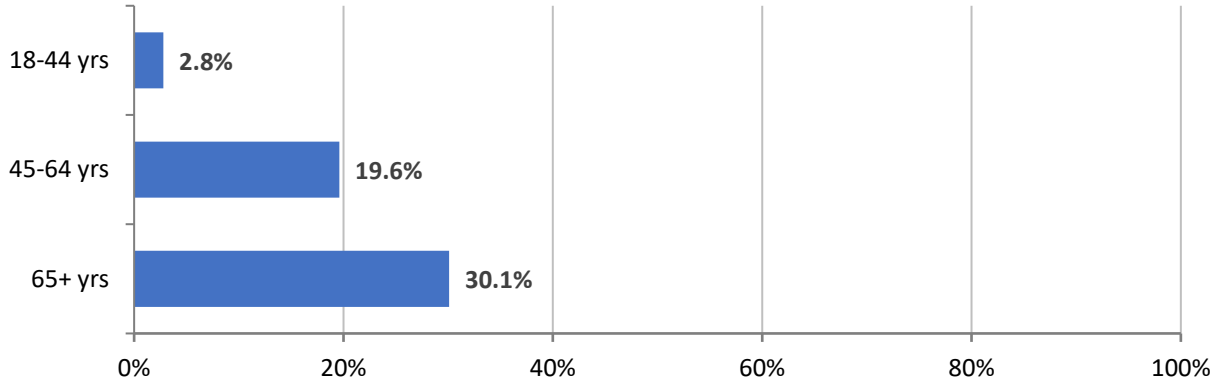


Finding:

Prevalence of diabetes was higher for male Veterans (23.2%) than female Veterans (10.8%).

Diabetes Mellitus by Age Group

Exhibit 8-26. Percent Distribution of Diabetes Mellitus by Age among Veteran VHA Patients, FY16-FY19

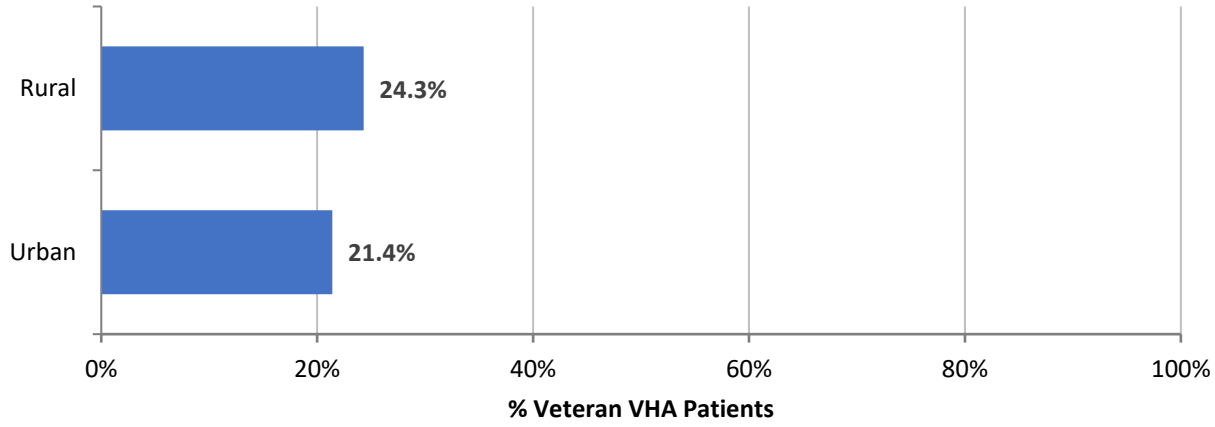


Finding:

Prevalence of diabetes diagnosis increased with age: Veterans age 18-44 years had the lowest (2.8%), followed by age 45-64 years (19.6%), and those age 65 years and older had the highest rates (30.1%).

Diabetes Mellitus by Rurality

Exhibit 8-27. Percent Distribution of Diabetes Mellitus by Rural/Urban Status among Veteran VHA Patients, FY16-FY19

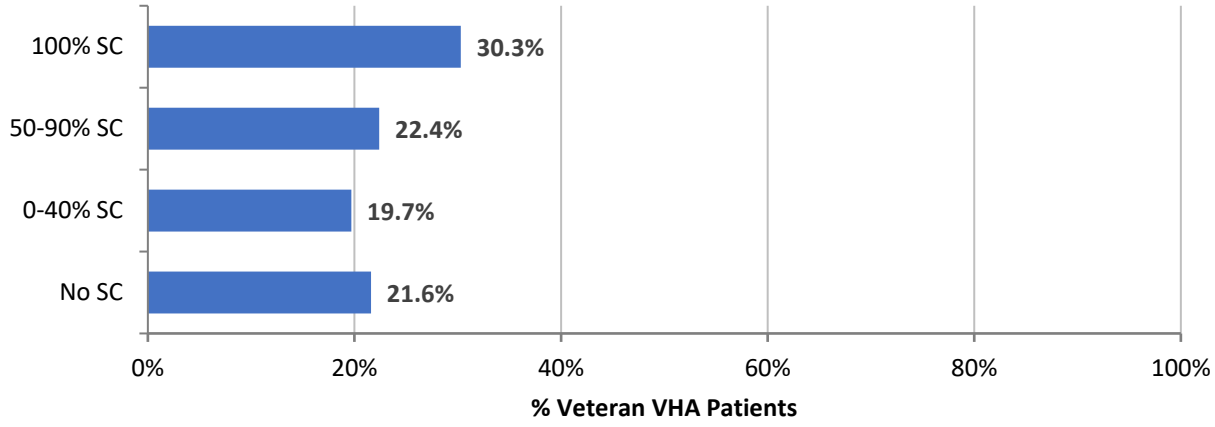


Finding:

Rural Veterans had higher rates of diabetes (24.3%) compared to Veterans in urban areas (21.4%).

