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**Supplemental Digital Content 1. Analytic Framework: Prevalence of and interventions to reduce disparities in populations within the VHA**

1st

Veteran populations related to:

• Race/ethnicity

• SES

• LGBT

• Gender

• Age

• Mental Illness

• Physical or cognitive

disability

• Geographic location

• Military era of service

• Other characteristics

Mediating Factors:

- Patient

- Provider

- Patient-Provider

- System

KQ 1

Utilization, Quality, Patient Outcomes

KQs 2, 3

Interventions

3rd

KQ 3

2nd

**KQ1.** For what Veteran groups/populations are health and healthcare disparities prevalent?

**Key Questions not included in this article:**

**KQ2.** What are the effects of interventions implemented within the VHA to reduce health disparities?

**KQ3.** What are the research projects designed to identify or mitigate health disparities currently being funded by the VA Office of Research and Development (ORD)?

**Abbreviations:** LGBT = Lesbian, Gay, Bisexual, Transgender; SES = Socioeconomic Status

**Supplemental Digital Content 2. Protocol**

Project Title: Prevalence of and interventions to reduce disparities in vulnerable populations within the VHA: A Map of the Evidence

1. **Background**

Improving the quality of care for all Veterans is a top priority for the Veterans Health Administration (VHA). Health equity is a key component of quality, and in order to direct future resources and to advise Veterans Administration (VA) leadership and other relevant offices, programs and partners, the Office of Health Equity (OHE) must have a clear understanding of the current state of health disparities within VHA. Advancing health equity is directly aligned with the strategic plans of both the VA and VHA, and goals for eliminating health disparities are outlined in the VHA Blueprint for Excellence.[1](#_ENREF_1) Healthy People 2020 defines a *health disparity* as “a particular type of health difference that is closely linked with social, economic, and/or environmental disadvantage,” and may relate to race or ethnicity, gender, sexual identity, age, disability, geographic location, or socioeconomic status.[2](#_ENREF_2) A better understanding of disparities in care provided to Veterans by the VHA and of interventions designed to mitigate disparities, have been an ongoing priority for VA leadership for the past decade. This dedication to health equity for all Veterans has resulted in a number of recent systematic reviews by the VA Evidence-based Synthesis Program (ESP) and other organizations.

**Race and Ethnicity**

Three ESP reviews have examined the topic of racial and ethnic disparities. A comprehensive review by Saha et al. (2007) examined racial and ethnic disparities within the VHA, factors contributing to disparities, interventions designed to mitigate disparities, and ongoing research funded by the VA Health Services Research and Development (HSR&D).[3](#_ENREF_3) Findings included no clear pattern of disparities by clinical area; however, disparities were more prevalent for processes requiring a higher degree of decision making, communication, or effort; process of care outcomes such as blood pressure, glucose, and cholesterol favored White Veterans; and disparities affected African American and Hispanic Veterans most significantly.[3](#_ENREF_3) Quinones et al. (2011) focused on interventions to reduce racial and ethnic disparities both inside and out of the VHA, and identified five studies involving minority Veterans (African American, Hispanic, Native American).[4](#_ENREF_4) Most recently, Peterson et al. (2015) published a limited update to Saha et al.’s review. The evidence brief included only a synthesis of morbidity and mortality outcomes, and was accompanied by supplementary data tables describing additional outcomes such as access to care, screening, and other process of care and patient outcomes.[5](#_ENREF_5) Findings included higher morbidity/mortality rates for African American Veterans (as compared to Whites) associated with a wide range of conditions (e.g., colon cancer, chronic kidney disease [CKD], Human Immunodeficiency Virus [HIV], diabetes, posttraumatic stress disorder [PTSD], venous thromboembolism), and for Hispanic Veterans with hepatitis C.[5](#_ENREF_5)

**Geographic Location (Rural vs. Urban)**

In 2006 the Rural Veterans Care Act established the VA Office of Rural Health to address the specific health care needs of 3 million rural Veterans – roughly one-third of Veterans enrolled in VA services – and to address disparities related to their care.[6](#_ENREF_6) In 2008, the VA National Center for Patient Safety published a review specifically examining the status of rural Veterans’ health, associated characteristics of care, and variables related to disparities, such as access, utilization patterns, rural care delivery models and healthcare settings used by Veterans.[7](#_ENREF_7)

A recent ESP review examined urban versus rural ambulatory care in VHA and non-VHA settings.[8](#_ENREF_8) The review focused on differences in health care access and utilization between rural and urban patients, as well as differences in process of care and patient outcomes. Findings from the review include lower cancer screening rates (e.g., breast, cervical) and higher suicide rates associated with differential use of antidepressants in patients living in rural areas. In addition, despite better continuity of care with a specific primary care provider (PCP), patients living in rural areas are more likely to have a physician extender as their PCP, and have poorer access to specialty care, including mental health providers.

**Mental Illness**

As compared to the population at large, Veterans experience a high burden of mental illness. According to a recent analysis of VHA utilization by Operation Enduring Freedom (OEF), Operation Iraqi Freedom (OIF), and Operation New Dawn (OND) Veterans, 57.6% of Veterans receiving care through the VHA were diagnosed with a mental illness, with more than half diagnosed with PTSD; 378,993.[9](#_ENREF_9) Moreover, individuals with mental illness experience a disproportionately high rate of co-occurring medical conditions, such as diabetes and pulmonary and cardiovascular disease.[10](#_ENREF_10) A 2014 ESP review examined disparities in the receipt of preventive care, or the management of chronic conditions among Veterans and non-veteran adults with mental health disorders.[11](#_ENREF_11)Findings related to mammography, pap smears, and colorectal cancer screening within the VHA were inconsistent, with Veterans with a mental illness less likely to receive a pneumococcal vaccine, those with diabetes less likely to receive eye and foot exams. However, Veterans with a mental illness and comorbid diabetes were more likely to receive HbA1c monitoring, and Veterans with PTSD and depressive disorders were more likely to be both screened for tobacco use and referred to cessation counseling.[11](#_ENREF_11)

**Women’s Health**

Women are currently the fastest growing cohort with the Veteran community, and by 2020 will make up 11% of the Veteran population.[12](#_ENREF_12) A recent study of OEF/OIF Veterans receiving care through the VHA found that women were more likely than men to have back, musculoskeletal, and joint problems in the year after returning from deployment, with the odds increasing up to seven years post-deployment.[13](#_ENREF_13) A 2014 study examining trends in gender disparities associated with gender-neutral VHA clinical measures from 2008-2014 found that while gender differences in screening for depression and PTSD were eliminated over the study period, and that there were significant reductions in disparities related to hypertension and diabetes control, disparities remained in other areas. For example, in 2012, women Veterans with a history of diabetes or ischemic heart disease had higher average low-density lipoprotein (LD) levels and lower rates of appropriate statin prescriptions than their male counterparts (79.5% of female Veterans versus 88.9% of males), increasing their risk for future cardiovascular events.[14](#_ENREF_14)

In 2006, an ESP review by Goldzweig et al. assessed the body of VA research related to women’s health. The review identified 182 studies from 1978 to 2004, largely observational and descriptive in nature, with only two randomized controlled trials (RCTs) identified.[15](#_ENREF_15) An update examining research published between 2004 and 2008 was published in 2010. Findings were consistent with increasing attention to issues related to disparities in care for women Veterans, with 195 articles identified, of which five were RCTs.[16](#_ENREF_16) Since 2008, the VA and VHA have made significant efforts to increase awareness about women’s health and reduce disparities. In 2008, the VA launched a Women’s Health improvement initiative, including a five-year plan to reduce disparities, and in 2011 Women’s Health became part of the Office of Patient Care Services (PCS), allowing for better integration of services and coordination of care.[17](#_ENREF_17),[18](#_ENREF_18) In addition, women Veteran’s heath has increasingly become a research priority in the VA. An update to the 2010 ESP review on women’s health is currently in progress.[19](#_ENREF_19),[20](#_ENREF_20)

**Lesbian, Gay, Bisexual, and Transgender (LGBT)**

Studies examining the experience and disparities related to LGBT status among Veterans are limited. A study examining 2010 Behavioral Risk Factor Surveillance System (BRFSS) data found that across all care providers, lesbian, gay, and bisexual Veterans were less likely to seek medical care, were more likely to have activity limitations due to physical, mental, or emotional problems, were more likely to have a positive HIV test, and were more likely to be a current smoker.[21](#_ENREF_21) A 2015 mixed methods study of 20 lesbians receiving VHA care found that half of the participants feared mistreatment if their providers knew of their sexual orientation status.[22](#_ENREF_22) Another study surveyed 202 VHA providers about care related to LGBT patients in two VHA medical centers. Results indicated that despite resources provided to VHA staff and providers, similar to non-VHA settings, only 25% of providers surveyed assessed sexual orientation status with 25-50% of their patients.[23](#_ENREF_23) In addition, 20% of providers surveyed thought sexual orientation was not appropriate to discuss in a clinical setting, and 11% were uncomfortable doing so.[24](#_ENREF_24) Finally, a recent case-controlled study of transgender Veterans receiving care though the VHA between 1996 and 2013 (5,135 transgender Veterans, 15,405 non transgender Veterans) found that transgender Veterans were more likely (p<.0001) to be diagnosed with nearly all psychological and physical conditions, including cerebrovascular disease, chronic obstruction pulmonary disease (COPD), congestive heart failure, depression, diabetes, eating disorders, high cholesterol, hypertension, ischemic heart disease, obesity, panic disorder, PTSD, chronic renal disease, serious mental illness, and traumatic brain injury.[25](#_ENREF_25)

**The Current Study**

Our review will serve as a map of the original research related to health disparities broadly, set in the VHA. Previous VA ESP and other VA-funded programs have examined disparities related to race/ethnicity, rural residence, mental health, and women. However, disparities, or the potential for disparities in the quality of, access to, and/or utilization of healthcare may affect numerous other Veteran populations (e.g., age, LGBT status, socioeconomic status [SES], physical or cognitive disability, military era of service, and other characteristics). We seek to identify studies related to disparities in care for Veterans administered through the VHA, as well as interventions designed to mitigate disparities within the VHA, and ongoing research examining health disparities funded through the VA Office of Research and Development. This review will provide a high-level map of the evidence outlining the state of disparities research pertaining to Veterans receiving care through the VHA, and will categorize identified disparities by population and clinical area. Our findings will illustrate areas for which research allows for a more detailed systematic review and synthesis, as well as the populations and clinical conditions for which more research is needed to better understand and address the need for equitable healthcare for all Veterans.

1. **Key Questions and Inclusion/Exclusion Criteria**

The research questions for this systematic review were developed after a topic refinement process that included a preliminary review of published peer-reviewed literature, and consultation with internal partners, investigators, and stakeholders. Supplemental Digital Content 1 provides our analytic framework. See Supplemental Digital Content 5 for PICOTS.

The key questions for the review are as follows:

**KQ1.** For what groups/populations, and in which clinical areas are health and healthcare disparities prevalent within the VHA?

**KQ2.** What are the effects of interventions implemented within the VHA to reduce health disparities?

**KQ3.** What research projects have been funded by the VA Office of Research and Development (ORD) to address any of the components in the other key questions from 2010 to present?

Our approach was guided by an analytic framework developed by Saha et al. for the 2007 ESP report on racial and ethnic disparities in the VHA.[3](#_ENREF_3) In the framework, first generation studies are those that examine disparities in the quality of care or utilization, and are used to inform key question 1. Second generation studies examine mediating factors that may contribute to disparities for any given group/population, and are outside of the scope of the current review. Third generation studies examine interventions to reduce disparities, and are used to address key question 2 (see Supplemental Digital Content 1)

1. **Literature Search Strategies**

Our search strategy will be based on the strategy developed for Saha et al.’s 2007 VA ESP review, and modified to include all populations for whom a disparity in the quality of or utilization of care might exist.[3](#_ENREF_3) The search strategy will be peer reviewed by a second research librarian using the instrument for Peer Review of Search Strategies (PRESS).[26](#_ENREF_26),[27](#_ENREF_27) To identify relevant articles, we will search MEDLINE®, PubMed, PsycINFO©, CINAHL©, the Cochrane Library (Ovid EBM Reviews: Cochrane Central Register of Controlled Trials, Cochrane Database of Systematic Reviews, Cochrane Health Technology Assessment, and Database of Abstracts of Reviews of Effects), Social Services Abstracts, and Sociological Abstracts. We will conduct a primary review of the literature by systematically searching, reviewing, and analyzing the scientific evidence as it pertains to the key questions in the report. For key questions 1 and 2 (all populations), we will search for relevant literature published since the search end date of Saha et al.’s VA ESP review (2006) through February 2016.[3](#_ENREF_3) For key question 3 we will search the VA’s Health Services Research and Development (HSR&D) Projects database to identify ongoing and recently completed VA research projects since 2010.

In addition, we will evaluate the excluded studies and supplementary materials for Peterson et al.’s (2015) VA ESP evidence brief.[5](#_ENREF_5) We will also evaluate the bibliographies of included primary studies and relevant systematic or nonsystematic reviews that were identified in the course of our search, including Gierisch et al.’s (2014) ESP review on disparities on the quality of care for patients with mental illness, Spoont et al.’s (2011) VA ESP review examining ambulatory care in rural vs. urban populations, and Bean-Mayberry et al.’s (2010) VA ESP review examining women’s health in the VA.[8](#_ENREF_8),[11](#_ENREF_11),[16](#_ENREF_16)

To identify studies not published in peer-reviewed journals, we will search ClinicalTrials.gov and the VA HSR&D and ESP websites. To provide a broad overview of all health disparity research conducted within the VHA, we will include studies included in previous VA ESP reports meeting inclusion and date criteria.[3-5](#_ENREF_3)

1. **Study Selection**

Criteria for population, interventions, comparators, outcomes, timing, and setting (PICOTS) was developed in collaboration with our stakeholder and Technical Expert Panel (TEP), and is provided in Supplemental Digital Content 5. We will include only studies with VHA populations examining health disparities. To examine both prevalence (KQ1) and intervention effects (KQ2), we will include all studies with a control group within the same population or that examined a comparison to another group relevant to the specific population. In addition, we will focus on identifying research funded by the ORD (KQ3) that includes a comparison group. For all key questions, we will examine outcomes related to the utilization and the quality of healthcare. We will include all study designs except for nonsystematic literature reviews. Using pre-specified inclusion/exclusion criteria (Appendix A), two independent reviewers will review titles and abstracts using Abstrackr and agree on a final inclusion/exclusion decision for 10% of the search yield, with the remaining 90% decided by a single reviewer.[28](#_ENREF_28) We will review funded research for inclusion according to the same pre-specified inclusion criteria by the primary investigator. At the full-text screening stage, two independent reviewers will assess all article for inclusion. Discordant results will be resolved through discussion or consultation with a third if discrepancies cannot be resolved between the first two reviewers. Articles meeting eligibility criteria will be included for data abstraction.

1. **Data abstraction**

Data from studies meeting inclusion criteria will be abstracted by one investigator (among KK, DH, CL, TE, AM, MM, MF, AL) and will be confirmed by a second reviewer. From each study, we will abstract data related to study design, setting, population characteristics, number of subjects, groups compared, examined outcomes and interventions, clinical topic, types of interventions, whether a mediator was examined (and type), results for each outcome, and search dates and sources searched for systematic reviews and meta-analyses.

1. **Assessment of methodological quality of individual studies**

Given that our purpose is to identify and classify the body of research related to health disparities in the VHA, we will not formally assess the quality of individual studies. We will instead classify studies by study design and provide details related to sample size, outcome measures, and confounding variables controlled for.

1. **Data Synthesis**

We will summarize original research by abstracting relevant data and qualitatively synthesizing the literature for each key question. We will provide figures mapping the evidence by population/type of disparity and clinical area.

1. **Assessing the overall body of evidence**

Given that our purpose is to identify and classify the body of research related to health disparities in the VHA, we will not formally assess the overall body of evidence.

1. **Stakeholder and Technical Experts**

Topic Nominator: Uchenna S. Uchendu, MD, Executive Director, Office of Health Equity.

Technical Expert Panel:

* Leonard Egede
* Jennifer Gierisch
* Kenneth T. Jones
* Sara J. Knight
* Michelle Spoont
* Donna Washington
* William B. Weeks

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**Supplemental Digital Content 3. Search Strategy**

**DATABASES/WEBSITES:**

Medline

PubMed (non-Medline materials)

CINAHL

PsycINFO

EBM Reviews (CDSR, DARE, HTA, Cochrane CENTRAL)

Social Services Abstracts

Sociological Abstracts

HSR&D

ESP

Clinicaltrials.gov

**SEARCH STRATEGIES**

**Ovid MEDLINE(R) and Ovid OLDMEDLINE(R)** 1946 to November Week 3 2015,

**Ovid MEDLINE(R) In-Process & Other Non-Indexed Citations** January 07, 2016

Date Searched: January 8, 2016

|  |  |  |
| --- | --- | --- |
| 1 | Healthcare disparities/ | 9988 |
| 2 | Health equity/ | 18 |
| 3 | Health status disparities/ | 9840 |
| 4 | Health services accessibility/ | 57487 |
| 5 | "Health Services Needs and Demand"/ | 45916 |
| 6 | Delivery of health care/ | 72039 |
| 7 | Quality of health care/ | 62070 |
| 8 | Attitude of health personnel/ | 99786 |
| 9 | Professional-patient relations/ | 23109 |
| 10 | Physician-patient relations/ | 64369 |
| 11 | Nurse-patient relations/ | 32266 |
| 12 | Dentist-patient relations/ | 7810 |
| 13 | Patient satisfaction/ | 65439 |
| 14 | (Discriminat\* or Disparit\* or parity or Inequal\* or Unequal or equal or Inequit\* or Equity or equitable or undertreat\* or under-treat\* or overtreat\* or over-treat\* or access or accessible or accessibility).tw. | 733163 |
| 15 | or/1-14 | 1147372 |
| 16 | Transgendered persons/ or health services for transgendered persons/ | 673 |
| 17 | Homosexuality/ | 12115 |
| 18 | Homosexuality, male/ | 11279 |
| 19 | Homosexuality, female/ | 2942 |
| 20 | Bisexuality/ | 3134 |
| 21 | Transsexualism/ | 3152 |
| 22 | (LGBT\* or lesbian\* or homosexual\* or gay or gays or bisexual\* or transgender\* or transsexual\* or sexual\* orient\*).tw. | 25554 |
| 23 | exp Socioeconomic factors/ | 370883 |
| 24 | homeless persons/ | 6085 |
| 25 | "transients and migrants"/ | 9084 |
| 26 | (Socio-demographic\* or Sociodemographic\* or socioeconomic\* or socio-economic\* or SES or sociocultural\* or socio-cultural\* or poverty or indigent or low-income or class or classes or disadvantaged).tw. | 578928 |
| 27 | female/ or (women\* or female\* or gender\* or sex or sex-based).tw. | 7512980 |
| 28 | exp religion/ or religio\*.tw. | 66505 |
| 29 | rural population/ or urban population/ or (rural-urban or rural or urban or inner-city).tw. | 211536 |
| 30 | "Aged, 80 and over"/ or exp Aged/ or Dental Care for Aged/ or health services for the aged/ or Middle Aged/ or Young Adult/ or (aged or aging or frail or old or older or senior\* or elderly or middle-aged).tw. | 5317645 |
| 31 | health services for persons with disabilities/ or (disabilit\* or disabled or handicap\*).tw. | 160130 |
| 32 | mental health/ | 25017 |
| 33 | mental disorders/ | 130378 |
| 34 | Psychotic Disorders/ | 34754 |
| 35 | Schizophrenia/ | 88315 |
| 36 | Schizophrenia, catatonic/ | 549 |
| 37 | Schizophrenia, disorganized/ | 523 |
| 38 | Schizophrenia, paranoid/ | 3831 |
| 39 | Shared Paranoid Disorder/ | 290 |
| 40 | Schizoid Personality Disorder/ | 574 |
| 41 | Schizotypal Personality Disorder/ | 2346 |
| 42 | Affective disorders, psychotic/ | 2181 |
| 43 | Bipolar Disorder/ | 34398 |
| 44 | Cyclothymic Disorder/ | 548 |
| 45 | Stress disorders, traumatic/ | 533 |
| 46 | Combat Disorders/ | 2768 |
| 47 | Stress disorders, post-traumatic/ | 24281 |
| 48 | Stress disorders, traumatic, acute/ | 352 |
| 49 | (psychotic or schizotyp\* or schizophren\* or schizoid\* or schizoaffective or bipolar or mania\* or hypomania\* or hypo-mania\* or manic or cyclothymic or PTSD or post-traumatic stress or posttraumatic stress or ((severe\* or serious\* or chronic\* or persistent\*) adj mental\* ill\*)).tw. | 194414 |
| 50 | Population groups/ | 3059 |
| 51 | Race relations/ | 2391 |
| 52 | Minority groups/ | 11512 |
| 53 | Continental Population Groups/ | 17748 |
| 54 | American Native Continental Ancestry Group/ | 409 |
| 55 | African continental ancestry group/ | 34133 |
| 56 | Asian Continental Ancestry Group/ | 44531 |
| 57 | Oceanic Ancestry Group/ | 7908 |
| 58 | African Americans/ | 47804 |
| 59 | Hispanic Americans/ | 21985 |
| 60 | Indians, north American/ | 12856 |
| 61 | Asian Americans/ | 6309 |
| 62 | exp Ethnic groups/ | 125175 |
| 63 | (Ethnic\* or race\* or racial\* or minority or minorities or African-American\* or Black or Blacks or Hispanic\* or Chicano\* or Chicana\* or Latino\* or Latina\* or Hispanic\* or Asian-American\* or Native American\* or Indian or Indians).tw. | 388894 |
| 64 | ((vulnerable adj2 population\*) or subgroup\* or sub-group\* or subpopulation\* or sub-population\* or stratif\*).tw. | 336981 |
| 65 | cultural competency/ or (cultural\* competen\* or microinsult\* or microaggression\*).tw. | 5885 |
| 66 | or/16-64 | 10050541 |
| 67 | exp "United States Department of Veterans Affairs"/ or exp Veterans Health/ or exp Hospitals, Federal/ or exp Veterans Disability Claims/ or exp Veterans/ or hospitals, veterans/ or gulf war/ or vietnam conflict/ or world war ii/ or afghan campaign 2001-/ or iraq war, 2003-2011/ | 27660 |
| 68 | (veteran\* or VA or "Veterans Affairs" or VHA or "Veterans Health Administration" or VAMC).tw. | 42658 |
| 69 | or/67-68 | 54931 |
| 70 | and/15,66,69 | 4547 |
| 71 | (2006\* or 2007\* or 2008\* or 2009\* or 2010\* or 2011\* or 2012\* or 2013\* or 2014\* or 2015\* or 2016\*).ed. | 9401974 |
| 72 | 70 and 71 | 2687 |
| 73 | limit 72 to english language | 2627 |
| 74 | limit 73 to (comment or editorial or letter or news) | 94 |
| 75 | 73 not 74 | 2533 |
| 76 | 75 not "visual acuity (VA)".tw. | 2394 |
| 77 | remove duplicates from 76 | 2247 |