Diabetes Mellitus by Service-connected Disability Rating

Exhibit 8-28. Percent Distribution of Diabetes Mellitus by Service-connected Disability Rating among Veteran VHA Patients, FY16-FY19



Note: SC denotes service-connected disability rating

Finding:

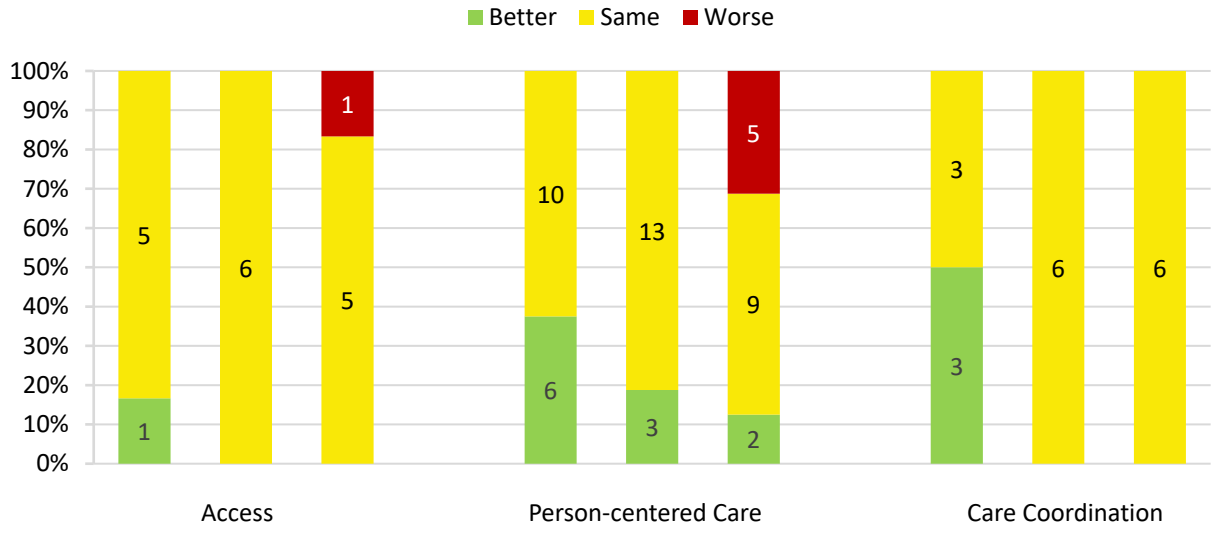
Veterans with 100% service connection had a diabetes prevalence of 30.3% compared to 21.6% for Veterans with no service connection.

Section IV.2: Patient Experiences – Diabetes Mellitus

Variations in VHA Patient Experience by Veteran Diagnosed Diabetes Mellitus

Exhibit 8-29. Number and percentage of measures for which Veteran VHA patients with diagnosed diabetes mellitus experienced better, same, or worse patient experiences compared with reference group

Exhibit 8-29. Patient Experiences By Age Group (Diabetes Mellitus)



Patient Experience	Access			Person-centered Care			Care Coordination		
Comparison	18-44	45-64	65+	18-44	45-64	65+	18-44	45-64	65+
Worse	0	0	1	0	0	5	0	0	0
Same	5	6	5	10	13	9	3	6	6
Better	1	0	0	6	3	2	3	0	0

Reference group: Veteran VHA patients of the corresponding age group who do not have diagnosed diabetes mellitus

Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

Importance:

The goal of quality improvement is to provide access to care, person-centered care and care coordination to ultimately improve patient outcomes and patient experiences for all patients, regardless of their health status.

Findings:

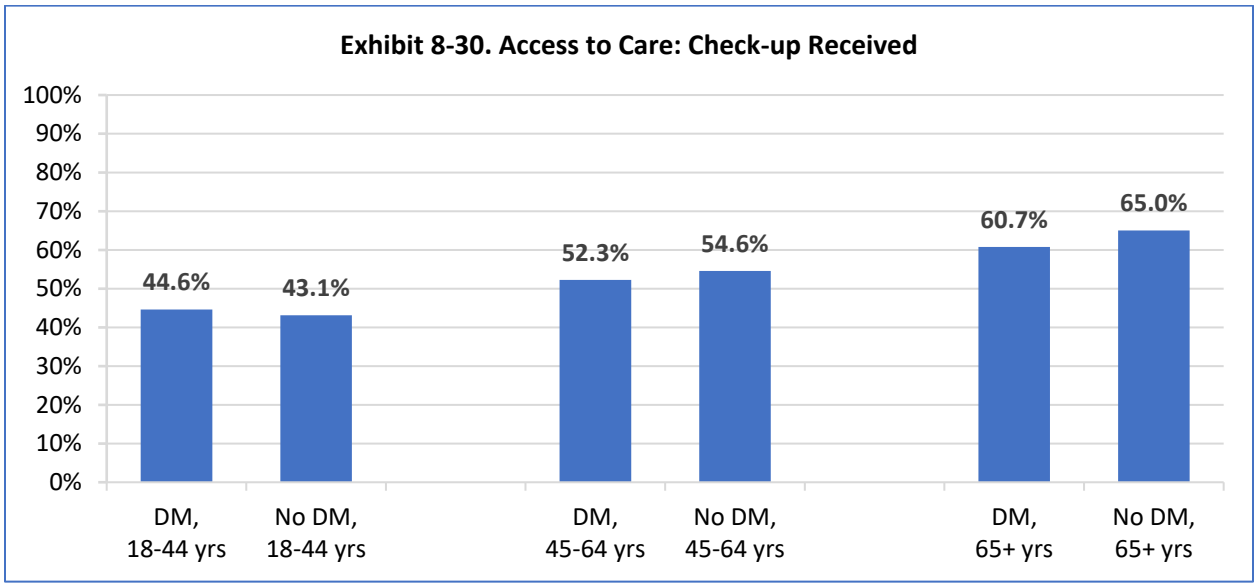
- Findings show a few disparities between patients with a diagnosis of diabetes mellitus compared to those without diabetes.

- Access:
    - VHA users age 18-44 years with diabetes reported better access on 1 measure (16.7%) and the same access on 5 measures (83.3%) compared to those without diabetes.
    - VHA users age 45-64 years with and without diabetes experienced similar access on all 6 measures (100%).
    - VHA users age 65+ years with diabetes experienced similar care on 5 measures (83.3%) but reported worse care for one access measure (16.7%) compared to those without diabetes.

- Person-centered care:
    - VHA users age 18-44 years with diabetes reported better person-centered care on 6 measures (37.5%) and the same care on 10 measures (62.5%) compared to those without diabetes.
    - VHA users age 45-64 years with diabetes experienced better person-centered care on 3 measures (18.8%) and the same care on 13 measures (81.3%) compared to those without diabetes.
    - VHA users age 65+ years with diabetes experienced better person-centered care on 2 measures (12.5%), the same on 9 measures (56.3%), but reported worse person-centered care for 5 measures (31.3%) compared to those without diabetes.

- Care coordination:
    - VHA users age 18-44 years with diabetes reported better care coordination on 3 measures (50%) and the same care coordination on 3 measures (50%) compared to those without diabetes.
    - VHA users age 45-64 years with and without diabetes experienced similar care coordination on all 6 measures (100%).
    - VHA users age 65+ years with and without diabetes experienced similar care coordination on all 6 measures (100%).

Exhibit 8-30. VHA users who indicated that in the last 6 months when they made an appointment with their provider for a check-up or routine care, they always received an appointment as soon as needed



Reference group: Veteran VHA patients of the corresponding age group who do not have diagnosed diabetes mellitus
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

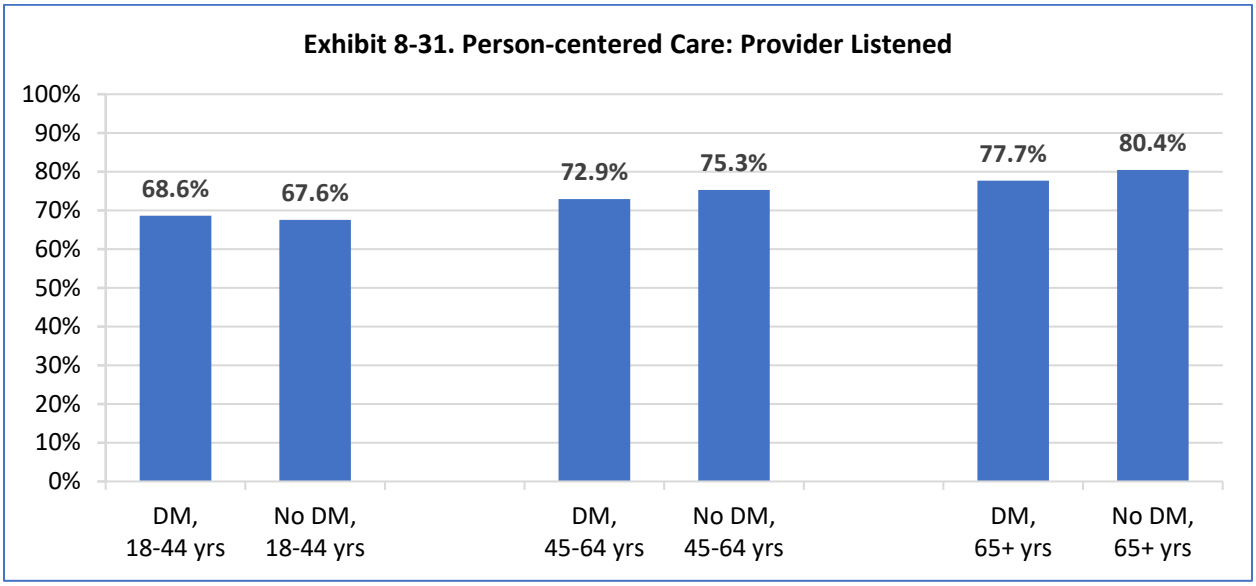
Importance:

Access that includes timeliness of care may help reduce the mortality and morbidity for cardiovascular disease and other chronic conditions.

Findings:

- For age 65 years and older, patients with diabetes were less likely to report receiving a check-up or routine care appointment as soon as they needed (60.7%) than their counterparts without diabetes (65.0%).
- There were no disparities for those patients with and without diabetes for VHA users age 18-44 or 45-64 years in reporting receiving a check-up or routine care appointment as soon as they needed.

Exhibit 8-31. VHA users who indicated, in the last 6 months, their provider always listened carefully to them



Reference group: Veteran VHA patients of the corresponding age group who do not have diagnosed diabetes mellitus
Source: Health Equity/QUERI Partnered Evaluation Center analysis of SHEP-PCMH FY2016 – FY2019 data

Importance:

Patient perceptions of provider communication may influence quality of care and overall satisfaction with care.