**Ovid PsycINFO** 1806 to February Week 1 2016

Date searched: 02/10/2016

|  |  |  |
| --- | --- | --- |
| 1 | exp Health Disparities/ | 4969 |
| 2 | treatment barriers/ | 3119 |
| 3 | Health care services/ | 31595 |
| 4 | health care delivery/ | 18244 |
| 5 | "quality of care"/ | 10412 |
| 6 | health care utilization/ | 13133 |
| 7 | Health personnel attitudes/ | 15627 |
| 8 | (Discriminat\* or Disparit\* or parity or Inequal\* or Unequal or equal or Inequit\* or Equity or equitable or undertreat\* or under-treat\* or overtreat\* or over-treat\* or access or accessible or accessibility or bias or biases).tw. | 319804 |
| 9 | or/1-8 | 386469 |
| 10 | transgender/ | 2391 |
| 11 | homosexuality/ or "homosexuality (attitudes toward)"/ | 9473 |
| 12 | male homosexuality/ | 12005 |
| 13 | lesbianism/ | 9222 |
| 14 | bisexuality/ | 5765 |
| 15 | exp Transsexualism/ | 2660 |
| 16 | (LBG or LGBT\* or lesbian\* or homosexual\* or gay or gays or bisexual\* or transgender\* or transsexual\* or sexual\* orient\*).tw. | 37571 |
| 17 | socioeconomic status/ or income level/ or lower class/ or social class/ or disadvantaged/ or poverty/ or socioeconomic class attitudes/ or lower class attitudes/ | 45398 |
| 18 | homeless/ or homeless mentally ill/ | 5988 |
| 19 | (Socio-demographic\* or Sociodemographic\* or socioeconomic\* or socio-economic\* or SES or sociocultural\* or socio-cultural\* or poverty or indigent or low-income or class or classes or disadvantaged).tw. | 241258 |
| 20 | Female.po. or exp Sex Discrimination/ or (women\* or female\* or gender\* or sex or sex-based).tw. | 1309280 |
| 21 | religion/ or exp religious beliefs/ or exp religious organizations/ or exp religious practices/ or exp religious prejudices/ or religio\*.tw. | 83080 |
| 22 | exp Rural Environments/ or exp Urban Environments/ or (rural-urban or rural or urban or inner-city).tw. | 80027 |
| 23 | ("300" or "320" or "340" or "360" or "380" or "390").po. or "aging (attitudes toward)"/ or age discrimination/ or "aged (attitudes toward)"/ or (aged or aging or frail or old or older or senior\* or elderly or middle-aged).tw. | 565721 |
| 24 | disabilities/ or learning disabilities/ or multiple disabilities/ or reading disabilities/ or disability discrimination/ or "disabled (attitudes toward)"/ or (disabilit\* or disabled or handicap\*).tw. | 131195 |
| 25 | mental health/ | 47131 |
| 26 | mental disorders/ or chronic mental illness/ or "mental illness (attitudes toward)"/ | 74701 |
| 27 | exp psychosis/ | 99080 |
| 28 | exp schizophrenia/ | 77765 |
| 29 | schizophrenia/ or acute schizophrenia/ or catatonic schizophrenia/ or childhood schizophrenia/ or paranoid schizophrenia/ or process schizophrenia/ or "schizophrenia (disorganized type)"/ or schizophreniform disorder/ or undifferentiated schizophrenia/ | 77765 |
| 30 | schizoid personality disorder/ | 624 |
| 31 | exp Folie A Deux/ | 174 |
| 32 | exp Schizotypal Personality Disorder/ | 1323 |
| 33 | affective disorders/ | 12270 |
| 34 | bipolar disorder/ | 21866 |
| 35 | exp Cyclothymic Personality/ | 203 |
| 36 | posttraumatic stress disorder/ | 24848 |
| 37 | acute stress disorder/ | 507 |
| 38 | (psychotic or schizotyp\* or schizophren\* or schizoid\* or schizoaffective or bipolar or mania\* or hypomania\* or hypo-mania\* or manic or cyclothymic or PTSD or post-traumatic stress or posttraumatic stress or ((severe\* or serious\* or chronic\* or persistent\*) adj mental\* ill\*)).tw. | 202517 |
| 39 | "racial and ethnic groups"/ or racism/ or "race and ethnic discrimination"/ or stereotyped attitudes/ or social discrimination/ | 32753 |
| 40 | african cultural groups/ | 1822 |
| 41 | asians/ or chinese cultural groups/ or japanese cultural groups/ or korean cultural groups/ or south asian cultural groups/ or southeast asian cultural groups/ or vietnamese cultural groups/ | 19866 |
| 42 | "latinos/latinas"/ or mexican americans/ | 23357 |
| 43 | minority groups/ or alaska natives/ or american indians/ or arabs/ or blacks/ or hawaii natives/ or inuit/ or jews/ or romanies/ | 64581 |
| 44 | pacific islanders/ or hawaii natives/ | 719 |
| 45 | indigenous populations/ or alaska natives/ or american indians/ or inuit/ | 10306 |
| 46 | (Ethnic\* or race\* or racial\* or minority or minorities or African-American\* or Black or Blacks or Hispanic\* or Chicano\* or Chicana\* or Latino\* or Latina\* or Hispanic\* or Asian-American\* or Native American\* or Indian or Indians).tw. | 223875 |
| 47 | ((vulnerable adj2 population\*) or subgroup\* or sub-group\* or subpopulation\* or sub-population\* or stratif\*).tw. | 57013 |
| 48 | cultural sensitivity/ or cross cultural treatment/ or cross cultural differences/ or (cultural\* competen\* or microinsult\* or microaggression\*).tw. | 54787 |
| 49 | or/10-48 | 2096947 |
| 50 | military veterans/ or (veteran\* or VA or "Veterans Affairs" or VHA or "Veterans Health Administration" or VAMC).tw. | 18623 |
| 51 | and/9,49-50 | 2139 |
| 52 | (2006\* or 2007\* or 2008\* or 2009\* or 2010\* or 2011\* or 2012\* or 2013\* or 2014\* or 2015\* or 2016\*).up. | 1868212 |
| 53 | and/51-52 | 1555 |
| 54 | limit 53 to ("column/opinion" or "comment/reply" or editorial or letter) | 62 |
| 55 | 53 not 54 | 1493 |

**Ovid EBM Reviews:**

**Cochrane Central Register of Controlled Trials** January 2016

**Cochrane Database of Systematic Reviews** 2005 to February 03, 2016

**Database of Abstracts of Reviews of Effects** 1st Quarter 2016

**Health Technology Assessment** 1st Quarter 2016

Date Searched: 02/11/2016

|  |  |  |
| --- | --- | --- |
| 1 | (Discriminat\* or Disparit\* or parity or Inequal\* or Unequal or equal or Inequit\* or Equity or equitable or undertreat\* or under-treat\* or overtreat\* or over-treat\* or access or accessible or accessibility).tw. | 428980 |
| 2 | (LGBT\* or lesbian\* or homosexual\* or gay or gays or bisexual\* or transgender\* or transsexual\* or sexual\* orient\*).tw. | 575 |
| 3 | (Socio-demographic\* or Sociodemographic\* or socioeconomic\* or socio-economic\* or SES or sociocultural\* or socio-cultural\* or poverty or indigent or low-income or class or classes or disadvantaged).tw. | 25289 |
| 4 | (women\* or female\* or gender\* or sex or sex-based).tw. | 137925 |
| 5 | religio\*.tw. | 512 |
| 6 | (rural-urban or rural or urban or inner-city).tw. | 8281 |
| 7 | (aged or aging or frail or old or older or senior\* or elderly or middle-aged).tw. | 92909 |
| 8 | (disabilit\* or disabled or handicap\*).tw. | 15908 |
| 9 | (psychotic or schizotyp\* or schizophren\* or schizoid\* or schizoaffective or bipolar or mania\* or hypomania\* or hypo-mania\* or manic or cyclothymic or PTSD or post-traumatic stress or posttraumatic stress or ((severe\* or serious\* or chronic\* or persistent\*) adj mental\* ill\*)).tw. | 18814 |
| 10 | (Ethnic\* or race\* or racial\* or minority or minorities or African-American\* or Black or Blacks or Hispanic\* or Chicano\* or Chicana\* or Latino\* or Latina\* or Hispanic\* or Asian-American\* or Native American\* or Indian or Indians).tw. | 20288 |
| 11 | ((vulnerable adj2 population\*) or subgroup\* or sub-group\* or subpopulation\* or sub-population\* or stratif\*).tw. | 43614 |
| 12 | (cultural\* competen\* or microinsult\* or microaggression\*).tw. | 92 |
| 13 | or/2-12 | 269480 |
| 14 | (veteran\* or VA or "Veterans Affairs" or VHA or "Veterans Health Administration" or VAMC).tw. | 4420 |
| 15 | and/1,13-14 | 1318 |
| 16 | (2006\* or 2007\* or 2008\* or 2009\* or 2010\* or 2011\* or 2012\* or 2013\* or 2014\* or 2015\* or 2016\*).yr. | 444071 |
| 17 | 15 and 16 | 913 |
| 18 | 17 not "visual acuity (VA)".tw. | 842 |
| 19 | limit 18 to english language [Limit not valid in CDSR,DARE; records were retained] | 826 |
| 20 | remove duplicates from 19 | 804 |

**EBSCOHOST CINAHL**

Date Searched: April 12, 2016

|  |  |  |  |
| --- | --- | --- | --- |
| # | Search Terms | Limits | Result |
| S64 | S14 AND S60 AND S63 | **Published Date**: 20060101-20160531;  **English Language**;  **Exclude MEDLINE records**;  **Publication Type**: Abstract, Book, Book Chapter, Case Study, Clinical Trial, Journal Article, Meta Analysis, Meta Synthesis, Proceedings, Randomized Controlled Trial, Review, Systematic Review;  **Age Groups**: Adult: 19-44 years, Middle Aged: 45-64 years, Aged: 65+ years, Aged, 80 and over | 183 |
| S63 | S61 OR S62 |  | 21,073 |
| S62 | veteran\* or VA or "Veterans Affairs" or VHA or "Veterans Health Administration" or VAMC |  | 21,073 |
| S61 | (MH "Hospitals, Veterans") OR (MH "United States Department of Veterans Affairs") OR (MH "Vietnam Veterans") OR (MH "Veterans") |  | 15,589 |
| S60 | S15 OR S16 OR S17 OR S18 OR S19 OR S20 OR S21 OR S22 OR S23 OR S24 OR S25 OR S26 OR S27 OR S28 OR S29 OR S30 OR S31 OR S32 OR S33 OR S34 OR S35 OR S36 OR S37 OR S38 OR S39 OR S40 OR S41 OR S42 OR S43 OR S44 OR S45 OR S46 OR S47 OR S48 OR S49 OR S50 OR S51 OR S52 OR S53 OR S54 OR S55 OR S56 OR S57 OR S58 OR S59 |  | 2,152,898 |
| S59 | (cultural\* W1 competen\*) or microinsult\* or microaggression\* |  | 7,869 |
| S58 | (MH "Cultural Competence") |  | 6,731 |
| S57 | (vulnerable W2 population\*) or subgroup\* or sub-group\* or subpopulation\* or sub-population\* or stratif\* |  | 52,613 |
| S56 | Ethnic\* or race\* or racial\* or minority or minorities or African-American\* or Black or Blacks or Hispanic\* or Chicano\* or Chicana\* or Latino\* or Latina\* or Hispanic\* or Asian-American\* or Native American\* or Indian or Indians |  | 137,488 |
| S55 | (MH "Ethnic Groups+") |  | 102,418 |
| S54 | (MH "Asians") |  | 15,314 |
| S53 | (MH "Native Americans") |  | 7,294 |
| S52 | (MH "Hispanics") |  | 24,005 |
| S51 | (MH "Blacks") |  | 40,786 |
| S50 | (MH "Minority Groups") |  | 8,668 |
| S49 | (MH "Race Relations") |  | 749 |
| S48 | TX psychotic or schizotyp\* or schizophren\* or schizoid\* or schizoaffective or bipolar or mania\* or hypomania\* or hypo-mania\* or manic or cyclothymic or PTSD or post-traumatic stress or posttraumatic stress or ((severe\* or serious\* or chronic\* or persistent\*) W3 mental\* ill\*)) |  | 94,623 |
| S47 | (MH "Stress Disorders, Post-Traumatic") |  | 14,388 |
| S46 | (MH "Cyclothymic Disorder") |  | 97 |
| S45 | (MH "Bipolar Disorder") |  | 7,897 |
| S44 | (MH "Affective Disorders, Psychotic") |  | 498 |
| S43 | (MH "Schizotypal Personality Disorder") |  | 199 |
| S42 | (MH "Paranoid Disorders") |  | 478 |
| S41 | (MH "Schizophrenia") |  | 17,261 |
| S40 | (MH "Psychotic Disorders") |  | 7,397 |
| S39 | (MH "Mental Disorders") |  | 40,135 |
| S38 | (MH "Mental Health") |  | 19,042 |
| S37 | disabilit\* or disabled or handicap\* |  | 117,918 |
| S36 | (MH "Health Services for Persons with Disabilities") |  | 16 |
| S35 | aged or aging or frail or old or older or senior\* or elderly or middle-aged |  | 740,517 |
| S34 | (MH "Middle Age") OR (MH "Age Specific Care") |  | 663,638 |
| S33 | (MH "Health Services for the Aged") OR (MH "Dental Care for Aged") OR (MH "Aged") OR (MH "Aged, 80 and Over") |  | 557,338 |
| S32 | rural-urban or rural or urban or inner-city |  | 76,119 |
| S31 | (MH "Rural Population") OR (MH "Urban Population") |  | 9,915 |
| S30 | religio\* |  | 17,661 |
| S29 | (MH "Religion and Religions+") OR (MH "Religion and Medicine") |  | 31,964 |
| S28 | women\* or female\* or gender\* or sex or sex-based |  | 1,401,842 |
| S27 | (MH "Women") OR (MH "Women's Health Services") OR (MH "Women's Health") |  | 38,714 |
| S26 | TX Socio-demographic\* or Sociodemographic\* or socioeconomic\* or socio-economic\* or SES or sociocultural\* or socio-cultural\* or poverty or indigent or low-income or class or classes or disadvantaged |  | 304,744 |
| S25 | (MH "Transients and Migrants") |  | 2,592 |
| S24 | (MH "Homeless Persons") |  | 3,746 |
| S23 | (MH "Socioeconomic Factors+") OR (MH "Poverty+") OR (MH "Social Class+") |  | 238,185 |
| S22 | LGBT\* or lesbian\* or homosexual\* or gay or gays or bisexual\* or transgender\* or transsexual\* or sexual\* orient\* |  | 14,195 |
| S21 | (MH "GLBT Persons") |  | 1,996 |
| S20 | (MH "Transsexuals") OR (MH "Transsexualism") |  | 878 |
| S19 | (MH "Bisexuals") OR (MH "Bisexuality") |  | 1,526 |
| S18 | (MH "Lesbians") |  | 1,840 |
| S17 | (MH "Homosexuals, Male") |  | 3,332 |
| S16 | (MH "Homosexuals") OR (MH "Homosexuality") |  | 5,515 |
| S15 | (MH "Transgendered Persons") |  | 916 |
| S14 | S1 OR S2 OR S3 OR S4 OR S5 OR S6 OR S7 OR S8 OR S9 OR S10 OR S11 OR S12 OR S13 |  | 658,248 |
| S13 | TX Discriminat\* or Disparit\* or parity or Inequal\* or Unequal or equal or Inequit\* or Equity or equitable or undertreat\* or under-treat\* or overtreat\* or over-treat\* or access or accessible or accessibility |  | 489,015 |
| S12 | (MH "Patient Satisfaction") |  | 37,275 |
| S11 | (MH "Dentist-Patient Relations") |  | 1,389 |
| S10 | (MH "Nurse-Patient Relations") |  | 22,318 |
| S9 | (MH "Physician-Patient Relations") |  | 22,780 |
| S8 | (MH "Professional-Patient Relations") |  | 23,124 |
| S7 | (MH "Attitude of Health Personnel") |  | 28,790 |
| S6 | (MH "Quality of Health Care") |  | 50,683 |
| S5 | (MH "Health Care Delivery") |  | 33,123 |
| S4 | (MH "Health Services Needs and Demand") |  | 16,847 |
| S3 | (MH "Health Services Accessibility") |  | 56,992 |
| S2 | (MH "Health Status Disparities") |  | 2,748 |
| S1 | (MH "Healthcare Disparities") |  | 3,464 |

**ProQuest Sociological Abstracts**

Date Searched: April 20, 2016

| **[Set](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview:toggellistorder?site=socabs&t:ac=RecentSearches)** | **Search** | **Results** |
| --- | --- | --- |
| **S16** | [S1 AND S14 AND S13](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink:rerunsearch/6790F8A6B8064F6CPQ/None?site=socabs&t:ac=RecentSearches) Limits applied (2006-2016 publication date) | **85** |
| **S15** | [S1 AND S14 AND S13](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink:rerunsearch/D4757FC57E2B4419PQ/None?site=socabs&t:ac=RecentSearches) | [**231**](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink_0:rerunsearch/D4757FC57E2B4419PQ/None?site=socabs&t:ac=RecentSearches) |
| **S14** | [S2 OR S3 OR S4 OR S5 OR S6 OR S7 OR S8 OR S9 OR S10 OR S11 OR S12](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink:rerunsearch/F19ECDB16AD44731PQ/None?site=socabs&t:ac=RecentSearches) | [**528,219**](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink_0:rerunsearch/F19ECDB16AD44731PQ/None?site=socabs&t:ac=RecentSearches) |
| **S13** | [ab(veteran\* OR VA OR "Veterans Affairs" OR VHA OR "Veterans Health Administration" OR VAMC) OR su(veterans)](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink:rerunsearch/F20B788514B74787PQ/None?site=socabs&t:ac=RecentSearches) | [**2,551**](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink_0:rerunsearch/F20B788514B74787PQ/None?site=socabs&t:ac=RecentSearches) |
| **S12** | [ab(cultural\* competen\* OR microinsult\* OR microaggression\*)](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink:rerunsearch/DAEC9C543BB4C75PQ/None?site=socabs&t:ac=RecentSearches) | [**1,986**](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink_0:rerunsearch/DAEC9C543BB4C75PQ/None?site=socabs&t:ac=RecentSearches) |
| **S11** | [ab(vulnerable population\* OR subgroup\* OR sub-group\* OR subpopulation\* OR sub-population\* OR stratif\*) or su(social stratification)](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink:rerunsearch/2F27F1FBD6D94E68PQ/None?site=socabs&t:ac=RecentSearches) | [**34,383**](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink_0:rerunsearch/2F27F1FBD6D94E68PQ/None?site=socabs&t:ac=RecentSearches) |
| **S10** | [ab(Ethnic\* OR race\* OR racial\* OR minority OR minorities OR African-American\* OR Black OR Blacks OR Hispanic\* OR Chicano\* OR Chicana\* OR Latino\* OR Latina\* OR Hispanic\* OR Asian-American\* OR Native American\* OR Indian OR Indians) or su(American Indians or Arab Americans, or Asian Americans or Black Americans or Eskimos or Hispanic Americans or Jewish Americans or African Cultural Groups or Asian Cultural Groups or Middle Eastern Cultural Groups or Latin American Cultural Groups or North American Cultural Groups or Oceanic Cultural Groups or Race or Ethnicity)](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink:rerunsearch/48324E4A68014E7BPQ/None?site=socabs&t:ac=RecentSearches) | [**178,830**](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink_0:rerunsearch/48324E4A68014E7BPQ/None?site=socabs&t:ac=RecentSearches) |
| **S9** | [ab(psychotic OR schizotyp\* OR schizophren\* OR schizoid\* OR schizoaffective OR bipolar OR mania\* OR hypomania\* OR hypo-mania\* OR manic OR cyclothymic OR PTSD OR post-traumatic stress OR posttraumatic stress OR severe\* mental\* ill\* OR serious\* mental\* ill\* OR chronic\* mental\* ill\* OR persistent\* mental\* ill\*) or su(mental illness or schizophrenia or psychopathology or posttraumatic stress disorder or bipolar disorders or cyclothymia)](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink:rerunsearch/98A3ADD1285C487CPQ/None?site=socabs&t:ac=RecentSearches) | **9,545** |
| **S8** | [ab(disabilit\* OR disabled OR handicap\*) or su(handicapped or physically handicapped)](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink:rerunsearch/17D18A9BA8114994PQ/None?site=socabs&t:ac=RecentSearches) | [**10,467**](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink_0:rerunsearch/17D18A9BA8114994PQ/None?site=socabs&t:ac=RecentSearches) |
| **S7** | [ab(aged OR aging OR frail OR old OR older OR senior\* OR elderly OR middle-aged) or su(aging or elderly or middle aged adults)](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink:rerunsearch/49B7358BAEDC4DD3PQ/None?site=socabs&t:ac=RecentSearches) | [**71,149**](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink_0:rerunsearch/49B7358BAEDC4DD3PQ/None?site=socabs&t:ac=RecentSearches) |
| **S6** | [ab(rural-urban OR rural OR urban OR inner-city)or su(rural urban differences or urban rural differences or rural areas or urban areas)](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink:rerunsearch/EA6DA3E32AFB40D5PQ/None?site=socabs&t:ac=RecentSearches) | [**56,206**](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink_0:rerunsearch/EA6DA3E32AFB40D5PQ/None?site=socabs&t:ac=RecentSearches) |
| **S5** | [ab(religio\*) or su(religions or Religious Cultural Groups)](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink:rerunsearch/7A8AD796909440AFPQ/None?site=socabs&t:ac=RecentSearches) | [**77,095**](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink_0:rerunsearch/7A8AD796909440AFPQ/None?site=socabs&t:ac=RecentSearches) |
| **S4** | [ab(women\* OR female\* OR gender\* OR sex OR sex-based) or su(womens health care or working women or females or sexism or sex role attitudes or sexual inequality)](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink:rerunsearch/5156148F8174829PQ/None?site=socabs&t:ac=RecentSearches) | [**180,772**](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink_0:rerunsearch/5156148F8174829PQ/None?site=socabs&t:ac=RecentSearches) |
| **S3** | [ab(Socio-demographic\* OR Sociodemographic\* OR socioeconomic\* OR socio-economic\* OR SES OR sociocultural\* OR socio-cultural\* OR poverty OR indigent OR low-income OR class OR classes OR disadvantaged) or su(socioeconomic factors or social background or social factors or sociocultural factors or sociodemographic factors or socioeconomic status or poverty or rural poverty or rural poor or urban poverty or urban poor or income inequality or social inequality or social class)](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink:rerunsearch/CD26E5EF8D7E46E5PQ/None?site=socabs&t:ac=RecentSearches) | [**165,056**](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink_0:rerunsearch/CD26E5EF8D7E46E5PQ/None?site=socabs&t:ac=RecentSearches) |
| **S2** | [ab(LGBT\* OR lesbian\* OR homosexual\* OR gay OR gays OR bisexual\* OR transgender\* OR transsexual\* OR sexual\* orient\*) or su(Lesbianism or bisexuality or homosexuality or transsexuality or homophobia)](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink:rerunsearch/F81D248CDEE441DDPQ/None?site=socabs&t:ac=RecentSearches) | [**15,518**](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink_0:rerunsearch/F81D248CDEE441DDPQ/None?site=socabs&t:ac=RecentSearches) |
| **S1** | [ab(Discriminat\* OR Disparit\* OR parity OR Inequal\* OR Unequal OR equal OR Inequit\* OR Equity OR equitable OR undertreat\* OR under-treat\* OR overtreat\* OR over-treat\* OR access OR accessible OR accessibility) or su(discrimination or racial discrimination or equality or inequality or access)](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink:rerunsearch/2180DF8B18AF4514PQ/None?site=socabs&t:ac=RecentSearches) | [**101,521**](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink_0:rerunsearch/2180DF8B18AF4514PQ/None?site=socabs&t:ac=RecentSearches) |

**ProQuest Social Services Abstracts**

Date Searched: April 21, 2016

| [**Set**](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview:toggellistorder?site=socialservices&t:ac=RecentSearches) | **Search** | **Results** |
| --- | --- | --- |
| **S16** | [S1 AND S14 AND S13](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink:rerunsearch/AFA5BCE791F34188PQ/None?site=socialservices&t:ac=RecentSearches) Limits applied (2006-2016) | [**45**](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink_0:rerunsearch/AFA5BCE791F34188PQ/None?site=socialservices&t:ac=RecentSearches) |
| **S15** | [S1 AND S14 AND S13](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink:rerunsearch/AEBAA9E22C884678PQ/None?site=socialservices&t:ac=RecentSearches) | **78** |
| **S14** | [S2 OR S3 OR S4 OR S5 OR S6 OR S7 OR S8 OR S9 OR S10 OR S11 OR S12](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink:rerunsearch/5C4AE19472A54292PQ/None?site=socialservices&t:ac=RecentSearches) | [**115,167**](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink_0:rerunsearch/5C4AE19472A54292PQ/None?site=socialservices&t:ac=RecentSearches) |
| **S13** | [ab(veteran\* OR VA OR "Veterans Affairs" OR VHA OR "Veterans Health Administration" OR VAMC) OR su(veterans)](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink:rerunsearch/AA6A964FF42F480CPQ/None?site=socialservices&t:ac=RecentSearches) | [**1,460**](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink_0:rerunsearch/AA6A964FF42F480CPQ/None?site=socialservices&t:ac=RecentSearches) |
| **S12** | [ab(cultural\* competen\* OR microinsult\* OR microaggression\*)](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink:rerunsearch/76CD4CC85C9A4634PQ/None?site=socialservices&t:ac=RecentSearches) | [**1,319**](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink_0:rerunsearch/76CD4CC85C9A4634PQ/None?site=socialservices&t:ac=RecentSearches) |
| **S11** | [ab(vulnerable population\* OR subgroup\* OR sub-group\* OR subpopulation\* OR sub-population\* OR stratif\*) or su(social stratification)](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink:rerunsearch/D35B054E12F64D47PQ/None?site=socialservices&t:ac=RecentSearches) | [**3,826**](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink_0:rerunsearch/D35B054E12F64D47PQ/None?site=socialservices&t:ac=RecentSearches) |
| **S10** | [ab(Ethnic\* OR race\* OR racial\* OR minority OR minorities OR African-American\* OR Black OR Blacks OR Hispanic\* OR Chicano\* OR Chicana\* OR Latino\* OR Latina\* OR Hispanic\* OR Asian-American\* OR Native American\* OR Indian OR Indians) or su(American Indians or Arab Americans, or Asian Americans or Black Americans or Eskimos or Hispanic Americans or Jewish Americans or African Cultural Groups or Asian Cultural Groups or Middle Eastern Cultural Groups or Latin American Cultural Groups or North American Cultural Groups or Oceanic Cultural Groups or Race or Ethnicity)](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink:rerunsearch/24588DCD75044B02PQ/None?site=socialservices&t:ac=RecentSearches) | [**26,249**](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink_0:rerunsearch/24588DCD75044B02PQ/None?site=socialservices&t:ac=RecentSearches) |
| **S9** | [ab(psychotic OR schizotyp\* OR schizophren\* OR schizoid\* OR schizoaffective OR bipolar OR mania\* OR hypomania\* OR hypo-mania\* OR manic OR cyclothymic OR PTSD OR post-traumatic stress OR posttraumatic stress OR severe\* mental\* ill\* OR serious\* mental\* ill\* OR chronic\* mental\* ill\* OR persistent\* mental\* ill\*) or su(mental illness or schizophrenia or psychopathology or posttraumatic stress disorder or bipolar disorders or cyclothymia)](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink:rerunsearch/E95EB47D9D9E4AB9PQ/None?site=socialservices&t:ac=RecentSearches) | [**9,431**](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink_0:rerunsearch/E95EB47D9D9E4AB9PQ/None?site=socialservices&t:ac=RecentSearches) |
| **S8** | [ab(disabilit\* OR disabled OR handicap\*) or su(handicapped or physically handicapped)](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink:rerunsearch/EE13FB9504CF4AAFPQ/None?site=socialservices&t:ac=RecentSearches) | [**8,327**](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink_0:rerunsearch/EE13FB9504CF4AAFPQ/None?site=socialservices&t:ac=RecentSearches) |
| **S7** | [ab(aged OR aging OR frail OR old OR older OR senior\* OR elderly OR middle-aged) or su(aging or elderly or middle aged adults)](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink:rerunsearch/7622D6295C7C4D89PQ/None?site=socialservices&t:ac=RecentSearches) | [**30,467**](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink_0:rerunsearch/7622D6295C7C4D89PQ/None?site=socialservices&t:ac=RecentSearches) |
| **S6** | [ab(rural-urban OR rural OR urban OR inner-city)or su(rural urban differences or urban rural differences or rural areas or urban areas)](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink:rerunsearch/84417BC9D27740EAPQ/None?site=socialservices&t:ac=RecentSearches) | [**12,811**](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink_0:rerunsearch/84417BC9D27740EAPQ/None?site=socialservices&t:ac=RecentSearches) |
| **S5** | [ab(religio\*) or su(religions or Religious Cultural Groups)](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink:rerunsearch/5B9B212585BA40C7PQ/None?site=socialservices&t:ac=RecentSearches) | [**4,550**](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink_0:rerunsearch/5B9B212585BA40C7PQ/None?site=socialservices&t:ac=RecentSearches) |
| **S4** | [ab(women\* OR female\* OR gender\* OR sex OR sex-based) or su(womens health care or working women or females or sexism or sex role attitudes or sexual inequality)](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink:rerunsearch/DA3892D1E7F2430APQ/None?site=socialservices&t:ac=RecentSearches) | [**42,835**](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink_0:rerunsearch/DA3892D1E7F2430APQ/None?site=socialservices&t:ac=RecentSearches) |
| **S3** | [ab(Socio-demographic\* OR Sociodemographic\* OR socioeconomic\* OR socio-economic\* OR SES OR sociocultural\* OR socio-cultural\* OR poverty OR indigent OR low-income OR class OR classes OR disadvantaged) or su(socioeconomic factors or social background or social factors or sociocultural factors or sociodemographic factors or socioeconomic status or poverty or rural poverty or rural poor or urban poverty or urban poor or income inequality or social inequality or social class)](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink:rerunsearch/6338C2B8B1CD440FPQ/None?site=socialservices&t:ac=RecentSearches) | [**34,229**](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink_0:rerunsearch/6338C2B8B1CD440FPQ/None?site=socialservices&t:ac=RecentSearches) |
| **S2** | [ab(LGBT\* OR lesbian\* OR homosexual\* OR gay OR gays OR bisexual\* OR transgender\* OR transsexual\* OR sexual\* orient\*) or su(Lesbianism or bisexuality or homosexuality or transsexuality or homophobia)](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink:rerunsearch/29C44F57DE9E4FBAPQ/None?site=socialservices&t:ac=RecentSearches) | [**5,254**](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink_0:rerunsearch/29C44F57DE9E4FBAPQ/None?site=socialservices&t:ac=RecentSearches) |
| **S1** | [ab(Discriminat\* OR Disparit\* OR parity OR Inequal\* OR Unequal OR equal OR Inequit\* OR Equity OR equitable OR undertreat\* OR under-treat\* OR overtreat\* OR over-treat\* OR access OR accessible OR accessibility) or su(discrimination or racism or bias or prejudice or equality or inequality or access)](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink:rerunsearch/B0149E30CE734AE0PQ/None?site=socialservices&t:ac=RecentSearches) | [**23,972**](http://search.proquest.com.proxy.lib.pdx.edu/recentsearches.recentsearchtabview.recentsearchesgridview.scrolledrecentsearchlist.checkdbssearchlink_0:rerunsearch/B0149E30CE734AE0PQ/None?site=socialservices&t:ac=RecentSearches) |

**ClinicalTrials.gov**

Date Searched: April 22, 2016

( veteran\* OR VA OR Veterans Affairs OR VHA OR Veterans Health Administration OR VAMC ) AND ( discrimination OR discriminate OR discriminated OR disparity OR disparities OR parity OR Inequality OR inequalities OR unequal OR unequally OR inequity OR inequities OR equity OR equitable OR accessible OR accessibility OR prejudice OR prejudicial OR homophobia OR homophobic OR racism OR racist ) | Adult, Senior | received from 01/01/2006 to 04/22/2016 = 96 results

**Supplemental Digital Content 4. List of VA Centers Contacted for Additional Studies**

|  |
| --- |
| **Mental Illness Research, Education and Clinical Centers (MIRECCs)** |
| [New England MIRECC - VISN 1](http://www.mirecc.va.gov/visn1/) |
| [Center for Integrated Healthcare - VISN 2](http://www.mirecc.va.gov/cih-visn2/) (CIH) |
| [Center of Excellence for Suicide Prevention - VISN 2](http://www.mirecc.va.gov/suicideprevention/) |
| [VISN 3 MIRECC](http://www.mirecc.va.gov/visn3/) |
| [VISN 4 MIRECC](http://www.mirecc.va.gov/visn4/) |
| [VA Capitol Health Care Network MIRECC - VISN 5](http://www.mirecc.va.gov/visn5/) |
| [Mid-Atlantic MIRECC - VISN 6](http://www.mirecc.va.gov/visn6/) |
| [South Central MIRECC - VISN 16](http://www.mirecc.va.gov/visn16/) |
| [VISN 17 Center of Excellence (COE) for Research on Returning War Veterans](http://www.mirecc.va.gov/visn17/) |
| [Rocky Mountain Network MIRECC - VISN 19](http://www.mirecc.va.gov/visn19/) |
| [Northwest MIRECC - VISN 20](http://www.mirecc.va.gov/visn20/) |
| [Sierra Pacific MIRECC - VISN 21](http://www.mirecc.va.gov/visn21/) |
| [Desert Pacific MIRECC - VISN 22](http://www.mirecc.va.gov/visn22/) |
| [The National Center for PTSD](http://www.ptsd.va.gov/) |

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| --- |
| **Geriatric Research Education and Clinical Centers (GRECCs)** |
| [Ann Arbor](http://www.va.gov/GRECC/Ann_Arbor_GRECC.asp) |
| [Baltimore](http://www.va.gov/GRECC/Baltimore_MD_GRECC.asp) |
| [Birmingham/Atlanta](http://www.va.gov/GRECC/Birmingham_Atlanta_GRECC.asp) |
| Bro[nx/New York Harbor](http://www.va.gov/GRECC/Bronx_New_York_Harbor_GRECC.asp) |
| [Cleveland](http://www.va.gov/GRECC/Cleveland_GRECC.asp) |
| [Durham](http://www.va.gov/GRECC/Durham_GRECC.asp) |
| [Gainesville](http://www.va.gov/GRECC/Gainesville_GRECC.asp) |
| [Greater Los Angeles](http://www.va.gov/GRECC/Greater_Los_Angeles_GRECC.asp) |
| [Little Rock](http://www.va.gov/GRECC/Little_Rock_GRECC.asp) |
| [Madison](http://www.va.gov/GRECC/Madison_GRECC.asp) |
| [Miami](http://www.va.gov/GRECC/Miami_GRECC.asp) |
| [Minneapolis](http://www.va.gov/GRECC/Minneapolis_GRECC.asp) |
| [New England (Bedford Division)](http://www.va.gov/GRECC/New_England_GRECC_Bedford_Division.asp) |
| [New England (Boston Division)](http://www.va.gov/GRECC/New_England_GRECC_Boston_Division.asp) |
| [Palo Alto](http://www.va.gov/GRECC/Palo_Alto_GRECC.asp) |
| [Pittsburgh](http://www.va.gov/GRECC/Pittsburgh_GRECC.asp) |
| [Puget Sound (Seattle & American Lake Divisions)](http://www.va.gov/GRECC/Puget_Sound_GRECC_Seattle_and_American_Lake_Divisions.asp) |
| [Salt Lake City](http://www.va.gov/GRECC/Salt_Lake_City_GRECC.asp) |
| [San Antonio](http://www.va.gov/GRECC/San_Antonio_GRECC.asp) |
| [Tennessee Valley](http://www.va.gov/GRECC/Tennessee_Valley_GRECC.asp) |

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| **Other Centers** |
| Ann Arbor, MI: [Center for Clinical Management Research (CCMR)](http://www.hsrd.research.va.gov/centers/ccmr.cfm) |
| Bedford, MA and Boston, MA: [Center for Healthcare Organization and Implementation Research (CHOIR)](http://www.hsrd.research.va.gov/centers/choir.cfm) |
| Charleston, SC: [Charleston Health Equity and Rural Outreach Innovation Center (HEROIC)](http://www.hsrd.research.va.gov/centers/heroic.cfm) |
| Durham, NC: Center for Health Services Research in Primary Care |
| Hines, IL: Center of Innovation for Complex Chronic Healthcare (CINCCH) |
| Houston, TX: Center for Innovations in Quality, Effectiveness and Safety (IQuESt) |
| Indianapolis, IN: Center for Health Information and Communication (CHIC) |
| Iowa City, IA: Center for Comprehensive Access & Delivery Research and Evaluation (CADRE) |
| Los Angeles, CA: [Center for the Study of Healthcare Innovation, Implementation and Policy (CSHIIP)](http://www.hsrd.research.va.gov/centers/cshiip.cfm) |
| Minneapolis, MN: Center for Chronic Disease Outcomes Research (CCDOR) |
| North Florida/South Georgia and Tampa: [Center of Innovation on Disability and Rehabilitation Research (CINDRR)](http://www.hsrd.research.va.gov/centers/cidrr8.cfm) |
| North Little Rock, AR: [Center for Mental Healthcare and Outcomes Research (CeMHOR)](http://www.hsrd.research.va.gov/centers/cemhor.cfm) |
| Palo Alto, CA: [Center for Innovation to Implementation (Ci2i): Fostering High Value Care](http://www.hsrd.research.va.gov/centers/ci2i.cfm) |
| Pittsburgh and Philadelphia, PA: [Center for Health Equity Research & Promotion (CHERP)](http://www.hsrd.research.va.gov/centers/cherp.cfm) |
| Portland, OR: [Center to Improve Veteran Involvement in Care (CIVIC)](http://www.hsrd.research.va.gov/centers/civic.cfm) |
| Providence, RI: [Center of Innovation in Long-Term Services and Supports for Vulnerable Veterans](http://www.hsrd.research.va.gov/centers/providence.cfm) |
| Salt Lake City, UT: [Informatics, Decision-Enhancement and Analytic Sciences Center (IDEAS 2.0)](http://www.hsrd.research.va.gov/centers/ideas2.cfm) |
| Seattle, WA and Denver, CO: [Center of Innovation for Veteran-Centered and Value-Driven Care](http://www.hsrd.research.va.gov/centers/seattle-denver.cfm) |
| West Haven, CT: [Pain Research, Informatics, Multi-morbidities, and Education (PRIME) Center](http://www.hsrd.research.va.gov/centers/prime.cfm) |