Findings:

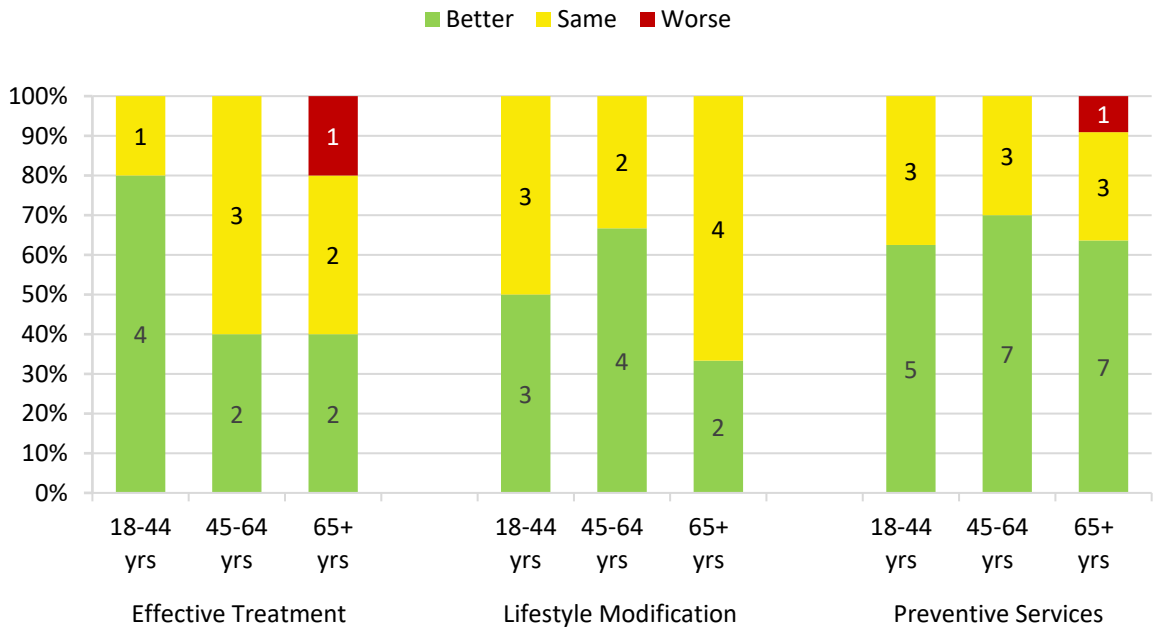
- For age 65 years and older, patients with diabetes were less likely to report that their provider always listened to them carefully (77.7%) than their counterparts without diabetes (80.4%).
- There were no disparities for those patients with and without diabetes for age group 18-44 or 45-64 years in reporting their provider always listened to them carefully.

Section IV.3: Health Care Quality – Diabetes Mellitus

Variations in VHA Health Care Quality by Veteran Diagnosed Diabetes Mellitus

Exhibit 8-32. Number and percentage of measures for which Veteran VHA patients with diagnosed diabetes mellitus experienced better, same, or worse health care quality compared with reference group

Exhibit 8-32. Health Care Quality by Age Group (Diabetes Mellitus)



Health Care Quality	Effective Treatment			Lifestyle Modification			Preventive Services		
Comparison	18-44	45-64	65+	18-44	45-64	65+	18-44	45-64	65+
Worse	0	0	1	0	0	0	0	0	1
Same	1	3	2	3	2	4	3	3	3
Better	4	2	2	3	4	2	5	7	7

Reference group: Veteran VHA patients of the corresponding age group who do not have diagnosed diabetes mellitus

Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

Importance:

Treatment management, healthy lifestyle behaviors and prevention are necessary for the reduction of morbidity and mortality related to cardiovascular disease and other chronic conditions.

Findings:

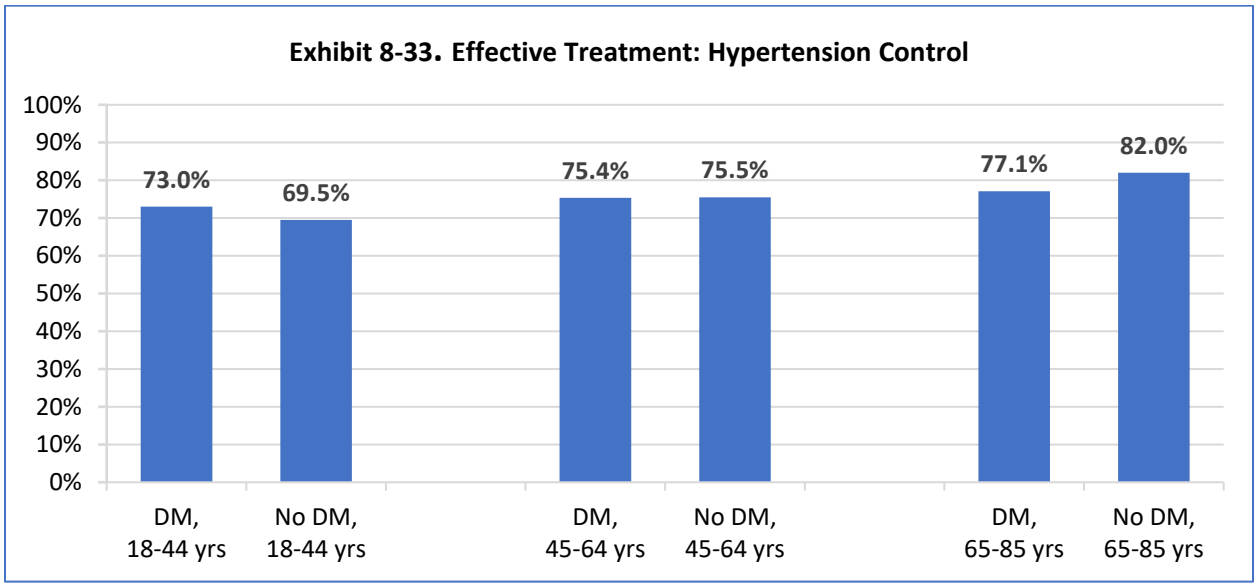
- Findings show only a few disparities in health care quality between patients with a diagnosis of diabetes mellitus compared to those without diabetes.