**Supplemental Digital Content 5. PICOTS**

|  |  |  |  |
| --- | --- | --- | --- |
| **Key Questions** | **KQ1.** For what Veteran groups/populations are health and healthcare disparities prevalent? | **KQ2.** What are the effects of interventions implemented within the VHA to reduce healthcare disparities?  \**Not included in this article* | **KQ3.** What are the research projects designed to identify or mitigate health disparities currently being funded by the VA Office of Research and Development (ORD)?  \**Not included in this article* |
| **Population** | Veterans only | | |
| **Interventions** | NA | Any interventions designed specifically or are being specifically used to reduce disparities, or examine mediators associated with health disparities for Veterans. | |
| **Comparators** | * + - * Control group within the same group       * Comparison to other groups relevant to the population | | |
| **Outcomes** | * Utilization of healthcare services * Quality of healthcare services  1. Intermediate/process of care measures 2. Patient evaluations of care  * Patient health outcomes | * Utilization of healthcare services * Quality of healthcare services  1. Intermediate/process of care measures 2. Patient evaluations of care  * Patient health outcomes * Mediators  1. System level (e.g., distribution of services) 2. Provider level (e.g., racial bias) 3. Patient level (e.g., trust) 4. Provider-patient level (e.g., communication) | |
| **Timing** | No restrictions | | |
| **Study design** | Original research, systematic review, or meta-analysis | | |
| **Setting** | VHA or community settings | | |

**Supplemental Digital Content 6. Inclusion Criteria**

|  |
| --- |
| 1. Language: Is the full text of the article in English?   Yes ...........…..............................................................……............…......Proceed to #2  No .............................................................……….....…*………….….* Code **X1**. STOP   1. Population: Are the participants exclusively Veterans/at a VA Medical Center?   Yes …………………………………………………….………………. Proceed to #3  No …………… Code **X2.** Add code **B** if retaining for background/discussion.STOP   1. Study Design: Is the study original research, a systematic review or meta-analysis?   Yes ………………..................................……………............…............Proceed to #4  No ……. …………… Code **X3.** Add code **B** if retaining for background/discussion.STOP   1. Comparator: The study’s primary comparison is populations/groups for whom a disparity may exist (e.g., race/ethnicity, gender, LGBT, age, mental illness, physical or cognitive disability, geographic location, military era of service, etc.)?   Yes …………………………………………………….………………. Proceed to #5  No …………… Code **X4.** Add code **B** if retaining for background/discussion.STOP   1. Outcomes: Does the study report one or more of the following outcomes: utilization, quality (i.e., patient outcomes [e.g., mortality, morbidity], intermediate/process of care measures, patient evaluations of care, direct observation [e.g., communication patterns], other [e.g., medication adherence, health education, etc.? Mediators (i.e., system level [e.g., distribution of services], provider level [e.g., racial bias], patient level [e.g., trust], provider-patient level [e.g., communication]) without an accompanying utilization, quality, intermediate/process of care, patient evaluations of care, direct observation, other outcome of interest are excluded.   Yes …………………………………………………….………………. Proceed to #6  No …………… Code **X5.** Add code **B** if retaining for background/discussion.STOP   1. Intervention: Does the study include interventions that were designed specifically for, or are being specifically used to reduce disparities, or examine mediators associated with health disparities for Veterans?   Yes ………………..................................……………............…............ **Code I for KQ2**. STOP  No ………………..................................……………............…............ **Code I for KQ1**. STOP |
| KQ1. For what groups/populations, and in which clinical areas are health and healthcare disparities prevalent within the VHA?  KQs not included in this article:  KQ2. What are the effects of interventions implemented within the VHA to reduce health disparities?  KQ3. What research projects have been funded by the VA Office of Research and Development (ORD) to address any of the components in the other key questions from 2010 to present? |

**Supplemental Digital Content 7. Scoring Criteria**

|  |  |
| --- | --- |
| **Category;**  **Points** | **Description** |
| Study Design  0 to 1 | 1 point for prospective studies. 0 points for all other designs. |
| Controlled for Confounders  -1 to 0 | 0 points for all others. -1 point if the study did not control for confounding variables. |
| Study Site(s)  0 to 1 | 1 point for multi-site. 0 points for single site study. |
| Sample Size  0 to 2 | KQ1: 2 points for studies with samples ≥100,000. 1 point for studies with samples ≥10,000. 0 points for studies <10,000. |

**Supplemental Digital Content 8. Methods Description**

We mapped original research by abstracting relevant data for each key question. Our search for vulnerable populations was intentionally broad, to capture the breadth of disparities related to health or healthcare affecting Veterans. The report is organized by population, in order from those with the largest number of studies to the smallest. We categorized studies examining rural populations specifically as separate from those simply measuring distance from a VAMC, because while challenges related to lack of access due to distance are likely applicable to Veterans living in rural areas, there may cultural factors specific to rural residence that may affect Veterans health.

For each population, we categorized studies examining the prevalence of disparities (KQ1) into those examining 1) utilization, 2) the quality of care (i.e., processes of care, patient evaluations of care, intermediate outcomes), and 3) patient health outcomes.  For each category, we recorded whether a study found a disparity, no disparity, or whether the findings within a category were mixed or unclear. For all populations, if a study reported multiple outcomes within the same category (e.g., blood pressure screening and control), we classified a study as mixed if the findings for all relevant outcomes were not in agreement (e.g., found significantly fewer screenings, but no difference in blood pressure control). We classified a finding as a disparity if it conflicted with the clinically appropriate or expected outcome for each population. For example, a finding of a higher mortality rate associated with a racial or ethnic group would be classified as a disparity. However, for studies examining age-related or era of military service-related disparities, we did not consider higher mortality rates in older adults and/or earlier eras of service (e.g., WWII or Vietnam) to be a disparity in health. For outcomes related to utilization, we classified lower utilization as a disparity for populations for which we know access is a primary issue (e.g., distance from a VA Medical Center or rural residence). However, for studies of other populations, if the rate at which the study population *should* be utilizing care was unclear, we classified significantly higher or lower rates of utilization as mixed or unclear, as we could not determine if higher or lower utilization rates were related to better or poorer health, or were related to access or other factors. For age-related disparities, if a study found either older or younger adults to be at a disadvantage that was not clinically normative, we classified it as a disparity.

**Supplemental Digital Content 9. Literature Flow Diagram**

References identified by systematic search (*n* = 4249)

PubMed: 133

Ovid MEDLINE: 2159

CINAHL: 153

PsycINFO: 538

EBM: 791

Sociological Abstracts: 57

Social Services Abstracts: 17

Other sources (e.g., HSRD site, grey literature, reference lists of relevant articles or reviews): 401

Articles retrieved for full-text review (*n* = 736)

Included studies (*n* = 351)

Excluded abstracts and background articles (*n* = 3513)

Articles excluded at the full-text level (*n* = 385)

Does not report on the prevalence of disparities: 225

Not an eligible study design: 68

No eligible outcomes: 53

Population not Veterans: 39

**Supplemental Digital Content 10. List of 351 Included Studies**

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**Supplemental Digital Content 11. Study Distribution by Clinical Area and Category**

Mental health represented the most widely studied clinical area, followed by cardiovascular disease, cancer, and diabetes. Most of the studies in cardiovascular disease (68%), cancer (75.7%), and diabetes (63.3%) reported quality of care outcomes. The table below shows the distribution of studies by clinical area and outcome category.

**Distribution of studies by clinical area and outcome category**

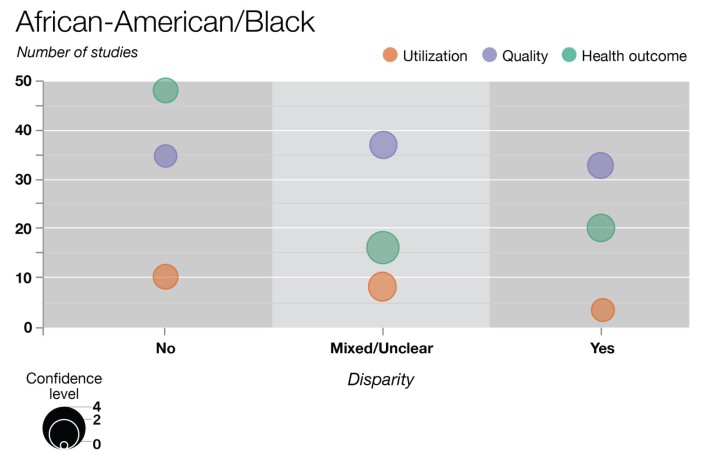
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| **Clinical area** | **Total studiesa**  **N (%)b** | **Utilization**  **N (%)c** | **Quality**  **N (%)c** | **Health Outcome**  **N (%)c** |
| Mental health | 97 (27.6) | 34 (35.1) | 35 (36.1) | 47 (48.5) |
| Cardiovascular | 50 (14.2) | 4 (8.0) | 34 (68.0) | 21 (42.0) |
| Cancer | 37 (10.5) | 2 (5.4) | 28 (75.7) | 18 (48.6) |
| Diabetes | 30 (8.5) | 2 (6.7) | 19 (63.3) | 12 (40.0) |
| Pain | 19 (5.4) | 5 (26.3) | 10 (52.6) | 7 (36.8) |
| Utilization | 14 (4.0) | 12 (85.7) | 2 (14.3) | 2 (14.3) |
| Women's health | 14 (4.0) | 5 (35.7) | 6 (42.9) | 4 (28.6) |
| Preventive and ambulatory care | 11 (3.1) | 4 (36.4) | 7 (63.6) |  |
| General health | 9 (2.6) | 3 (33.3) | 6 (66.7) | 4 (44.4) |
| Hepatitis C | 8 (2.3) | 1 (12.5) | 6 (75.0) | 4 (50.0) |
| HIV | 7 (2.0) | 2 (28.6) | 2 (28.6) | 4 (57.1) |
| Geriatrics, Prescribing | 6 (1.7) |  | 6 (100.0) |  |
| Renal | 6 (1.7) |  | 1 (16.7) | 5 (83.3) |
| Surgery | 6 (1.7) | 2 (33.3) | 1 (16.7) | 4 (66.7) |
| Dementia | 5 (1.4) | 1 (20.0) | 3 (60.0) | 2 (40.0) |
| Inpatient care | 4 (1.1) | 1 (25.0) | 3 (75.0) |  |
| Pneumonia | 4 (1.1) | 1 (25.0) | 1 (25.0) | 4 (100.0) |
| End-of-life care | 3 (0.9) |  | 3 (100.0) |  |
| Physical & mental health status | 3 (0.9) |  |  | 3 (100.0) |
| Quality of life, health-related | 3 (0.9) |  |  | 3 (100.0) |
| Traumatic brain injury | 3 (0.9) | 2 (66.7) |  | 2 (66.7) |
| Access | 2 (0.6) | 2 (100.0) |  |  |
| Chronic obstructive pulmonary disease | 2 (0.6) |  | 1 (50.0) | 1 (50.0) |
| Disability | 2 (0.6) |  | 2 (100.0) |  |
| Mortality | 2 (0.6) |  |  | 2 (100.0) |
| Smoking cessation | 2 (0.6) |  | 2 (100.0) |  |
| Chronic disease | 1 (0.3) |  |  | 1 (100.0) |
| Clinical pharmacy services | 1 (0.3) | 1 (100.0) |  |  |
| Dental | 1 (0.3) |  | 1 (100.0) |  |
| Epilepsy | 1 (0.3) |  | 1 (100.0) |  |
| Gastroenterology | 1 (0.3) |  | 1 (100.0) |  |
| Obstructive sleep apnea | 1 (0.3) |  | 1 (100.0) |  |
| Prosthetic care | 1 (0.3) |  | 1 (100.0) |  |
| Transplantation | 1 (0.3) |  | 1 (100.0) | 1 (100.0) |
| Varices care | 1 (0.3) |  | 1 (100.0) |  |
| Venous thromboembolism | 1 (0.3) |  | 1 (100.0) | 1 (100.0) |
| Vitamin D levels | 1 (0.3) | 1 (100.0) | 1 (100.0) |  |
| Wound care | 1 (0.3) | 1 (100.0) |  | 1 (100.0) |

a Ten studies were represented in more than one clinical area.

b Percent of total included studies (N=351).

c Percent of total studies in clinical area. Some studies reported outcomes in multiple categories.

**Supplemental Digital Content 12. Evidence Map: Health Disparities in VHA Patients by Race/Ethnicity – African American/Black**

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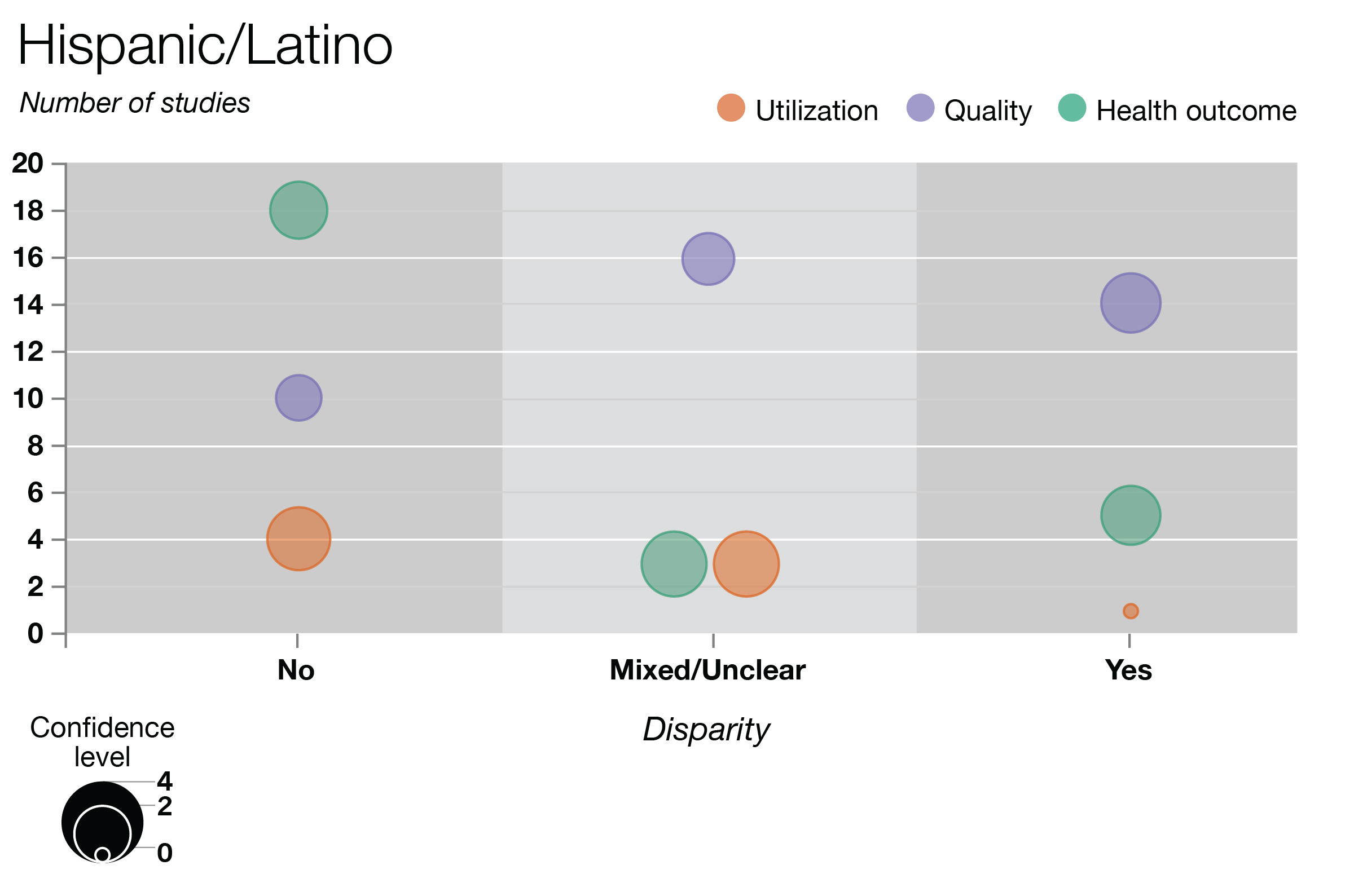
**Legend:** The bubble plot shows the number of studies identified (y-axis) that provided evidence of no disparity, mixed or unclear findings, or a disparity (x-axis) for each outcome category (utilization, quality, patient health outcomes). Bubble size represents the mean confidence score, with a range of -1 to 4.

**Supplemental Digital Content 13. Table: Health Disparities in VHA Patients by Race/Ethnicity – African American/Black**