- Effective Treatment:
    - VHA users age 18-44 years with diabetes experienced better effective treatment on 4 measures (80%) and the same on 1 measure (20%) compared to those without diabetes.
    - VHA users age 45-64 years with diabetes experienced better effective treatment on 2 measures (40%) and the same on 3 measures (60%) compared to those without diabetes.
    - VHA users age 65+ years with diabetes experienced better effective treatment on 2 measures (40%), the same on 2 measures (40%), and worse on 1 measure (20%) compared to those without diabetes.

- Lifestyle Modification:
    - VHA users age 18-44 years with diabetes experienced better lifestyle modification on 3 measures (50%) and the same on 3 measures (50%) compared to those without diabetes.
    - VHA users age 45-64 years with diabetes experienced better lifestyle modification on 4 measures (66.7%) and the same on 2 measures (33.3%) compared to those without diabetes.
    - VHA users age 65+ years with diabetes experienced better lifestyle modification on 2 measures (33.3%) and the same on 4 measures (66.7%) compared to those without diabetes.

- Preventive Services:
    - VHA users age 18-44 years with diabetes experienced better preventive services on 5 measures (62.5%) and the same on 3 measures (37.5%) compared to those without diabetes.
    - VHA users age 45-64 years with diabetes experienced better preventive services on 7 measures (70%) and the same on 3 measures (30%) compared to those without diabetes.
    - VHA users age 65+ years with diabetes experienced better preventive services on 7 measures (63.6%), the same on 3 measures (27.3%), but worse on 1 measure (9.1%) compared to those without diabetes.

Exhibit 8-33. VHA patients with diagnosed hypertension whose most recent blood pressure was less than 140/90 mmHg (or less than 150/90 mmHg for patients age 60-85 without a diagnosis of diabetes)



Reference group: Veteran VHA patients of the corresponding age group who do not have diagnosed diabetes mellitus
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

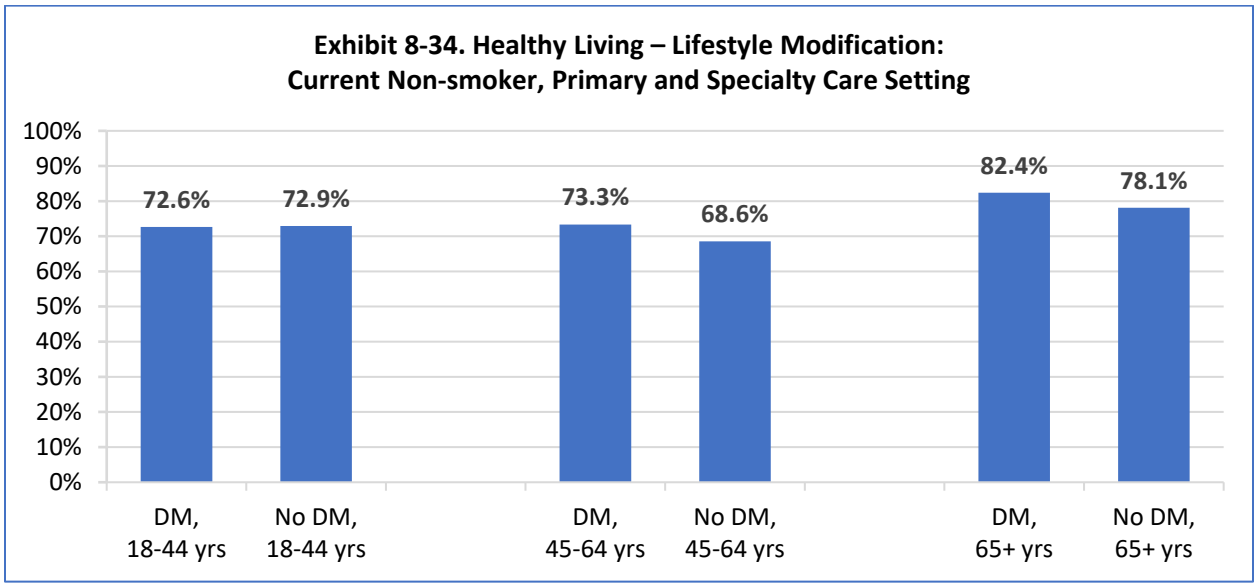
Importance:

Blood pressure control in patients with or without diabetes is important for reducing cardiovascular mortality and morbidity.

Findings - Among patients with diagnosed hypertension:

- For age 18-44 years, patients with diabetes were more likely to have their blood pressure under control (less than 140/90 mmHg) (73%), than patients without diabetes the same age (69.5%).
- There were no disparities for patients age 45-64 years for hypertension control between those with and without diabetes.
- For age 65-85 years, patients with diabetes were less likely to have their blood pressure under control (less than 150/90 mmHg) (77.1%), than patients without diabetes the same age (82%).

Exhibit 8-34. VHA outpatient users in a non-mental health clinic who were screened for tobacco use and did not use tobacco any time during the past 12 months



Reference group: Veteran VHA patients of the corresponding age group who do not have diagnosed diabetes mellitus
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