| *Title* | *Clinical area* | *Total N* | *Outcomes* | *Category* | *Disparity* | *Confi-dence* |
| --- | --- | --- | --- | --- | --- | --- |
| Association between race and survival of patients with non-small-cell lung cancer in the United States Veteran Affairs population[1](#_ENREF_1) | Cancer | 82414 | Mortality | Health Outcome | No | 1 |
| Racial disparities in cancer care in the Veterans Affairs health care system and the role of site of care[2](#_ENREF_2) | Cancer | 76707 | Survival | Health Outcome | Mixed/ Unclear | 2 |
| Association between race and survival of patients with non-small-cell lung cancer in the United States Veteran Affairs population[1](#_ENREF_1) | Cancer | 82414 | Quality | Quality | Yes | 1 |
| Racial disparities in cancer care in the Veterans Affairs health care system and the role of site of care[2](#_ENREF_2) | Cancer | 76707 | Access to care (diagnosis) | Quality | Yes | 2 |
| Reasons for underuse of recommended therapies for colorectal and lung cancer in the Veterans Health Administration[3](#_ENREF_3) | Cancer | 584 | Access, recommendation and receipt of recommended cancer therapy | Quality | Mixed/ Unclear | 1 |
| Association between race and survival of patients with non-small-cell lung cancer in the United States Veteran Affairs population[1](#_ENREF_1) | Cancer | 82414 | Utilization | Utilization | Yes | 1 |
| An examination of racial differences in process and outcome of colorectal cancer care quality among users of the Veterans Affairs Health Care System[4](#_ENREF_4) | Cancer (colorectal) | 2022 | 3 quality indicators: time from surgery to initiation of adjuvant chemotherapy, surgery to surveillance colonoscopy, and surgery to death | Health Outcome | No | 1 |
| Ethnic disparities are reduced in VA colon cancer patients[5](#_ENREF_5) | Cancer (colorectal) | 214 | Stage of disease at presentation, mean times from diagnosis to surgical resection, time from surgical consultation to surgery, mean time to adjuvant therapy with among stage III patients, survival time | Health Outcome | No | 0 |
| Impact of race on colorectal cancer[6](#_ENREF_6) | Cancer (colorectal) | 300 | Death | Health Outcome | No | -1 |
| Risk of colorectal cancer among Caucasian and African American veterans with ulcerative colitis[7](#_ENREF_7) | Cancer (colorectal) | 16490 | Colorectal cancer | Health Outcome | No | 2 |
| An examination of racial differences in process and outcome of colorectal cancer care quality among users of the Veterans Affairs Health Care System[4](#_ENREF_4) | Cancer (colorectal) | 2022 | 3 quality indicators: time from surgery to initiation of adjuvant chemotherapy, surgery to surveillance colonoscopy, and surgery to death | Quality | Mixed/ Unclear | 1 |
| Barriers to full colon evaluation for a positive fecal occult blood test[8](#_ENREF_8) | Cancer (colorectal) | 538 | Full colon evaluation | Quality | No | 0 |
| Ethnic disparities are reduced in VA colon cancer patients[5](#_ENREF_5) | Cancer (colorectal) | 214 | Stage of disease at presentation, mean times from diagnosis to surgical resection, time from surgical consultation to surgery, mean time to adjuvant therapy with among stage III patients, survival time | Quality | No | 0 |
| Examining potential colorectal cancer care disparities in the Veterans Affairs health care system[9](#_ENREF_9) | Cancer (colorectal) | 2022 | Guideline-concordant care | Quality | No | 1 |
| Low uptake of colorectal cancer screening among African Americans in an integrated Veterans Affairs health care network[10](#_ENREF_10) | Cancer (colorectal) | 357 | Screening uptake, time to screening | Quality | Yes | 1 |
| Presence and correlates of racial disparities in adherence to colorectal cancer screening guidelines[11](#_ENREF_11) | Cancer (colorectal) | 2115 | Screening adherence | Quality | No | 1 |
| Impact of race on colorectal cancer[6](#_ENREF_6) | Cancer (colorectal) | 300 | Access to care | Quality | Mixed/ Unclear | -1 |
| Risk factors for Barrett's esophagus compared between African Americans and non-Hispanic Whites[12](#_ENREF_12) | Cancer (esophageal adenocarcinoma) | 1952 | Diagnosis of Barrett’s esophagus | Health Outcome | No | 0 |
| Impact of race/ethnicity on laryngeal cancer in patients treated at a Veterans Affairs Medical Center[13](#_ENREF_13) | Cancer (laryngeal) | 205 | Patient and tumor characteristics, compliance with National Comprehensive Cancer Network guidelines, and survival outcomes | Health Outcome | No | 0 |
| Impact of race/ethnicity on laryngeal cancer in patients treated at a Veterans Affairs Medical Center[13](#_ENREF_13) | Cancer (laryngeal) | 205 | Patient and tumor characteristics, compliance with National Comprehensive Cancer Network guidelines, and survival outcomes | Quality | No | 0 |
| Influence of comorbidity on racial differences in receipt of surgery among US veterans with early-stage non-small-cell lung cancer[14](#_ENREF_14) | Cancer (lung) | 1314 | Access to care (non-small-cell lung cancer surgery) | Quality | Yes | 1 |
| Racial differences in doctors' information-giving and patients' participation[15](#_ENREF_15) | Cancer (lung) | 137 | Provider's information-giving utterances | Quality | Mixed/ Unclear | 1 |
| Racial differences in chronic immune stimulatory conditions and risk of non-Hodgkin's lymphoma in veterans from the United States[16](#_ENREF_16) | Cancer (non-Hodgkin lymphoma) | 9496 | Risk of non-Hodgkin lymphoma diagnosis by associated condition (infections, allergies, autoimmune conditions) | Health Outcome | Mixed/ Unclear | 1 |
| The association of race with timeliness of care and survival among Veterans Affairs health care system patients with late-stage non-small cell lung cancer[17](#_ENREF_17) | Cancer (non-small cell lung carcinoma) | 2200 | Survival | Health Outcome | No | 1 |
| The association of race with timeliness of care and survival among Veterans Affairs health care system patients with late-stage non-small cell lung cancer[17](#_ENREF_17) | Cancer (non-small cell lung carcinoma) | 2200 | Time to receiving recommended care (treatment initiation and palliative care) | Quality | No | 1 |
| Impact of race on oropharyngeal squamous cell carcinoma presentation and outcomes among veterans[18](#_ENREF_18) | Cancer (oropharyngeal squamous cell carcinoma) | 158 | Survival | Health Outcome | No | 0 |
| Impact of race in a predominantly African-American population of patients with low/intermediate risk prostate cancer undergoing radical prostatectomy within an equal access care institution[19](#_ENREF_19) | Cancer (prostate) | 222 | Biochemical failure (prostate-specific antigen >.2 ng/mL followed by repeat measure higher than .2 ng/mL or initiation of salvage treatment), distant control, survival | Health Outcome | No | 0 |
| Impact of race on survival in patients with clinically nonmetastatic prostate cancer who deferred primary treatment[20](#_ENREF_20) | Cancer (prostate) | 518 | Mortality | Health Outcome | Mixed/ Unclear | 0 |
| 'Race' and prostate cancer mortality in equal-access healthcare systems[21](#_ENREF_21) | Cancer (prostate) | 1249 | Prostate cancer mortality | Health Outcome | No | 1 |
| Racial parity in tumor burden, treatment choice and survival outcomes in men with prostate cancer in the VA healthcare system[22](#_ENREF_22) | Cancer (prostate) | 1258 | Prostate cancer mortality | Health Outcome | No | 1 |
| The association between race and prostate cancer risk on initial biopsy in an equal access, multiethnic cohort[23](#_ENREF_23) | Cancer (prostate) | 887 | Prostate cancer risk on initial biopsy and prostate cancer grade | Health Outcome | Yes | 0 |
| Counting alleles in single lesions of prostate tumors from ethnically diverse patients[24](#_ENREF_24) | Cancer (prostate) | 153 | 8p allelic status | Quality | No | 1 |
| Impact of race in a predominantly African-American population of patients with low/intermediate risk prostate cancer undergoing radical prostatectomy within an equal access care institution[19](#_ENREF_19) | Cancer (prostate) | 222 | Biochemical failure (prostate-specific antigen >.2 ng/mL followed by repeat measure higher than .2 ng/mL or initiation of salvage treatment), distant control, survival | Quality | Mixed/ Unclear | 0 |
| Race and time from diagnosis to radical prostatectomy: does equal access mean equal timely access to the operating room?--Results from the SEARCH database[25](#_ENREF_25) | Cancer (prostate) | 1532 | Time between biopsy and radical prostatectomy | Quality | No | 1 |
| Racial differences in adipose tissue distribution and risk of aggressive prostate cancer among men undergoing radiotherapy[26](#_ENREF_26) | Cancer (prostate) | 308 | Relationship between visceral obesity and prostate cancer | Quality | Yes | 0 |
| Racial parity in tumor burden, treatment choice and survival outcomes in men with prostate cancer in the VA healthcare system[22](#_ENREF_22) | Cancer (prostate) | 1258 | Prostate cancer mortality | Quality | No | 1 |
| Do racial disparities exist in the use of prostate cancer screening and detection tools in veterans?[27](#_ENREF_27) | Cancer (prostate, screening) | 275832 | Prostate-specific antigen screening uptake | Quality | Mixed/ Unclear | 3 |
| Functional status outcomes among white and African-American cardiac patients in an equal access system[28](#_ENREF_28) | Cardiovascular | 1022 | Utilization, Functional status | Health Outcome | No | 2 |
| Functional status outcomes among white and African-American cardiac patients in an equal access system[28](#_ENREF_28) | Cardiovascular | 1022 | Utilization, Functional status | Quality | Mixed/ Unclear | 2 |
| Better hypertension and lipid care in racially diverse, veterans at risk[29](#_ENREF_29) | Cardiovascular (acute coronary syndrome) | 36000 | Mortality | Health Outcome | Yes | 2 |
| The use of percutaneous coronary intervention in black and white veterans with acute myocardial infarction[30](#_ENREF_30) | Cardiovascular (acute coronary syndrome) | 4209 | Use of percutaneous coronary intervention, 30-day rates of cardiac catheterization, and coronary artery bypass surgery | Quality | No | 1 |
| The concentration of hospital care for black veterans in Veterans Affairs hospitals: implications for clinical outcomes[31](#_ENREF_31) | Cardiovascular (acute myocardial infarction, congestive heart failure) hip fracture, stroke, gastrointestinal hemorrhage, and pneumonia | 406537 hospital-izations | Mortality | Health Outcome | Mixed/ Unclear | 3 |
| Characteristics and outcomes of patients with advanced chronic systolic heart failure receiving care at the Veterans Affairs versus other hospitals: insights from the Beta-blocker Evaluation of Survival Trial (BEST)[32](#_ENREF_32) | Cardiovascular (advanced chronic systolic heart failure) | 898 | Mortality | Health Outcome | No | 1 |
| Racial differences in mortality among men hospitalized in military hospitals[33](#_ENREF_33) | Cardiovascular (angina, congestive heart failure, acute myocardial infarction), gastrointestinal hemorrhage, stroke, diabetes | 14122 | Hospital mortality | Health Outcome | No | 2 |
| Variation in cardiac procedure use and racial disparity among Veterans Affairs Hospitals[34](#_ENREF_34) | Cardiovascular (aortic valve replacement, implanted cardioverter or defibrillator, dual chambered pacemaker, or percutaneous coronary intervention) | 300614 | Receipt of care in academic and non-academic hospitals with <30% or ≥30% black inpatients within 90 days | Utilization | Mixed/ Unclear | 3 |
| Factors associated with a provider's recommendation of carotid endarterectomy: implications for understanding disparities in the use of invasive procedures[35](#_ENREF_35) | Cardiovascular (carotid endarterectomy) | 251 | Provider recommendation for carotid endarterectomy | Quality | No | 2 |
| Demographic determinants of response to statin medications[36](#_ENREF_36) | Cardiovascular (coronary artery disease) | 5191 | Achieving goal of LDL-C <100 | Quality | No | 0 |
| Disparities in VA heart failure care[37](#_ENREF_37) | Cardiovascular (heart failure) | NR - likely large | Mortality, rehospitalization | Health Outcome | Mixed/ Unclear | 2 |
| Racial variations in quality of care and outcomes in an ambulatory heart failure cohort[38](#_ENREF_38) | Cardiovascular (heart failure) | 18611 | Quality of care (documentation of left ventricular ejection fraction, appropriate prescription of angiotensin-converting enzyme inhibitors and beta-blockers, or if intolerant, angiotensin receptor blockers or hydralazine and nitrates among patients intolerant), 1-year mortality, 1-year all-cause and heart failure-caused hospitalization | Health Outcome | No | 2 |
| Examining patients' trust in physicians and the VA healthcare system in a prospective cohort followed for six-months after an exacerbation of heart failure[39](#_ENREF_39) | Cardiovascular (heart failure) | 159 | Trust in physician, trust in VHA | Quality | Mixed/ Unclear | 2 |
| Racial variations in quality of care and outcomes in an ambulatory heart failure cohort[38](#_ENREF_38) | Cardiovascular (heart failure) | 18611 | Quality of care (documentation of left ventricular ejection fraction, appropriate prescription of angiotensin-converting enzyme inhibitors and beta-blockers, or if intolerant, angiotensin receptor blockers or hydralazine and nitrates among patients intolerant), 1-year mortality, 1-year all-cause and heart failure-caused hospitalization | Quality | Mixed/ Unclear | 2 |
| Race and income association with health service utilization for veterans with heart failure[40](#_ENREF_40) | Cardiovascular (heart failure) | 149 | Heart failure related outcomes (30-day, 90-day, 1-year and total readmissions, ED visits and total bed days of care) | Utilization | No | 0 |
| Racial variations in quality of care and outcomes in an ambulatory heart failure cohort[38](#_ENREF_38) | Cardiovascular (heart failure) | 18611 | Quality of care (documentation of left ventricular ejection fraction, appropriate prescription of angiotensin-converting enzyme inhibitors and beta-blockers, or if intolerant, angiotensin receptor blockers or hydralazine and nitrates among patients intolerant), 1-year mortality, 1-year all-cause and heart failure-caused hospitalization | Utilization | Yes | 2 |
| Quality of care for cardiovascular disease-related conditions in patients with and without mental disorders[41](#_ENREF_41) | Cardiovascular (hypertension) | 24016 | Poor hypertension control (blood pressure ≥160/100) and good hypertension control (blood pressure ≤140/90). | Quality | Mixed/ Unclear | 2 |
| Decomposing gender differences in low-density lipoprotein cholesterol among veterans with or at risk for cardiovascular illness[42](#_ENREF_42) | Cardiovascular (lipid management) | 527568 | LDL-C greater than or equal to 130 | Quality | Mixed/ Unclear | 3 |
| Racial/ethnic differences in stroke mortality in veterans[43](#_ENREF_43) | Cardiovascular (stroke) | 4115 | All-cause mortality | Health Outcome | Yes | 0 |
| Stroke mortality and race: does access to care influence outcomes?[44](#_ENREF_44) | Cardiovascular (stroke) | 55094 | Mortality | Health Outcome | No | 2 |
| Racial disparities in blood pressure management among stroke patients[45](#_ENREF_45) | Cardiovascular (stroke) | 287 | Blood pressure control | Quality | No | 0 |
| The underuse of interventions in veterans with symptomatic carotid stenosis[46](#_ENREF_46) | Cardiovascular (stroke) | 229 | Receipt of carotid intervention | Quality | Yes | 1 |
| Factors associated with delays in seeking treatment for stroke care in veterans[47](#_ENREF_47) | Cardiovascular (stroke) | 100 | Delay in seeking care for treatment for stroke care | Utilization | Yes | 0 |
| Racial and ethnic disparities in post-stroke depression detection[48](#_ENREF_48) | Cardiovascular (stroke), mental health | 5825 | Diagnosis of post-stroke depression | Health Outcome | No | 1 |
| Racial/ethnic disparities in poststroke outpatient rehabilitation among veterans[49](#_ENREF_49) | Cardiovascular (stroke), rehabilitative care | 4115 | Receipt of physical therapy, occupational therapy evaluations, visits and procedures | Quality | No | 0 |
| Association of race with mortality and cardiovascular events in a large cohort of US veterans[50](#_ENREF_50) | Cardiovascular disease | 3072966 | Mortality | Health Outcome | Mixed/ Unclear | 3 |
| Cardiovascular disease risk factors among women veterans at VA medical facilities[51](#_ENREF_51) | Cardiovascular disease | 2515015 | Cardiovascular disease risk factors | Health Outcome | Yes | 2 |
| Racial differences in prevalence of coronary obstructions among men with positive nuclear imaging studies[52](#_ENREF_52) | Cardiovascular disease | 1025 | Significant coronary obstruction | Health Outcome | No | 2 |
| Racial disparities in prescriptions for cardioprotective drugs and cardiac outcomes in Veterans Affairs Hospitals[53](#_ENREF_53) | Cardiovascular disease | 474565 | Prescriptions for cardioprotective drugs (aspirin, beta-blocker, statin, angiotensin-converting enzyme inhibitors) | Health Outcome | Yes | 3 |
| Cardiovascular disease risk factors among women veterans at VA medical facilities[51](#_ENREF_51) | Cardiovascular disease | 2515015 | Cardiovascular disease risk factors | Quality | Mixed/ Unclear | 2 |
| Exploring racial and sociodemographic trends in physician behavior, physician trust and their association with blood pressure control[54](#_ENREF_54) | Cardiovascular disease | 793 | Blood pressure control | Quality | No | 1 |
| Heart matters: Gender and racial differences cardiovascular disease risk factor control among veterans[55](#_ENREF_55) | Cardiovascular disease | 24965 | Measures of blood pressure, LDL-C values, hemoglobin A1c levels | Quality | Mixed/ Unclear | 2 |
| Hypertensive patients' race, health beliefs, process of care, and medication adherence[56](#_ENREF_56) | Cardiovascular disease | 793 | Antihypertensive medication adherence | Quality | No | 1 |
| Lower use of carotid artery imaging at minority-serving hospitals[57](#_ENREF_57) | Cardiovascular disease | 2162 | Receipt of carotid artery imaging 12 months prior and 2 months post-hospital admission for ischemic stroke | Quality | Mixed/ Unclear | 1 |
| Race differences in cardiac catheterization: the role of social contextual variables[58](#_ENREF_58) | Cardiovascular disease | 237 | Access to care | Quality | No | 2 |
| Racial disparities in prescriptions for cardioprotective drugs and cardiac outcomes in Veterans Affairs Hospitals[53](#_ENREF_53) | Cardiovascular disease | 474565 | Prescriptions for cardioprotective drugs (aspirin, beta-blocker, statin, angiotensin-converting enzyme inhibitor) | Quality | Mixed/ Unclear | 3 |
| Racial/ethnic differences in cardiovascular risk factors among women veterans[59](#_ENREF_59) | Cardiovascular disease risk factors | 3611 | Cardiovascular disease risk factors | Health Outcome | Yes | 1 |
| Racial/ethnic differences in cardiovascular risk factors among women veterans[59](#_ENREF_59) | Cardiovascular disease risk factors | 3611 | Cardiovascular disease risk factors | Quality | Yes | 1 |
| Longitudinal ethnic differences in multiple cardiovascular risk factor control in a cohort of US adults with diabetes[60](#_ENREF_60) | Cardiovascular disease, diabetes | 11203 | Cardiovascular risk factor control (glycemic, blood pressure, LDL-C) | Quality | Yes | 1 |
| Racial differences in mortality among veterans hospitalized for exacerbation of chronic obstructive pulmonary disease[61](#_ENREF_61) | Chronic obstructive pulmonary disease | 50979 | Mortality | Health Outcome | No | 2 |
| Adherence to long-acting inhaled therapies among patients with chronic obstructive pulmonary disease (COPD)[62](#_ENREF_62) | Chronic obstructive pulmonary disease | 376 | Medication adherence | Quality | Yes | 2 |
| Delayed Parkinson's disease diagnosis among African-Americans: the role of reporting of disability[63](#_ENREF_63) | Dementia, Parkinson's disease | 74 | Stage of Parkinson's disease at which patients presented for care | Quality | No | 0 |
| Dental care in an equal access system valuing equity: Are there racial disparities?[64](#_ENREF_64) | Dental | 71315 | Receipt of root canal versus extraction | Quality | Yes | 1 |
| Differential impact of longitudinal medication non-adherence on mortality by race/ethnicity among veterans with diabetes[65](#_ENREF_65) | Diabetes | 629563 | Medication non-adherence associated mortality | Health Outcome | No | 3 |
| Effect of race/ethnicity and persistent recognition of depression on mortality in elderly men with type 2 diabetes and depression[66](#_ENREF_66) | Diabetes | 14500 | Mortality | Health Outcome | No | 1 |
| Exercise Capacity and All-Cause Mortality in African American and Caucasian Men with Type 2 Diabetes[67](#_ENREF_67) | Diabetes | 3148 | All-cause mortality | Health Outcome | Yes | 1 |
| Geographic and racial/ethnic variations in patterns of multimorbidity burden in patients with type 2 diabetes[68](#_ENREF_68) | Diabetes | 892223 | Multimorbidity | Health Outcome | Yes | 3 |
| Impact of diabetes control on mortality by race in a national cohort of veterans[69](#_ENREF_69) | Diabetes | 892223 | Mortality | Health Outcome | Mixed/ Unclear | 4 |
| Racial disparities in all-cause mortality among veterans with type 2 diabetes[70](#_ENREF_70) | Diabetes | 8812 | Time to death | Health Outcome | No | 0 |
| The association between mental health functioning and nontraumatic lower extremity amputations in veterans with diabetes[71](#_ENREF_71) | Diabetes | 114890 | Major and minor non-traumatic lower extremity amputations | Health Outcome | Mixed/ Unclear | 3 |
| Trends in initial lower extremity amputation rates among Veterans Health Administration Health Care System users from 2000 to 2004[72](#_ENREF_72) | Diabetes | 405580 to 739377 | Lower extremity amputation | Health Outcome | No | 3 |
| Diabetes care among veteran women with disability[73](#_ENREF_73) | Diabetes | 2344 | Hemoglobin A1c and LDL-C screening and control | Quality | Mixed/ Unclear | 1 |
| Diabetes care in black and white veterans in the southeastern U.S.[74](#_ENREF_74) | Diabetes | 4080 | Hemoglobin A1c level, number of outpatient visits, number of random plasma glucose measurements, and number of hemoglobin A1c measurements | Quality | Mixed/ Unclear | 1 |
| Longitudinal differences in glycemic control by race/ethnicity among veterans with type 2 diabetes[75](#_ENREF_75) | Diabetes | 8813 | Mean change in hemoglobin A1c, odds of poor control of hemoglobin A1c (<80%) | Quality | Yes | 0 |
| Racial and ethnic differences in longitudinal blood pressure control in veterans with type 2 diabetes mellitus[76](#_ENREF_76) | Diabetes | 5319 | Proportion of patients with controlled blood pressure | Quality | Yes | 0 |
| Regional, geographic, and ethnic differences in medication adherence among adults with type 2 diabetes[77](#_ENREF_77) | Diabetes | 690968 | Medication adherence | Quality | Yes | 3 |
| Regional, geographic, and racial/ethnic variation in glycemic control in a national sample of veterans with diabetes[78](#_ENREF_78) | Diabetes | 690698 | Hemoglobin A1c level, poor control of hemoglobin A1c (<80%) | Quality | Yes | 3 |
| Using quantile regression to investigate racial disparities in medication non-adherence[79](#_ENREF_79) | Diabetes | 11272 | Medication adherence | Quality | Yes | 1 |
| Diabetes care in black and white veterans in the southeastern U.S.[74](#_ENREF_74) | Diabetes | 4080 | Hemoglobin A1c level, number of outpatient visits, number of random plasma glucose measurements, and number of hemoglobin A1c measurements | Utilization | No | 1 |
| Racial and ethnic disparities in the control of cardiovascular disease risk factors in Southwest American veterans with type 2 diabetes: the Diabetes Outcomes in Veterans Study[80](#_ENREF_80) | Diabetes, cardiovascular disease risk | 338 | Glycemic control, insulin treatment intensity, lipid levels, and blood pressure control | Quality | Mixed/ Unclear | 1 |
| Chronic illness with complexities: Mental illness and substance use among veteran clinic users with diabetes[81](#_ENREF_81) | Diabetes, co-occurring substance use and mental health disorders in patients with diabetes | 485893 | Mental health status, substance use disorder, combined mental health and substance use disorder, access to care, and diabetes-related health complications | Health Outcome | Mixed/ Unclear | 3 |
| Racial/ethnic differences in diabetes care for older Veterans: Accounting for dual health system use changes conclusions[82](#_ENREF_82) | Diabetes, geriatrics | 5931 | Hemoglobin A1c, LDL-C screenings, eye exam | Quality | Mixed/ Unclear | 1 |
| Assistive technology and veterans with severe disabilities: examining the relationships among race, personal factors, medical support, income support, and use[83](#_ENREF_83) | Disability | 16370 | Use of assistive technology by disabled veterans | Quality | Yes | 2 |
| Equity in Veterans Affairs disability claims adjudication in a national sample of veterans[84](#_ENREF_84) | Disability | 20048 | Disability benefits | Quality | Mixed/ Unclear | 2 |
| Lack of ethnic differences in end-of-life care in the Veterans Health Administration[85](#_ENREF_85) | End-of-life care (palliative care) | 217 | Receipt of palliative care measures (advanced directive discussions, treatment of pain if present, symptom directed plan, do-not-resuscitate orders) | Quality | No | 0 |
| New-onset geriatric epilepsy care: Race, setting of diagnosis, and choice of antiepileptic drug[86](#_ENREF_86) | Epilepsy | 9682 | Suboptimal antiepileptic drug prescribing | Quality | Yes | 1 |
| Myelosuppression monitoring after immunomodulator initiation in veterans with inflammatory bowel disease: a national practice audit[87](#_ENREF_87) | Gastroenterology (inflammatory bowel disease) | 6045 | White blood cell monitoring | Quality | No | 1 |
| Patterns of sex and racial/ethnic differences in patient health care experiences in US Veterans Affairs hospitals[88](#_ENREF_88) | General health | 50471 | Patient reports of positive and negative health care experiences at VHA facilities | Quality | Mixed/ Unclear | 2 |