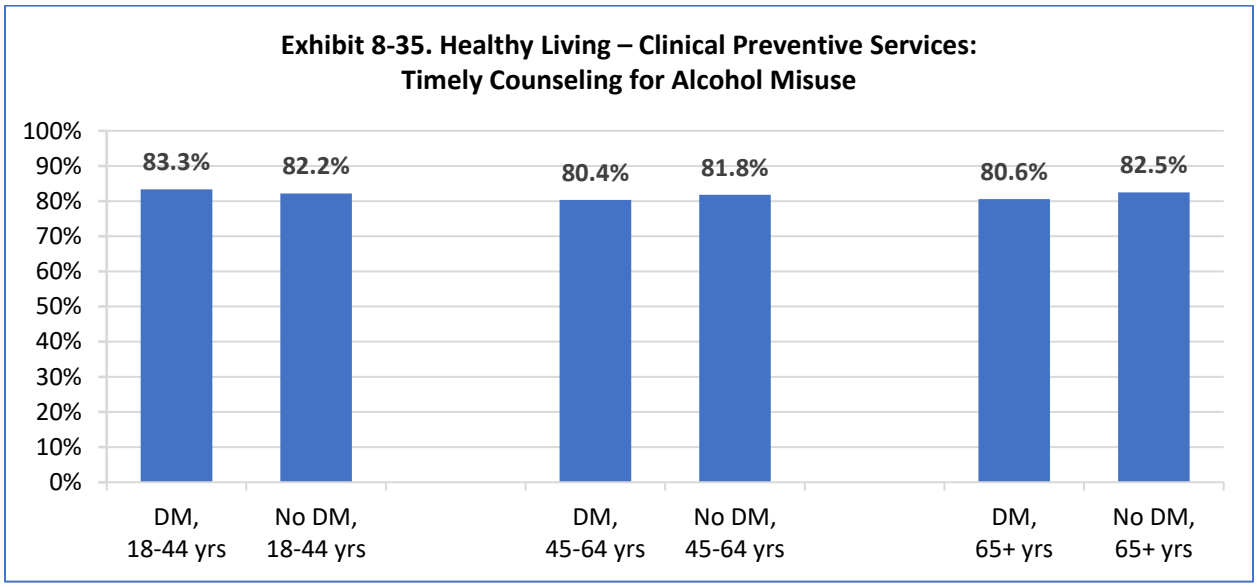
Importance:

Current tobacco smoking is the number one preventable cause of mortality and morbidity from cardiovascular disease. Screening for current smoking is necessary for all patients in multiple care settings to ensure the broadest impact of education, informed decision-making, and health behavior change.

Findings - Among patients screened for current tobacco use:

- There were no disparities in non-smoking rates for patients age 18-44 years.
- For patients age 45-64 years, the non-smoking rate was higher for those patients with diabetes (73.3%) compared to those without diabetes (68.6%).
- For patients age 65 years and older, the non-smoking rate was also higher for those patients with diabetes (82.4%) compared to those without diabetes (78.1%).

Exhibit 8-35. VHA patients who screened positive for alcohol misuse who had a brief alcohol intervention documented within 14 days of their positive screen



Reference group: Veteran VHA patients of the corresponding age group who do not have diagnosed diabetes mellitus
Source: Health Equity/QUERI Partnered Evaluation Center analysis of EPRP FY2016 – FY2019 data

Importance:

Alcohol use disorder is associated with cardiovascular disease, gastrointestinal diseases, and multiple cancers. Screening for alcohol use disorder is necessary for all primary care patients to ensure the broadest impact of education, informed decision-making, and health behavior change.

Findings:

- For age 65 years and older, patients with diabetes had a lower rate of brief alcohol intervention documented within 14 days of their positive screen (80.6%) compared to those without diabetes (82.5%).
- In the other age categories, there were no disparities in brief alcohol intervention documented within 14 days of their positive screen between patients with and without diabetes.

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Technical Appendix

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Cohort Creation

To create the cohort presented in the National Veteran Health Equity Report 2021, we selected all Veteran VHA users who responded to Survey of Healthcare Experiences of Patients (SHEP)-Patient Centered Medical Home (PCMH) surveys in fiscal years (FY)16 – FY19, or who were selected for quality measurement through the External Peer Review Program (EPRP) during FY16 – FY19. We created separate SHEP and EPRP cohorts. For each of these cohorts, we linked the 4 fiscal years of data; for individuals with observations in more than 1 year, we retained only the most recent year of data.

Sample Characteristics

Person-level sociodemographic characteristics were derived from data in the Corporate Data Warehouse for each year from FY16 to FY19. For each characteristic, we designated a reference group and comparison groups as listed in the table below.

Veteran Characteristic	Comparison Groups	Reference Group
Race/Ethnicity	American Indian/Alaska Native; Asian; Black or African American; Hispanic; Native Hawaiian/Other Pacific Islander; More than one race (more than one race)	White non-Hispanic
Gender	Female	Male
Age group	18-44 years; 45-64 years	65+ years
Older Age Group	75-84 years; 85+ years	65-74 years
Rurality	Rural (highly rural + other rural)	Urban
Socio-economic status (SES)	Low SES	High SES
Service-connected disability	50-90% service-connected disability; 100% service-connected disability	0-40% service-connected disability
Cardiovascular (CV) Risk Factors – Hypertension, Hyperlipidemia, Diabetes	*Diagnosed:* Hypertension; Hyperlipidemia; Diabetes	*No diagnosed:* Hypertension; Hyperlipidemia; Diabetes

Measures

Domains of Patient Experiences of VA Care

Access:

Getting timely appointments, care, and information

Person-centered Care:

- Communication – how well providers communicate with patients, office staff helpful and respectful
- Comprehensiveness – providers paying attention to patient's mental or emotional health
- Self-management support – providers support patient in taking care of their own health

Care Coordination:

Provider's use of information to coordinate patient care, including discussing medication decisions

Response Options

All metrics aligned so that a higher rate is better, e.g., blood pressure ≥ 160/100 mmHg or not done was aligned to blood pressure measured and < 160/100 mmHg. Metrics were then dichotomized to the response indicating the best care vs. less.