| Assessing potentially inappropriate prescribing in the elderly Veterans Affairs population using the HEDIS 2006 quality measure[89](#_ENREF_89) | Geriatrics, prescribing | 1096361 | Potentially inappropriate prescribing based on HEDIS criteria | Quality | No | 3 |
| Benzodiazepine and sedative-hypnotic use among older seriously Ill veterans: choosing wisely?[90](#_ENREF_90) | Geriatrics, prescribing | 222 | Potentially inappropriate use of benzodiazepines or other sedative-hypnotics | Quality | No | 0 |
| Potentially inappropriate prescribing for the elderly: effects of geriatric care at the patient and health care system level[91](#_ENREF_91) | Geriatrics, prescribing | 714130 | Potentially inappropriate prescribing in the elderly | Quality | No | 3 |
| Sex differences in inappropriate prescribing among elderly veterans[92](#_ENREF_92) | Geriatrics, prescribing | 965756 | Zhan criteria for inappropriate prescribing for older adults | Quality | No | 3 |
| Trends in use of high-risk medications for older veterans: 2004 to 2006[93](#_ENREF_93) | Geriatrics, prescribing | 1567467 | Use of high risk medications for the elderly | Quality | Mixed/ Unclear | 3 |
| Guideline-concordant hepatitis C virus testing and notification among patients with and without mental disorders[94](#_ENREF_94) | HCV | 19397 | HCV positive | Health Outcome | Yes | 2 |
| Impact of race/ethnicity and gender on HCV screening and prevalence among US Veterans in Department of Veterans Affairs care[95](#_ENREF_95) | HCV | 5500392 | HCV screening rates, HCV prevalence | Health Outcome | Yes | 2 |
| Guideline-concordant hepatitis C virus testing and notification among patients with and without mental disorders[94](#_ENREF_94) | HCV | 19397 | Receipt of HCV testing, notified ≤60 days | Quality | Mixed/ Unclear | 2 |
| Impact of race/ethnicity and gender on HCV screening and prevalence among US Veterans in Department of Veterans Affairs care[95](#_ENREF_95) | HCV | 5500392 | HCV screening rates, HCV prevalence | Quality | Mixed/ Unclear | 2 |
| Hepatitis C antiviral treatment rates: Understanding racial disparities[96](#_ENREF_96) | HCV treatment | 118 | Decision to start antiviral treatment, likelihood of recommending imaging, patient satisfaction/concerns | Quality | Mixed/ Unclear | 1 |
| Racial differences in the progression to cirrhosis and hepatocellular carcinoma in HCV-infected veterans[97](#_ENREF_97) | HCV, cancer (liver) | 149407 | Risk of cirrhosis or hepatocellular cancer | Health Outcome | No | 3 |
| Racial difference in mortality among U.S. veterans with HCV/HIV coinfection[98](#_ENREF_98) | HCV, HIV | 743 | 3-year all-cause mortality | Health Outcome | No | 0 |
| Rates and predictors of hepatitis C virus treatment in HCV-HIV-coinfected subjects[99](#_ENREF_99) | HCV, HIV | 6502 | Prescribed treatment for HCV | Quality | Yes | 1 |
| Is there a race-based disparity in the survival of veterans with HIV?[100](#_ENREF_100) | HIV | 5945 | Overall survival, hospital mortality (death during hospitalization or within 30 days of discharge), long-term survival (proportion who survived >30 days post-discharge) | Health Outcome | No | 1 |
| Racial differences in end-stage renal disease rates in HIV infection versus diabetes[101](#_ENREF_101) | HIV | 2015891 | Progression to end-stage renal disease | Health Outcome | Yes | 3 |
| Advances in patient safety: racial disparities in Patient Safety Indicator (PSI) rates in the Veterans Health Administration[102](#_ENREF_102) | Inpatient care | 1032103 | Patient safety indicators (including postoperative hip fracture, hemorrhage or hematoma, physiologic and metabolic derangements, respiratory failure, pulmonary embolism or deep vein thrombosis, sepsis, wound dehiscence, etc.) | Quality | Mixed/ Unclear | 2 |
| Use of mechanical and noninvasive ventilation in black and white chronic obstructive pulmonary disease patients within the Veterans Administration health care system[103](#_ENREF_103) | Inpatient/acute care | 40498 | Use of mechanical ventilation and noninvasive ventilation | Quality | Mixed/ Unclear | 2 |
| Racial, income, and marital status disparities in hospital readmissions within a veterans-integrated health care network[104](#_ENREF_104) | Inpatient/acute care | 8718 | Number of hospital readmissions | Utilization | No | 1 |
| Racial and ethnic differences in the treatment of seriously ill patients: a comparison of African-American, Caucasian and Hispanic veterans[105](#_ENREF_105) | Inpatient/acute care, elderly | 166059 | Use of life-sustaining treatment (resuscitation, mechanical ventilation, intensive care unit, enteral nutrition, transfusion) | Quality | Mixed/ Unclear | 3 |
| Bringing the war back home: Mental health disorders among 103 788 US veterans returning from Iraq and Afghanistan seen at Department of Veterans Affairs Facilities[106](#_ENREF_106) | Mental health | 103788 | PTSD or other mental health diagnoses | Health Outcome | No | 3 |
| Ethnic disparities in the treatment of dementia in veterans[107](#_ENREF_107) | Mental health | 410 | Dementia management with acetylcholinesterase inhibitors | Health Outcome | No | 0 |
| Racial differences in psychiatric symptom patterns and service use in VA primary care clinics[108](#_ENREF_108) | Mental health | 713 | Rates of trauma, PTSD diagnosis, other psychiatric diagnoses, and use of VA services and benefits | Health Outcome | No | 1 |
| Racial disparities in trauma exposure, psychiatric symptoms, and service use among female patients in Veterans Affairs primary care clinics[109](#_ENREF_109) | Mental health | 183 | Rates of PTSD, mood disorder, anxiety, substance use, any mental health disorder | Health Outcome | No | 1 |
| Ethnic disparities in the treatment of dementia in veterans[107](#_ENREF_107) | Mental health | 410 | Dementia management with acetylcholinesterase inhibitors | Quality | Mixed/ Unclear | 0 |
| Medication adherence, ethnicity, and the influence of multiple psychosocial and financial barriers[110](#_ENREF_110) | Mental health | 435 | Medication adherence | Quality | Mixed/ Unclear | 0 |
| Treatment adherence and illness insight in veterans with bipolar disorder[111](#_ENREF_111) | Mental health | 435 | Medication adherence | Quality | Yes | 0 |
| Racial differences in psychiatric symptom patterns and service use in VA primary care clinics[108](#_ENREF_108) | Mental health | 713 | Rates of trauma, PTSD diagnosis, other psychiatric diagnoses, and use of VA services and benefits | Utilization | Mixed/ Unclear | 1 |
| Treatment adherence with lithium and anticonvulsant medications among patients with bipolar disorder[112](#_ENREF_112) | Mental health (bipolar) | 44637 | Medication adherence | Quality | Yes | 1 |
| Self-reported access to general medical and psychiatric care among veterans with bipolar disorder[113](#_ENREF_113) | Mental health (bipolar) | 435 | Patient perception of access to health and mental health | Utilization | No | 0 |
| Exploratory data mining analysis identifying subgroups of patients with depression who are at high risk for suicide[114](#_ENREF_114) | Mental health (depression) | 887869 | Suicide | Health Outcome | No | 2 |
| Suicide mortality among individuals receiving treatment for depression in the Veterans Affairs health system: Associations with patient and treatment setting characteristics[115](#_ENREF_115) | Mental health (depression) | 807694 | Suicide mortality | Health Outcome | No | 3 |
| Racial and ethnic differences in receipt of antidepressants and psychotherapy by veterans with chronic depression[116](#_ENREF_116) | Mental health (depression) | 62095 | Adequate depression care | Quality | Mixed/ Unclear | 2 |
| Who receives outpatient monitoring during high-risk depression treatment periods?[117](#_ENREF_117) | Mental health (depression) | 494673 | Number of outpatient visits following mental health hospitalization or outpatient initiation of antidepressant medication | Utilization | No | 3 |
| Guideline-consistent antidepressant treatment patterns among veterans with diabetes and major depressive disorder[118](#_ENREF_118) | Mental health (depression), diabetes | 3953 | Proportion who have guideline-consistent antidepressant treatment | Quality | Yes | 1 |
| Military sexual trauma and patient perceptions of Veteran Health Administration health care quality[119](#_ENREF_119) | Mental health (military sexual trauma) | 164632 | Patient satisfaction with VHA outpatient care | Quality | Yes | 3 |
| Ethnic differences in personality disorder patterns among women Veterans diagnosed with PTSD[120](#_ENREF_120) | Mental health (personality disorders) | 260 | Personality Disorder diagnosis | Health Outcome | Yes | 0 |
| Are there racial/ethnic disparities in VA PTSD treatment retention?[121](#_ENREF_121) | Mental health (PTSD) | 6788 | PTSD treatment retention | Quality | Mixed/ Unclear | 2 |
| Racial differences in veterans' satisfaction with examination of disability from posttraumatic stress disorder[122](#_ENREF_122) | Mental health (PTSD) | 384 | Patient evaluation of interview quality | Quality | Yes | 2 |
| Race and ethnicity as factors in mental health service use among veterans with PTSD[123](#_ENREF_123) | Mental health (PTSD) | 20284 | Mental health care receipt (medication prescription, counseling) | Utilization | No | 2 |
| Racial/ethnic disparities in monitoring metabolic parameters for patients with schizophrenia receiving antipsychotic medications[124](#_ENREF_124) | Mental health (schizophrenia) | 30258 | Monitoring of metabolic dysregulation | Quality | Yes | 1 |
| Longitudinal patterns of health system retention among veterans with schizophrenia or bipolar disorder[125](#_ENREF_125) | Mental health (serious mental illness) | 164150 | 5-year survival | Health Outcome | No | 3 |
| Reinstitutionalization following psychiatric discharge among VA patients with serious mental illness: a national longitudinal study[126](#_ENREF_126) | Mental health (serious mental illness) | 35527 | Time to reinstitutionalization/rehospitalization | Health Outcome | No | 1 |
| Longitudinal patterns of health system retention among veterans with schizophrenia or bipolar disorder[125](#_ENREF_125) | Mental health (serious mental illness) | 164150 | Retention in VHA care | Utilization | Yes | 3 |
| Substance use disorders in Iraq and Afghanistan veterans in VA healthcare, 2001-2010: Implications for screening, diagnosis and treatment[127](#_ENREF_127) | Mental health (substance use disorder) | 456502 | Presence or absence of substance use disorders (alcohol or drug use disorder) | Health Outcome | Mixed/ Unclear | 3 |
| Individual and program predictors of attrition from VA substance use treatment[128](#_ENREF_128) | Mental health (substance use disorder) | 8064 | Rates of attrition | Quality | No | 1 |
| Quality of care for substance use disorders in patients with serious mental illness[129](#_ENREF_129) | Mental health (substance use disorder) | 8083 | Identification of substance use disorders, initiation of treatment, engagement in treatment | Quality | No | 1 |
| Long-term morbidity and mortality among a sample of cocaine-dependent black and white veterans[130](#_ENREF_130) | Mental health (substance use disorder, cocaine dependence) | 294 | Mortality, utilization of medical, mental health, drug, and alcohol services | Health Outcome | No | 1 |
| Mental illness and substance use disorders among women veterans with diabetes[131](#_ENREF_131) | Mental health in women with diabetes | 14984 | Serious mental illness and/or substance use disorder diagnoses | Health Outcome | No | 2 |
| Prevalence of suicidality among Hispanic and African American veterans following surgery[132](#_ENREF_132) | Mental health, surgery (organ, bone or joint, cancers, vascular, and amputations) | 89995 | Diagnosis of suicidal behavior or ideation | Health Outcome | Yes | 2 |
| Racial disparities in trauma exposure, psychiatric symptoms, and service use among female patients in Veterans Affairs primary care clinics[109](#_ENREF_109) | Mental health, utilization | 183 | Service use (inpatient, ED, Women's clinic, primary care, mental health) | Utilization | No | 1 |
| Impact of rural residence on survival of male veterans affairs patients after age 65[133](#_ENREF_133) | Mortality in older adults | 372463 | Mortality | Health Outcome | No | 3 |
| Racial disparity in adherence to positive airway pressure among US veterans[134](#_ENREF_134) | Obstructive sleep apnea | 2172 | Continuous positive airway pressure compliance | Quality | Yes | 0 |
| Pain among veterans of Operations Enduring Freedom and Iraqi Freedom: Do women and men differ?[135](#_ENREF_135) | Pain | 153212 | Pain (reported any pain, reported moderate-severe pain, reported persistent pain) | Health Outcome | Yes | 3 |
| A national study of racial differences in pain screening rates in the VA health care system[136](#_ENREF_136) | Pain | 245504 | Pain screening | Quality | Yes | 3 |
| Presence and correlates of racial disparities in pain management[137](#_ENREF_137) | Pain | 261448 | Screening for pain | Quality | Yes | 3 |
| Clinical characteristics of veterans prescribed high doses of opioid medications for chronic non-cancer pain[138](#_ENREF_138) | Pain (arthritis and pain management) | 1478 | High-dose opioid use | Health Outcome | No | 0 |
| Racial differences in prescription of opioid analgesics for chronic noncancer pain in a national sample of veterans[139](#_ENREF_139) | Pain (arthritis and pain management) | 99903 | Receipt of any opioid prescription | Quality | Mixed/ Unclear | 2 |
| Racial disparities in the monitoring of patients on chronic opioid therapy[140](#_ENREF_140) | Pain (arthritis and pain management) | 1899 | Following recommended opioid monitoring and treatment practices | Quality | Yes | 0 |
| The effect of patient race on total joint replacement recommendations and utilization in the orthopedic setting[141](#_ENREF_141) | Pain (arthritis and pain management) | 457 | Receipt of/recommendation for total joint replacement | Quality | No | 2 |
| Persistent pain and comorbidity among Operation Enduring Freedom/Operation Iraqi Freedom/Operation New Dawn veterans[142](#_ENREF_142) | Pain (chronic) | 5242 | Persistent pain (either self-rated scale, pain diagnosis, pain clinic visit, or opioid prescription) | Health Outcome | Yes | 1 |
| Associations between race and ethnicity and treatment for chronic pain in the VA[143](#_ENREF_143) | Pain (chronic) | 255522 | Veterans Rand Health Survey-12, question on receipt of treatment for chronic pain in past year, question on effectiveness of chronic pain care | Quality | Yes | 3 |
| Associations between race and ethnicity and treatment for chronic pain in the VA[143](#_ENREF_143) | Pain (chronic) | 255522 | Veterans Rand Health Survey-12, question on receipt of treatment for chronic pain in past year, question on effectiveness of chronic pain care | Utilization | Mixed/ Unclear | 3 |
| Orthopedic communication about osteoarthritis treatment: Does patient race matter?[144](#_ENREF_144) | Pain (osteoarthritis) | 402 | Communication (Roter Interaction Analysis System, Informed Decision Making Model) | Quality | No | 2 |
| Race, ethnicity and length of hospital stay after knee or hip arthroplasty[145](#_ENREF_145) | Pain (osteoarthritis) | 18263 | Length of hospital stay | Utilization | No | 2 |
| Disparities of care for African-Americans and Caucasians with community-acquired pneumonia: a retrospective cohort study[146](#_ENREF_146) | Pneumonia | 40878 | Antibiotic prescribing, pneumonia processes of care, length of hospital stay | Health Outcome | No | 2 |
| Disparities of care for African-Americans and Caucasians with community-acquired pneumonia: a retrospective cohort study[146](#_ENREF_146) | Pneumonia | 40878 | Antibiotic prescribing, pneumonia processes of care, length of hospital stay | Quality | No | 2 |
| Disparities of care for African-Americans and Caucasians with community-acquired pneumonia: a retrospective cohort study[146](#_ENREF_146) | Pneumonia | 40878 | Antibiotic prescribing, pneumonia processes of care, length of hospital stay | Utilization | No | 2 |
| Is lower 30-day mortality posthospital admission among blacks unique to the Veterans Affairs health care system?[147](#_ENREF_147) | Pneumonia, congestive heart failure, gastrointestinal bleeding, hip fracture, stroke, or acute myocardial infarction | 369155 | 30-day mortality | Health Outcome | No | 3 |
| Is thirty-day hospital mortality really lower for black veterans compared with white veterans?[148](#_ENREF_148) | Pneumonia, congestive heart failure, gastrointestinal bleeding, hip fracture, stroke, or acute myocardial infarction | 406550 | 30-day mortality after hospitalization | Health Outcome | Mixed/ Unclear | 3 |
| Short- and long-term mortality after an acute illness for elderly whites and blacks[149](#_ENREF_149) | Pneumonia, congestive heart failure, gastrointestinal bleeding, hip fracture, stroke, or acute myocardial infarction | 155529 | 30-day to 2-year mortality | Health Outcome | Mixed/ Unclear | 3 |
| Despite improved quality of care in the Veterans Affairs health system, racial disparity persists for important clinical outcomes[150](#_ENREF_150) | Preventive and ambulatory care | 1126254 | Quality of care measures: diabetes (control of Hemoglobin A1c, control of LDL-C), cardiovascular disease (control of LDL-C), hypertension control | Quality | Mixed/ Unclear | 3 |
| Race and vitamin D status and monitoring in male veterans[151](#_ENREF_151) | Preventive and ambulatory care | 14148 | Follow-up testing for vitamin D | Quality | Yes | 2 |
| Racial/ethnic disparities in medication use among veterans with hypertension and dementia: a national cohort study[152](#_ENREF_152) | Preventive and ambulatory care | 56561 | Prevalence of each medication class and medication adherence | Quality | Yes | 2 |
| Understanding racial and ethnic differences in patient experiences with outpatient health care in Veterans Affairs Medical Centers[153](#_ENREF_153) | Preventive and ambulatory care | 211459 | Getting needed care, getting care quickly, how well doctors and nurses communicate, rating of personal doctor, nurse, specialist, overall healthcare rating, use of shared decision-making, pharmacy services | Quality | Mixed/ Unclear | 3 |
| VA facility determinants of racial-ethnic variations in quality of care[154](#_ENREF_154) | Preventive and ambulatory care | NR - likely large | Control of blood pressure, LDL-cholesterol, and diabetes, colorectal cancer screening, receipt of immunizations | Quality | Yes | 2 |
| Healthcare utilization following mild traumatic brain injury in female veterans[155](#_ENREF_155) | Preventive and ambulatory care | 12144 | Healthcare utilization, outpatient | Utilization | Mixed/ Unclear | 2 |
| Perceived access to general medical and psychiatric care among veterans with bipolar disorder[156](#_ENREF_156) | Preventive and ambulatory care | 435 | Obtaining necessary care | Utilization | Mixed/ Unclear | 0 |
| Race-ethnicity and gender differences in VA health care service utilization among US veterans of recent conflicts[157](#_ENREF_157) | Preventive and ambulatory care | 309050 | Healthcare utilization | Utilization | Mixed/ Unclear | 3 |
| The effects of race and other socioeconomic factors on health service use among American military veterans[158](#_ENREF_158) | Preventive and ambulatory care | 19270 | Health service use | Utilization | Mixed/ Unclear | 2 |
| Does sex influence immunization status for influenza and pneumonia in older veterans[159](#_ENREF_159) | Preventive care (immunization status) | 48424 | Receipt of influenza immunization in the prior influenza season and receipt of pneumonia immunization ever | Quality | Yes | 2 |
| Health-related quality of life among US veterans and civilians by race and ethnicity[160](#_ENREF_160) | Quality of life, health-related | 110000 | Physically unhealthy days, mentally unhealthy days, recent activity limitation days | Health Outcome | No | 3 |
| Overall graft loss versus death-censored graft loss: unmasking the magnitude of racial disparities in outcomes among US kidney transplant recipients[161](#_ENREF_161) | Renal | 4918 | Overall graft loss, death and death-censored graft loss | Health Outcome | Mixed/ Unclear | 1 |
| The MDRD equation underestimates the prevalence of CKD among blacks and overestimates the prevalence of CKD among whites compared to the CKD-EPI equation: a retrospective cohort study[162](#_ENREF_162) | Renal | 97451 | Mean estimated glomerular filtration rate at first serum creatinine | Health Outcome | No | 3 |
| Survival advantage in black versus white men with CKD: effect of estimated GFR and case mix[163](#_ENREF_163) | Renal (chronic kidney disease) | 570808 | 5-year mortality | Health Outcome | Mixed/ Unclear | 3 |
| White/black racial differences in risk of end-stage renal disease and death[164](#_ENREF_164) | Renal (end-stage renal disease) | 2015891 | Progression to end-stage renal disease, time to death, rates of change in estimated glomerular filtration rate | Health Outcome | Yes | 3 |
| Perceived discrimination predicts longer time to be accepted for kidney transplant[165](#_ENREF_165) | Renal (end-stage renal disease) | 127 | time to be accepted for kidney transplant | Quality | No | 1 |
| Competing risk factor analysis of end-stage renal disease and mortality in chronic kidney disease[166](#_ENREF_166) | Renal disease | 220 | End-stage renal disease, mortality | Health Outcome | Mixed/ Unclear | 1 |
| Risk of smoking and receipt of cessation services among veterans with mental disorders[167](#_ENREF_167) | Smoking cessation | 224193 | Physician advised quitting, physician recommended medication, physician discussed quitting methods | Quality | Yes | 3 |
| Racial disparities in patient safety indicator (PSI) rates in the Veterans Health Administration[168](#_ENREF_168) | Surgery (postoperative and surgical complications) | 1032103 | Death in low mortality Diagnosis-Related Groups | Health Outcome | Mixed/ Unclear | 3 |
| Ethnicity and race variations in receipt of surgery among Veterans with and without depression[169](#_ENREF_169) | Surgery, mental health (depression) | 309068 | Surgery | Quality | Mixed/ Unclear | 3 |
| Outcomes and predictors of incisional surgical site infection in stoma reversal[170](#_ENREF_170) | Surgery, surgical site infection | 128 | Surgical site infections | Health Outcome | No | 0 |
| Racial/ethnic disparities in mortality risk among US veterans with traumatic brain injury[171](#_ENREF_171) | TBI | 14690 | Mortality | Health Outcome | No | 2 |
| Racial/ethnic disparities in VA services utilization as a partial pathway to mortality differentials among veterans diagnosed with TBI[172](#_ENREF_172) | TBI | 14960 | Mortality | Health Outcome | No | 2 |
| Racial/ethnic disparities in VA services utilization as a partial pathway to mortality differentials among veterans diagnosed with TBI[172](#_ENREF_172) | TBI | 14960 | Number of rehabilitation, neurology, and TBI visits | Utilization | No | 2 |
| Racial and ethnic disparities in satisfaction with VA care[173](#_ENREF_173) | Utilization (satisfaction) | 1219 | Patient satisfaction (access) | Quality | No | 1 |
| The quality of care provided to patients with varices in the department of Veterans Affairs[174](#_ENREF_174) | Varices care | 550 | Rate of meeting specified quality indicators for variceal care | Quality | No | 1 |
| African American race was associated with an increased risk of complications following venous thromboembolism[175](#_ENREF_175) | Venous thromboembolism | 168 | Processes of care, the time to administration of heparin after the diagnosis, and whether heparin therapy was initiated empirically before the diagnosis was objectively confirmed | Health Outcome | Yes | 1 |
| African American race was associated with an increased risk of complications following venous thromboembolism[175](#_ENREF_175) | Venous thromboembolism | 168 | Mortality, recurrent venous thromboembolism, major bleeding | Quality | No | 1 |
| Contraceptive care in the VA health care system[176](#_ENREF_176) | Women’s health (contraceptive care) | 103950 | Receipt and type of contraception | Quality | Yes | 3 |
| Adherence to hormonal contraception among women veterans: differences by race/ethnicity and contraceptive supply[177](#_ENREF_177) | Women’s health (contraceptive care) | 6946 | Adherence to hormonal contraceptive medication | Health Outcome | No | 1 |
| Predictors of adherence to hormonal contraceptives in a female veteran population[178](#_ENREF_178) | Women’s health (contraceptive care) | 805 | Adherence to hormonal contraceptive medication | Health Outcome | No | 0 |
| Determinants of hormone therapy discontinuation among female veterans nationally[179](#_ENREF_179) | Women’s health (hormone therapy) | 36222 | Hormone therapy discontinuation | Quality | No | 2 |
| Hormone therapy use in women veterans accessing Veterans Health Administration care: a national cross-sectional study[180](#_ENREF_180) | Women’s health (hormone therapy) | 157195 | Prescription of hormone therapy | Quality | No | 3 |
| Posttraumatic stress disorder and risk of spontaneous preterm birth[181](#_ENREF_181) | Women’s health (preterm birth), mental health (PTSD) | 16334 | Spontaneous preterm birth | Health Outcome | Yes | 2 |
| Infertility care among OEF/OIF/OND women veterans in the Department of Veterans Affairs[182](#_ENREF_182) | Women’s health (reproductive health) | 1323 | Received an infertility assessment | Quality | Mixed/ Unclear | 0 |
| Depression treatment patterns among women veterans with cardiovascular conditions or diabetes[183](#_ENREF_183) | Women’s health (cardiovascular health or diabetes) | 7354 | Depression services (antidepressants, psychotherapy) | Utilization | Mixed/ Unclear | 0 |
| Women Veterans ambulatory care use project, phase II[184](#_ENREF_184) | Women's health | 2174 | Utilization of VHA mental health care | Utilization | Yes | 0 |

**Abbreviations:** ED = emergency department; HEDIS = Healthcare Effectiveness Data and Information Set; LDL-C = low-density lipoprotein cholesterol; PTSD = posttraumatic stress disorder; VHA = Veterans Health Administration.

**Supplemental Digital Content 14.** **Evidence Map:** **Health Disparities in VHA Patients by Race/Ethnicity – Hispanic/Latino**

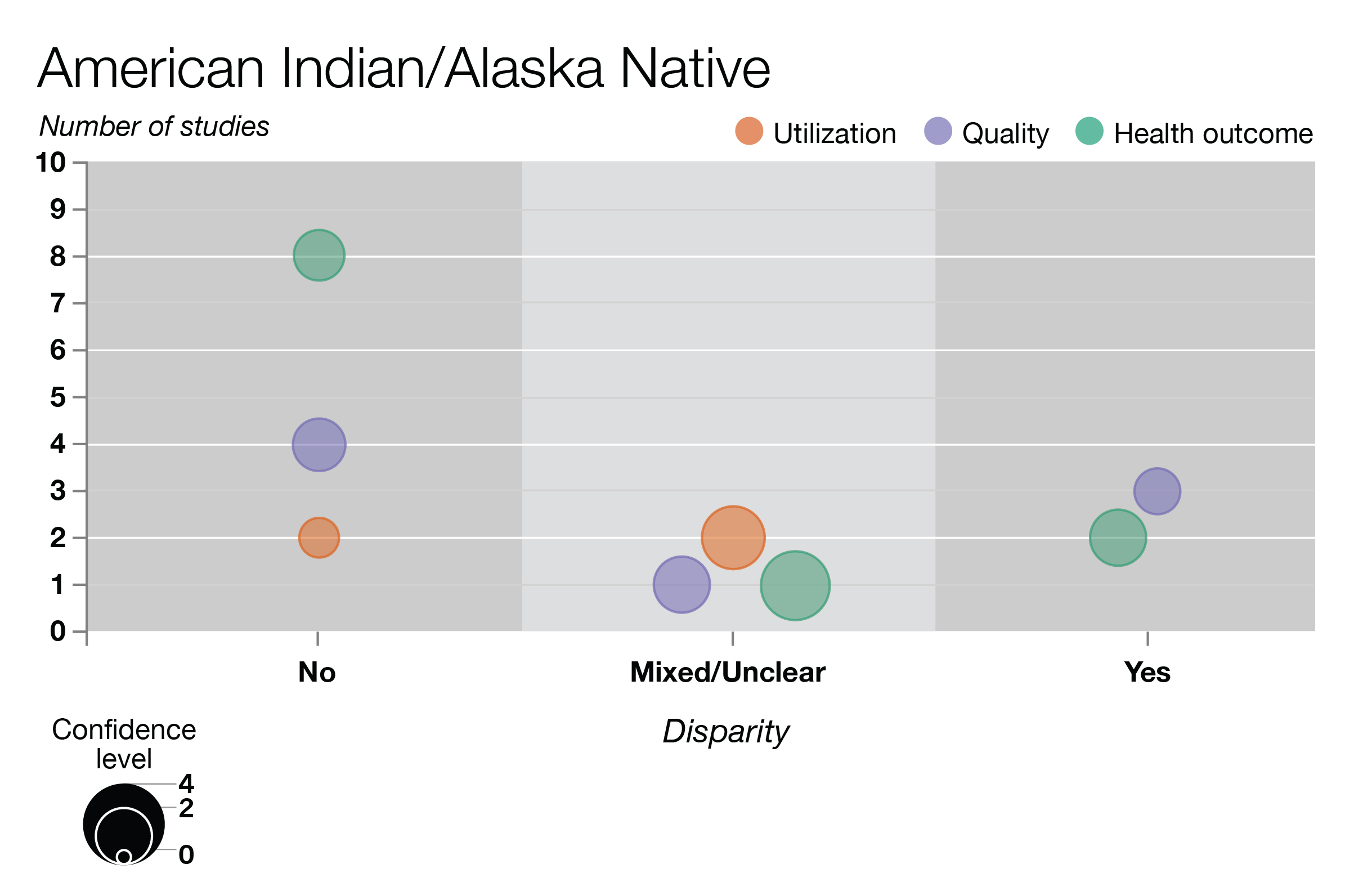


**Legend:** The bubble plot shows the number of studies identified (y-axis) that provided evidence of no disparity, mixed or unclear findings, or a disparity (x-axis) for each outcome category (utilization, quality, patient health outcomes). Bubble size represents the mean confidence score, with a range of -1 to 4.