SHEP-PCMH Response Options	Dichotomized Response
Always, Usually, Sometimes, Never	Always vs. less than always
Yes, No	Yes vs. No
0 – 10 provider rating scale	9 – 10 vs. 0 – 8
A lot, Some, A little, Not at all	A lot vs. Less

Measures of Patient Experiences of VA Care by Domain or Priority Area

Domain or Priority Area	SHEP- PCMH Contrast	Survey Question	Response Options Dichotomized
Access	Questions During Office Hours Answered	In the last 6 months, when you contacted this provider's office during regular office hours, how often did you get an answer to your medical question that same day?	Always vs. less
	Questions After Hours Answered	In the last 6 months, when you contacted this provider's office after regular office hours, how often did you get an answer to your medical question as soon as you needed?	Always vs. less
	Care Received	In the last 6 months, when you contacted this provider's office to get an appointment for care you needed right away, how often did you get an appointment as soon as you needed?	Always vs. less
	Check-up Received	In the last 6 months, when you made an appointment for a check-up or routine care with this provider, how often did you get an appointment as soon as you needed?	Always vs. less

Domain or Priority Area	SHEP- PCMH Contrast	Survey Question	Response Options Dichotomized
Access (continued)	Care After Hours Received	In the last 6 months, how often were you able to get the care you needed from this provider's office during evenings, weekends, or holidays?	Always vs. less
	Appointment Wait Time	Wait time includes time spent in the waiting room and exam room. In the last 6 months, how often did you see this provider within 15 minutes of your appointment time?	Always vs. less
Person-centered Care	Information After Hours	Did this provider's office give you information about what to do if you needed care during evenings, weekends, or holidays?	Yes vs. No
	Information Reminders	Some offices remind patients between visits about tests, treatment, or appointments. In the last 6 months, did you get any reminders from this provider's office between visits?	Yes vs. No
	Provider Information Understood	In the last 6 months, how often did this provider explain things in a way that was easy to understand?	Always vs. less
	Provider Listened	In the last 6 months, how often did this provider listen carefully to you?	Always vs. less
	Health Question Answered	In the last 6 months, how often did this provider give you easy to understand information about these health questions or concerns?	Always vs. less
	Provider Aware of History	In the last 6 months, how often did this provider seem to know the important information about your medical history?	Always vs. less
	Provider Showed Respect	In the last 6 months, how often did this provider show respect for what you had to say?	Always vs. less
	Provider Enough Time Spent	In the last 6 months, how often did this provider spend enough time with you?	Always vs. less
	Provider Rating	Using any number from 0 to 10, where 0 is the worst provider possible and 10 is the best provider possible, what number would you use to rate this provider?	9-10 vs. 0-8
	Health Goals Discussed	In the last 6 months, did anyone in this provider's office talk with you about specific goals for your health?	Yes vs. No
	Health Difficulty Discussed	In the last 6 months, did anyone in this provider's office ask you if there are things that make it hard for you to take care of your health?	Yes vs. No

Domain or Priority Area	SHEP- PCMH Contrast	Survey Question	Response Options Dichotomized
Person-centered Care (continued)	Depression Discussed	In the last 6 months, did anyone in this provider's office ask you if there was a period of time when you felt sad, empty or depressed?	Yes vs. No
	Stress Discussed	In the last 6 months, did you and anyone in this provider's office talk about things in your life that worry you or cause you stress?	Yes vs. No
	Personal Discussed	In the last 6 months, did you and anyone in this provider's office talk about a personal problem, family problem, alcohol use, drug use, or a mental or emotional illness?	Yes vs. No
	Staff Helpful	In the last 6 months, how often were clerks and receptionists at this provider's office as helpful as you thought they should be?	Always vs. less
	Staff Respectful	In the last 6 months, how often did clerks and receptionists at this provider's office treat you with courtesy and respect?	Always vs. less
Care Coordination	Medication Discussed	In the last 6 months, how often did you and someone from this provider's office talk about all the prescription medicines you were taking?	Always vs. less
	Medication Status Reason	When you talked about starting or stopping a prescription medicine, how much did this provider talk about the reasons you might want to take a medicine?	A lot vs. less
	Medication Status Reason Not	When you talked about starting or stopping a prescription medicine, how much did this provider talk about the reasons you might not want to take a medicine?	A lot vs. less
	Medication Status Best	When you talked about starting or stopping a prescription medicine, did this provider ask you what you thought was best for you?	Yes vs. No
	Follow-up Test	In the last 6 months, when this provider ordered a blood test, x-ray, or other test for you, how often did someone from this provider's office follow up to give you those results?	Always vs. less
	Specialty Care Information	In the last 6 months, how often did the provider named in Question 1 seem informed and up-to-date about the care you got from specialists?	Always vs. less

Domains of Quality of VA Care

Effective Treatment:

Promoting the most effective prevention and treatment practices for the leading causes of mortality, starting with cardiovascular disease

Healthy Living – Lifestyle Modification

Promoting lifestyle changes to address behavioral risk factors for chronic conditions

Healthy Living – Clinical Preventive Services

Promoting wide use of best practices to enable healthy living

Response Options

1 = measure achieved; 0 = measure not achieved

Measures of Quality of VA Care by Domain or Priority Area

Domain or Priority Area	Quality Contrast	Measure Description
Effective Treatment	Hypertension Control	VHA patients with diagnosed hypertension whose most recent blood pressure was less than 140/90 mmHg (or less than 150/90 mmHg for patients age 60-85 without a diagnosis of diabetes)
	Hypertension not Poorly Controlled	VHA patients with diagnosed hypertension whose most recent blood pressure was measured in the last 12 months, and was less than 160/100 mmHg
	Undiagnosed Hypertension	VHA patients without a diagnosis of hypertension whose most recent blood pressure was less than 140/90 mmHg
	Undiagnosed Poorly Controlled Hypertension	VHA patients without a diagnosis of hypertension whose most recent blood pressure was measured in the last 12 months, and was less than 160/100 mmHg
	Screened for Diabetes Control	VHA patients with diagnosed diabetes who had glycosylated hemoglobin (HbA1C) measured in the past year to assess diabetes control
	Diabetes Retinal Exam	VHA patients with diagnosed diabetes who had a timely retinal examination
	Diabetes Renal Testing	VHA patients with diagnosed diabetes who had nephropathy screening in the past year, documented evidence of nephropathy, and/or evidence of angiotensin-converting enzyme inhibitor (ACE-I) or angiotensin receptor blocker (ARB) therapy
	Diabetes Foot Inspection	VHA patients with diagnosed diabetes who had documentation in the medical record that within the past year a visual inspection of the patient`s feet was completed

Domain or Priority Area	Quality Contrast	Measure Description
Effective Treatment (continued)	Diabetes Foot Pedal Pulses	VHA patients with diagnosed diabetes who had documentation in the medical record that within the past year the pulses were checked in the patient`s feet
	Diabetes Foot Sensory Exam with Monofilament	VHA patients with diagnosed diabetes who had documentation in the medical record that within the past year they had a foot exam using a monofilament
	Diabetes Daily Aspirin Use	VHA patients with diagnosed diabetes who had documentation of use of aspirin or another antithrombotic therapy during the measurement period [Note: This measure was active FY2017 - quarter 2 of FY2019]
	Diabetes - ACE-I/ARB Prescribed	VHA patients with diagnosed diabetes that had an angiotensin-converting enzyme inhibitor (ACE-I) or angiotensin receptor blocker (ARB) included in their current medications [Note: This measure was active through FY2016 only]
	Diabetes Controlled	VHA patients with diagnosed diabetes whose glycosylated hemoglobin (HbA1C) was measured in the prior year, and was less than 9%
	Blood Pressure Control in Diabetes	VHA patients with diagnosed diabetes whose most recent blood pressure was less than 140/90 mmHg
	Blood Pressure not Poorly Control in Diabetes	VHA patients with diagnosed diabetes whose most recent blood pressure was measured in the last 12 months, and was less than 160/100 mmHg [Note: This measure was assessed through FY2016 only]
	Screened for Hyperlipidemia	VHA male patients age 35 and older and female patients age 45 and older, who had a lipid profile measurement that was timely based on their cardiovascular disease risk
Healthy Living – Lifestyle Modification	Participated in Weight Management Program if Eligible	VHA patients eligible for participation in a weight management program, who have documentation of participation in a weight management program in the past year [Note: Eligible patients are those with body mass index (BMI) 30 or greater, or those with BMI of 25 or greater with an associated obesity-related condition]
	Current Non-Smoker, Primary and Specialty Care Setting	VHA outpatients in a non-mental health clinic who were screened for tobacco use and did not use tobacco any time during the past 12 months
	Current Non-Smoker, Mental Health Clinic	VHA outpatients with a mental health diagnosis who were screened for tobacco use and did not use tobacco any time during the past 12 months
	Tobacco Use - Advised to Quit	VHA patients who are current tobacco users (any tobacco use in the past 12 months) who in the past 12 months have been advised to quit

Domain or Priority Area	Quality Contrast	Measure Description
Healthy Living – Lifestyle Modification (continued)	Tobacco Use - Discussed Cessation Strategies	VHA patients who are current tobacco users (any tobacco use in the past 12 months) who in the past 12 months discussed or were offered information on behavioral counseling options to assist with quitting
	Tobacco Use - Discussed Cessation Medications	VHA patients who are current tobacco users (any tobacco use in the past 12 months) who in the past 12 months discussed or were offered FDA approved cessation medications to assist in quitting
Healthy Living – Clinical Preventive Services	Screened for Tobacco Use	VHA patients who were screened in the past year for tobacco use
	Screened for alcohol Misuse	VHA patients who were screened in the past year for alcohol misuse
	Timely Counseling for Alcohol Misuse	VHA patients who screened positive for alcohol misuse who had a brief alcohol intervention documented within 14 days of their positive screen
	Screened for Depression	VHA patients who were screened in the past year for depression
	Screened for PTSD	VHA patients who were screened at required intervals for post-traumatic stress disorder (PTSD)
	Breast Cancer Screening	VHA women patients ages 52-74, with evidence of mammography screening in the prior 27 months
	Cervical Cancer Screening	VHA women patients ages 24-64, with evidence of cervical cancer screening in the prior 3 years with a Papanicolaou test (Pap smear) or 5 years with a Pap test plus HPV test
	Colo-rectal Cancer Screening	VHA patients ages 51-75, with documentation of colorectal cancer screening that is current based on the screening modality. [Note: Timely screening includes colonoscopy within 10 years, CT colonography or flexible sigmoidoscopy within 5 years, fecal immunochemical-based (FIT)-DNA test or three-card guaiac fecal occult blood test (iFOBT/FIT) within 2 years]
	Influenza Immunization	VHA patients who received an influenza vaccination during July through March of the measurement year [Note: This measure was assessed FY2017-FY2019]
	Influenza Immunization Accepted	VHA patients who accepted influenza immunization. [Note: This measure was assessed FY2017-FY2019]
	Pneumococcal Immunizations	VHA patients age 65 or older who received pneumococcal immunizations
	Pneumococcal Immunizations Accepted	VHA patients age 65 or older who accepted pneumococcal immunizations

Analysis

Comparisons made between priority group(s) and reference group

- Two criteria had to be satisfied for a difference to be categorized as a meaningful difference:
    - An absolute difference that was statistically significant with a p-value < 0.05 on a two-tailed test, AND
    - A relative difference of at least 10%, where the relative difference is the difference between the priority group gap in care and the reference group gap in care, divided by the reference group gap in care
- Meaningful differences that favor the reference group are disparities, whereas those that favor the priority group are advantages

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