**Supplemental Digital Content 15.** **Table: Health Disparities in VHA Patients by Race/Ethnicity – Hispanic/Latino**

| *Title* | *Clinical area* | *Total N* | *Outcomes* | *Category* | *Disparity* | *Confi-dence* |
| --- | --- | --- | --- | --- | --- | --- |
| Racial parity in tumor burden, treatment choice and survival outcomes in men with prostate cancer in the VA healthcare system[22](#_ENREF_22) | Cancer (prostate) | 1258 | Prostate cancer mortality | Health Outcomes | No | 1 |
| Racial parity in tumor burden, treatment choice and survival outcomes in men with prostate cancer in the VA healthcare system[22](#_ENREF_22) | Cancer (prostate) | 1258 | Prostate cancer mortality | Quality | Mixed/ Unclear | 1 |
| Racial/ethnic differences in cardiovascular risk factors among women veterans[59](#_ENREF_59) | Cardiovascular | 3611 | Cardiovascular disease risk factors | Health Outcomes | Mixed/ Unclear | 1 |
| Demographic determinants of response to statin medications[36](#_ENREF_36) | Cardiovascular (coronary artery disease) | 5191 | Achieving goal of LDL-C <100 | Quality | No | 0 |
| Decomposing gender differences in low-density lipoprotein cholesterol among veterans with or at risk for cardiovascular illness[42](#_ENREF_42) | Cardiovascular (lipid management) | 527568 | LDL-C greater than or equal to 130 | Quality | No | 3 |
| Racial and ethnic disparities in post-stroke depression detection[48](#_ENREF_48) | Cardiovascular (Stroke) | 5825 | Diagnosis of post-stroke depression | Health Outcomes | No | 1 |
| Longitudinal ethnic differences in multiple cardiovascular risk factor control in a cohort of US adults with diabetes[60](#_ENREF_60) | Cardiovascular disease, Diabetes | 11203 | CV risk factor control (glycemic, BP, LDL-C) | Quality | Yes | 1 |
| Racial and ethnic disparities in the control of cardiovascular disease risk factors in Southwest American veterans with type 2 diabetes: the Diabetes Outcomes in Veterans Study[80](#_ENREF_80) | Cardiovascular, Diabetes | 338 | Glycemic control, insulin treatment intensity, lipid levels, and blood pressure control. | Quality | Mixed/ Unclear | 1 |
| Racial and ethnic disparities in the control of cardiovascular disease risk factors in Southwest American veterans with type 2 diabetes: the Diabetes Outcomes in Veterans Study[80](#_ENREF_80) | Cardiovascular, Diabetes | 338 | Glycemic control, insulin treatment intensity, lipid levels, and blood pressure control. | Quality | Mixed/ Unclear | 1 |
| Ethnic disparities in the treatment of dementia in veterans[107](#_ENREF_107) | Dementia | 410 | Dementia management with acetylcholinesterase inhibitors (CHEIs) | Health Outcomes | No | 0 |
| Ethnic disparities in the treatment of dementia in veterans[107](#_ENREF_107) | Dementia | 410 | Dementia management with acetylcholinesterase inhibitors (CHEIs) | Quality | Mixed/ Unclear | 0 |
| Racial/ethnic disparities in medication use among veterans with hypertension and dementia: a national cohort study[152](#_ENREF_152) | Dementia, Cardiovascular (hypertension) | 56561 | Prevalence of each medication class and medication possession ratio (MPR)-medication adherence | Quality | Yes | 2 |
| Dental care in an equal access system valuing equity: are there racial disparities?[64](#_ENREF_64) | Dental | 71315 | Receipt of root canal vs. extraction | Quality | Mixed/ Unclear | 1 |
| Differential impact of longitudinal medication non-adherence on mortality by race/ethnicity among veterans with diabetes[65](#_ENREF_65) | Diabetes | 629563 | Medication non-adherence associated mortality | Health Outcomes | Yes | 3 |
| Geographic and racial/ethnic variations in patterns of multimorbidity burden in patients with type 2 diabetes[68](#_ENREF_68) | Diabetes | 892223 | Multimorbidity | Health Outcomes | No | 3 |
| Impact of diabetes control on mortality by race in a national cohort of veterans[69](#_ENREF_69) | Diabetes | 892223 | Mortality | Health Outcomes | Mixed/ Unclear | 4 |
| Trends in initial lower extremity amputation rates among Veterans Health Administration health care System users from 2000 to 2004[72](#_ENREF_72) | Diabetes | 405,580 - 739,377 | Lower extremity amputation | Health Outcomes | No | 3 |
| Diabetes care among veteran women with disability[73](#_ENREF_73) | Diabetes | 2344 | Hemoglobin A1c and LDL-C screening and control | Quality | Mixed/ Unclear | 1 |
| Racial and ethnic differences in longitudinal blood pressure control in veterans with type 2 diabetes mellitus[76](#_ENREF_76) | Diabetes | 5319 | Proportion of patients with controlled BP | Quality | Yes | 0 |
| Racial/ethnic and educational-level differences in diabetes care experiences in primary care[185](#_ENREF_185) | Diabetes | 189 | Patient perceptions of alignment with chronic care model (Patient Assessment of Chronic Illness Care) | Quality | No | 1 |
| Regional, geographic, and ethnic differences in medication adherence among adults with type 2 diabetes[77](#_ENREF_77) | Diabetes | 690968 | Medication adherence (MPR-med possession ratio) | Quality | Yes | 3 |
| Regional, geographic, and racial/ethnic variation in glycemic control in a national sample of veterans with diabetes[78](#_ENREF_78) | Diabetes | 690698 | Hemoglobin A1c level, poor control of hemoglobin A1c (<80%) | Quality | Yes | 3 |
| Chronic illness with complexities: Mental illness and substance use among veteran clinic users with diabetes[81](#_ENREF_81) | Diabetes, co-occurring substance use and mental health disorders in patients with diabetes | 485893 | Mental health status, substance use disorder, combined mental health and substance use disorder, access to care, and diabetes-related health complications | Health Outcomes | Mixed/ Unclear | 3 |
| Racial/ethnic differences in diabetes care for older Veterans: accounting for dual health system use changes conclusions[82](#_ENREF_82) | Diabetes, geriatrics | 5931 | Hemoglobin A1c, LDL-C screenings, eye exam | Quality | Mixed/ Unclear | 1 |
| Lack of ethnic differences in end-of-life care in the Veterans Health Administration[85](#_ENREF_85) | End-of-life care (palliative care) | 217 | Receipt of palliative care measures (advanced directive discussions, treatment of pain if present, symptom directed plan, DNR orders) | Quality | No | 0 |
| New-onset geriatric epilepsy care: race, setting of diagnosis, and choice of antiepileptic drug[86](#_ENREF_86) | Epilepsy | 9682 | Suboptimal antiepileptic drug (AED) prescribing | Quality | No | 1 |
| Patterns of sex and racial/ethnic differences in patient health care experiences in US Veterans Affairs hospitals[88](#_ENREF_88) | General health | 50471 | Patient reports of positive and negative health care experiences at VA facilities | Quality | Mixed/ Unclear | 2 |
| Assessing potentially inappropriate prescribing in the elderly Veterans Affairs population using the HEDIS 2006 quality measure[89](#_ENREF_89) | Geriatrics, Prescribing | 1096361 | Potentially inappropriate prescribing based on HEDIS criteria. | Quality | Yes | 3 |
| Benzodiazepine and sedative-hypnotic use among older seriously Ill veterans: choosing wisely?[90](#_ENREF_90) | Geriatrics, Prescribing | 222 | Potentially inappropriate use of benzodiazepines or other sedative-hypnotics (BSHs) | Quality | Yes | 0 |
| Sex differences in inappropriate prescribing among elderly veterans[92](#_ENREF_92) | Geriatrics, Prescribing | 965756 | Zhan criteria for inappropriate prescribing for older adults. | Quality | Yes | 3 |
| Trends in use of high-risk medications for older veterans: 2004 to 2006[93](#_ENREF_93) | Geriatrics, Prescribing | 1567467 | Use of high risk medications for the elderly (HRME) | Quality | Yes | 3 |
| Impact of race/ethnicity and gender on HCV screening and prevalence among US Veterans in Department of Veterans Affairs care[95](#_ENREF_95) | HCV | 3907136 | HCV Screening rates, HCV prevalence | Health Outcomes | Yes | 2 |
| Impact of race/ethnicity and gender on HCV screening and prevalence among US Veterans in Department of Veterans Affairs care[95](#_ENREF_95) | HCV | 3907136 | HCV Screening rates, HCV prevalence | Quality | No | 2 |
| Racial differences in the progression to cirrhosis and hepatocellular carcinoma in HCV-infected veterans[97](#_ENREF_97) | HCV, cancer (liver) | 149407 | Risk of cirrhosis or hepatocellular cancer | Health Outcomes | Yes | 3 |
| Rates and predictors of hepatitis C virus treatment in HCV-HIV-coinfected subjects[99](#_ENREF_99) | HCV, HIV | 6502 | Prescribed treatment for HCV | Quality | Yes | 1 |
| Advances in patient safety: racial disparities in Patient Safety Indicator (PSI) rates in the Veterans Health Administration[102](#_ENREF_102) | Inpatient care | 1032103 | Patient safety indicators, including postoperative hip fracture, postoperative hemorrhage or hematoma, postoperative physiologic and metabolic derangements, postoperative respiratory failure, postoperative pulmonary embolism or deep vein thrombosis, postoperative sepsis, postoperative wound dehiscence, complications of anesthesia, death in low-mortality Diagnosis-Related Groups, decubitus ulcer, failure to rescue, foreign body left during procedure, iatrogenic pneumothorax, selected infections due to medical care, accidental puncture or laceration, and transfusion reaction | Quality | Mixed/ Unclear | 2 |
| Racial and ethnic differences in the treatment of seriously ill patients: a comparison of African-American, Caucasian and Hispanic veterans[105](#_ENREF_105) | Inpatient/acute care, elderly | 166059 | Use of life-sustaining treatment (Resuscitation, Mechanical Ventilation, Intensive Care Unit, Enteral Nutrition, Transfusion) | Quality | Mixed/ Unclear | 3 |
| Treatment adherence with lithium and anticonvulsant medications among patients with bipolar disorder[112](#_ENREF_112) | Mental health (Bipolar) | 44637 | Adherence | Quality | Yes | 1 |
| Suicide mortality among individuals receiving treatment for depression in the Veterans Affairs health system: Associations with patient and treatment setting characteristics[115](#_ENREF_115) | Mental health (Depression) | 807694 | Suicide mortality | Health Outcomes | No | 3 |
| Racial and ethnic differences in receipt of antidepressants and psychotherapy by veterans with chronic depression[116](#_ENREF_116) | Mental health (Depression) | 62095 | Adequate depression care | Quality | Mixed/ Unclear | 2 |
| Who receives outpatient monitoring during high-risk depression treatment periods?[117](#_ENREF_117) | Mental health (Depression) | 494673 | Number of outpatient visits following mental health hospitalization or outpatient initiation of antidepressant medication | Utilization | No | 3 |
| Guideline-consistent antidepressant treatment patterns among veterans with diabetes and major depressive disorder[118](#_ENREF_118) | Mental health (Depression), diabetes | 3953 | Proportion who have guideline-consistent antidepressant treatment | Quality | No | 1 |
| Ethnic differences in personality disorder patterns among women Veterans diagnosed with PTSD[120](#_ENREF_120) | Mental health (Personality Disorders) | 260 | Personality Disorder diagnosis | Health Outcomes | No | 0 |
| Are there racial/ethnic disparities in VA PTSD treatment retention?[121](#_ENREF_121) | Mental health (PTSD) | 6788 | PTSD treatment retention | Quality | Mixed/ Unclear | 2 |
| Race and ethnicity as factors in mental health service use among veterans with PTSD[123](#_ENREF_123) | Mental health (PTSD) | 20284 | Mental health care receipt (psychotropic prescription, AD prescription, counseling) | Utilization | No | 2 |
| Prevalence of suicidality among Hispanic and African American veterans following surgery[132](#_ENREF_132) | Mental health (SBI), surgery (organ, bone or joint, cancers, vascular, and amputations) | 89995 | Diagnosis of suicidal behavior or ideation | Health Outcomes | No | 2 |
| Military sexual trauma and patient perceptions of Veteran Health Administration health care quality[119](#_ENREF_119) | Mental health (sexual trauma) | 164632 | Patient satisfaction with VHA outpatient care | Quality | Yes | 3 |
| Longitudinal patterns of health system retention among veterans with schizophrenia or bipolar disorder[125](#_ENREF_125) | Mental health (serious mental illness) | 164150 | 5-year survival | Health Outcomes | No | 3 |
| Reinstitutionalization following psychiatric discharge among VA patients with serious mental illness: a national longitudinal study[126](#_ENREF_126) | Mental health (serious mental illness) | 35527 | Time to reinstitutionalization/rehospitalization | Health Outcomes | No | 1 |
| Racial/ethnic disparities in monitoring metabolic parameters for patients with schizophrenia receiving antipsychotic medications[124](#_ENREF_124) | Mental health (serious mental illness) | 30258 | Monitoring of metabolic dysregulation | Quality | Mixed/ Unclear | 1 |
| Longitudinal patterns of health system retention among veterans with schizophrenia or bipolar disorder[125](#_ENREF_125) | Mental health (serious mental illness) | 164150 | Retention in VA care | Utilization | No | 3 |
| Substance use disorders in Iraq and Afghanistan veterans in VA healthcare, 2001-2010: Implications for screening, diagnosis and treatment[127](#_ENREF_127) | Mental health (substance use disorder) | 456502 | Presence or absence of substance use disorders (alcohol or drug use disorder) | Health Outcomes | No | 3 |
| Mental illness and substance use disorders among women veterans with diabetes[131](#_ENREF_131) | Mental health (Substance Use Disorder), diabetes | 14984 | Serious mental illness and/or substance use disorder diagnoses | Health Outcomes | No | 2 |
| Impact of rural residence on survival of male veterans affairs patients after age 65[133](#_ENREF_133) | Mortality (65+) | 372463 | Mortality | Health Outcomes | No | 3 |
| Pain among veterans of Operations Enduring Freedom and Iraqi Freedom: Do women and men differ?[135](#_ENREF_135) | Pain | 153212 | Pain: reported any pain, reported moderate-severe pain, reported persistent pain | Health Outcomes | No | 3 |
| Persistent pain and comorbidity among Operation Enduring Freedom/Operation Iraqi Freedom/Operation New Dawn veterans[142](#_ENREF_142) | Pain (chronic) | 5242 | Persistent pain (either self-rated scale, ICD-9 pain diagnosis, pain clinic visit, or opioid Rx) | Health Outcomes | No | 1 |
| Associations between race and ethnicity and treatment for chronic pain in the VA[143](#_ENREF_143) | Pain (chronic) | 9121 women 246,401 men | Question on receipt of treatment for chronic pain in past year, question on effectiveness of chronic pain care. | Utilization | Mixed/ Unclear | 3 |
| Race, ethnicity and length of hospital stay after knee or hip arthroplasty[145](#_ENREF_145) | Pain (chronic) | Arthroplasty, Knee: 11,739 Hip: 6,524 Total- 18,263 | Length of hospital stay | Utilization | No | 2 |
| Understanding racial and ethnic differences in patient experiences with outpatient health care in Veterans Affairs Medical Centers[153](#_ENREF_153) | Preventive and ambulatory care | 211459 | Getting needed care, getting care quickly, how well doctors and nurses communicate, rating of personal doctor, nurse, specialist, overall healthcare rating, use of shared decision-making, pharmacy services | Quality | Mixed/ Unclear | 3 |
| VA facility determinants of racial-ethnic variations in quality of care[154](#_ENREF_154) | Preventive and ambulatory care | NR - likely large | Colorectal cancer screening, receipt of immunizations, Control of blood pressure, LDL-cholesterol, and diabetes | Quality | Yes | 5 |
| Health-related quality of life among US veterans and civilians by race and ethnicity[160](#_ENREF_160) | Quality of life, health-related | 110000 | Physically unhealthy days, mentally unhealthy days, recent activity limitation days | Health Outcomes | No | 3 |
| Risk of smoking and receipt of cessation services among veterans with mental disorders[167](#_ENREF_167) | Smoking cessation | 224193 | Physician advised quitting, physician recommended medication, physician discussed quitting methods | Quality | Yes | 3 |
| Ethnicity and race variations in receipt of surgery among Veterans with and without depression[169](#_ENREF_169) | Surgery | 309068 | Surgery | Quality | Mixed/ Unclear | 3 |
| Racial disparities in patient safety indicator (PSI) rates in the Veterans Health Administration[168](#_ENREF_168) | Surgery (postoperative and surgical complications) | 1032103 | Death in low mortality Diagnosis-Related Groups | Health Outcomes | No | 3 |
| Racial/ethnic disparities in mortality risk among US veterans with traumatic brain injury[171](#_ENREF_171) | TBI | 14690 | Mortality | Health Outcomes | Yes | 2 |
| Racial/ethnic disparities in VA services utilization as a partial pathway to mortality differentials among veterans diagnosed with TBI[172](#_ENREF_172) | TBI | 14960 | Mortality | Health Outcomes | No | 2 |
| Racial/ethnic disparities in VA services utilization as a partial pathway to mortality differentials among veterans diagnosed with TBI[172](#_ENREF_172) | TBI | 14960 | Total visits | Utilization | Mixed/ Unclear | 2 |
| Race-ethnicity and gender differences in VA health care service utilization among US veterans of recent conflicts[157](#_ENREF_157) | Utilization | 309050 | Healthcare utilization | Utilization | Mixed/ Unclear | 3 |
| Racial and ethnic disparities in satisfaction with VA care[173](#_ENREF_173) | Utilization (satisfaction) | 1219 | Patient satisfaction (access, cost, pharmacy) | Quality | Mixed/ Unclear | 1 |
| Contraceptive care in the VA health care system[176](#_ENREF_176) | Women’s health (contraceptive care) | 103950 | Receipt and type of contraception | Quality | Mixed/ Unclear | 3 |
| Adherence to hormonal contraception among women veterans: differences by race/ethnicity and contraceptive supply[177](#_ENREF_177) | Women’s health (hormonal contraceptives) | 6946 | Adherence to hormonal contraceptive medication (time between refills, total months of contraceptive coverage, whether the woman had contraceptive coverage during the last week of FY 2008) | Health Outcomes | Yes | 1 |
| Determinants of hormone therapy discontinuation among female veterans nationally[179](#_ENREF_179) | Women’s health (hormone therapy) | 36222 | Hormone therapy discontinuation | Quality | No | 2 |
| Hormone therapy use in women veterans accessing Veterans Health Administration care: a national cross-sectional study[180](#_ENREF_180) | Women’s health (hormone therapy) | 157195 | Rx of HT (hormone therapy) | Quality | No | 3 |
| Infertility care among OEF/OIF/OND women veterans in the Department of Veterans Affairs[182](#_ENREF_182) | Women’s health (Reproductive health) | 1323 | Received an infertility assessment | Quality | No | 0 |
| Women Veterans ambulatory care use project, phase II[184](#_ENREF_184) | Women's health | 2174 | Utilization of VA mental health care | Utilization | Yes | 0 |

**Supplemental Digital Content 16. Evidence Map: Health Disparities in VHA Patients by Race/Ethnicity – American Indian/Alaska Native**

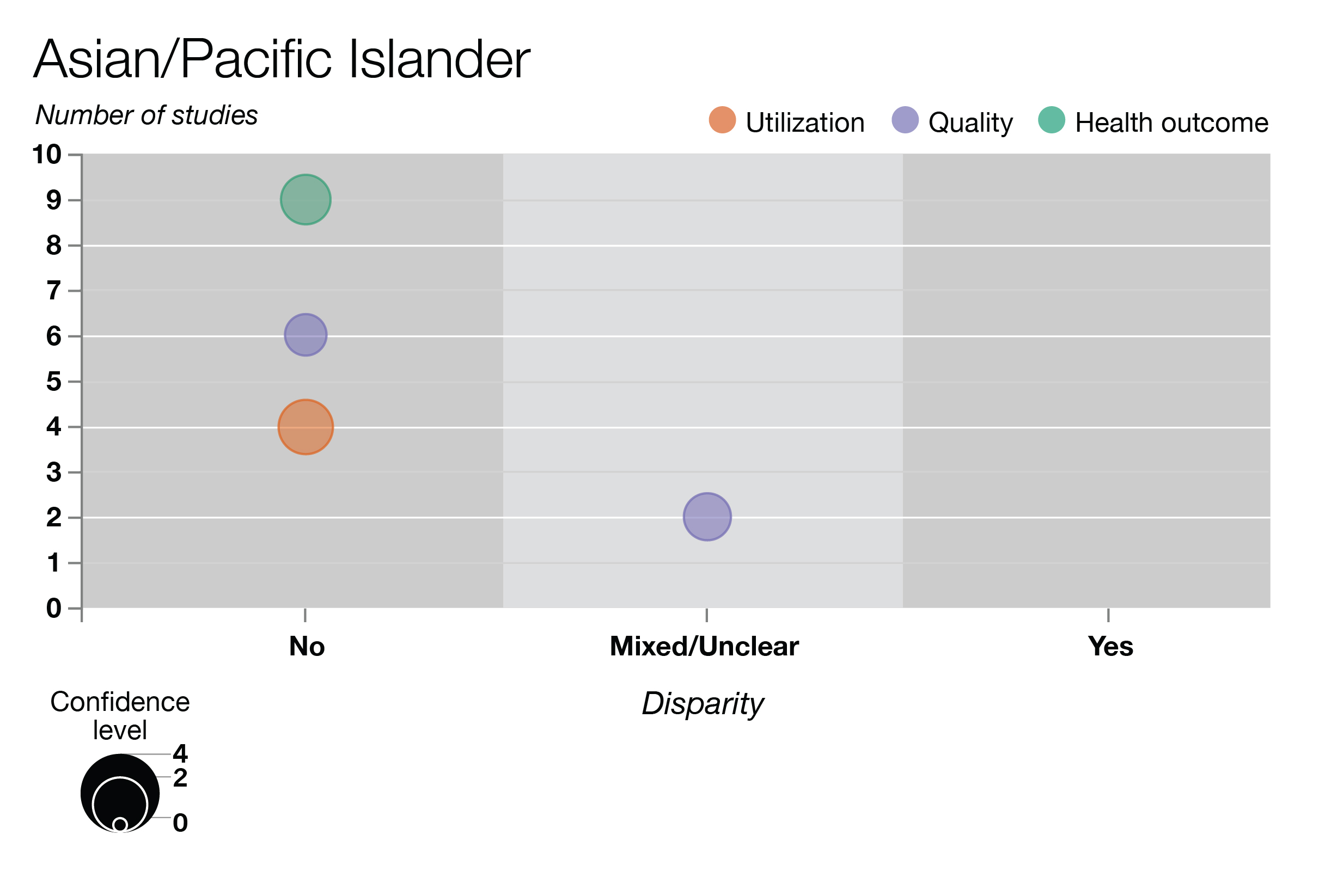


**Legend:** The bubble plot shows the number of studies identified (y-axis) that provided evidence of no disparity, mixed or unclear findings, or a disparity (x-axis) for each outcome category (utilization, quality, patient health outcomes). Bubble size represents the mean confidence score, with a range of -1 to 4.

**Supplemental Digital Content 17. Table: Health Disparities in VHA Patients by Race/Ethnicity – American Indian/Alaska Native**

| *Title* | *Clinical area* | *Total N* | *Outcomes* | *Category* | *Disparity* | *Confi-dence* |
| --- | --- | --- | --- | --- | --- | --- |
| Association between race and survival of patients with non-small-cell lung cancer in the United States Veteran Affairs population[1](#_ENREF_1) | Cancer (non-small cell lung carcinoma) | 82414 | Mortality | Health Outcome | No | 1 |
| Demographic determinants of response to statin medications[36](#_ENREF_36) | Cardiovascular (coronary artery disease) | 5191 | Achieving goal of LDL-C <100 | Quality | Yes | 0 |
| Race and income association with health service utilization for veterans with heart failure[40](#_ENREF_40) | Cardiovascular (heart failure) | 149 | Heart failure related outcomes (30-day, 90-day, 1-year and total readmissions, ED visits and total bed days of care) | Utilization | No | 0 |
| Healthcare disparities for American Indian veterans in the United States: a population-based study[186](#_ENREF_186) | General health | 34504 | Delaying care, restricted access to care due to financial concerns | Quality | Yes | 2 |
| Rural native veterans in the Veterans Health Administration: characteristics and service utilization patterns[187](#_ENREF_187) | General health | 287675 | Number of diagnoses, service connection disability | Quality | Yes | 2 |
| Impact of race/ethnicity and gender on HCV screening and prevalence among US Veterans in Department of Veterans Affairs care[95](#_ENREF_95) | HCV |  | HCV infection prevalence | Health Outcome | Yes | 2 |
| Impact of race/ethnicity and gender on HCV screening and prevalence among US Veterans in Department of Veterans Affairs care[95](#_ENREF_95) | HCV |  | Proportion screened for HCV | Quality | No | 2 |
| Advances in patient safety: racial disparities in Patient Safety Indicator (PSI) rates in the Veterans Health Administration[102](#_ENREF_102) | Inpatient care | 1032103 | Patient safety indicators, including postoperative hip fracture, postoperative hemorrhage or hematoma, postoperative physiologic and metabolic derangements, postoperative respiratory failure, postoperative pulmonary embolism or deep vein thrombosis, postoperative sepsis, postoperative wound dehiscence, complications of anesthesia, death in low-mortality Diagnosis-Related Groups, decubitus ulcer, failure to rescue, foreign body left during procedure, iatrogenic pneumothorax, selected infections due to medical care, accidental puncture or laceration, and transfusion reaction | Quality | No | 2 |
| Treatment adherence with lithium and anticonvulsant medications among patients with bipolar disorder[112](#_ENREF_112) | Mental health (Bipolar) | 44,637 | Adherence | Quality | No | 1 |
| Racial and ethnic differences in receipt of antidepressants and psychotherapy by veterans with chronic depression[116](#_ENREF_116) | Mental health (Depression) | 62095 | Adequate depression care | Quality | Mixed/ Unclear | 2 |
| Are there racial/ethnic disparities in VA PTSD treatment retention?[121](#_ENREF_121) | Mental health (PTSD) | 6788 | PTSD treatment retention | Quality | No | 2 |
| Race and ethnicity as factors in mental health service use among veterans with PTSD[123](#_ENREF_123) | Mental health (PTSD) | 20284 | Mental health care receipt (psychotropic prescription, AD prescription, counseling) | Utilization | Mixed/ Unclear | 2 |
| Posttraumatic stress disorder and risk of spontaneous preterm birth[181](#_ENREF_181) | Mental health (PTSD), Childbirth | 16334 | Spontaneous preterm birth | Health Outcome | Yes | 2 |
| Longitudinal patterns of health system retention among veterans with schizophrenia or bipolar disorder[125](#_ENREF_125) | Mental health (serious mental illness) | 164150 | 5-year survival | Health Outcome | No | 2 |
| Reinstitutionalization following psychiatric discharge among VA patients with serious mental illness: a national longitudinal study[126](#_ENREF_126) | Mental health (serious mental illness) | 35,527 | Time to reinstitutionalization/rehospitalization | Health Outcome | No | 1 |
| Impact of rural residence on survival of male veterans affairs patients after age 65[133](#_ENREF_133) | Mortality (65+) | 372463 | Mortality | Health Outcome | No | 3 |
| Health-related quality of life among US veterans and civilians by race and ethnicity[160](#_ENREF_160) | Quality of life, health-related | 110,000 | Physically unhealthy days, mentally unhealthy days, recent activity limitation days | Health Outcome | Mixed/ Unclear | 3 |
| Racial disparities in patient safety indicator (PSI) rates in the Veterans Health Administration[168](#_ENREF_168) | Surgery (postoperative and surgical complications) | 1032103 | Death in low mortality Diagnosis-Related Groups | Health Outcome | No | 3 |
| Surgical outcomes in American Indian veterans: a closer look[188](#_ENREF_188) | Surgery/Postoperative complications | 4419 | Post-operative complications, mortality | Health Outcome | No | 1 |
| Rural native veterans in the Veterans Health Administration: characteristics and service utilization patterns[187](#_ENREF_187) | Utilization | 287675 | Number of diagnoses, service connection disability | Health Outcome | No | 2 |
| Race-ethnicity and gender differences in VA health care service utilization among US veterans of recent conflicts[157](#_ENREF_157) | Utilization | 309050 | Healthcare utilization | Utilization | Mixed/ Unclear | 3 |
| The effects of race and other socioeconomic factors on health service use among American military veterans[158](#_ENREF_158) | Utilization | 19270 | Health service use | Utilization | No | 2 |
| Predictors of adherence to hormonal contraceptives in a female veteran population[178](#_ENREF_178) | Women’s health (hormonal contraceptives) | 805 | Adherence to hormonal contraceptive medication (medication possession ratio >.9) | Health Outcome | No | 0 |

**Supplemental Digital Content 18. Evidence Map: Health Disparities in VHA Patients by Race/Ethnicity – Asian/Pacific Islander**

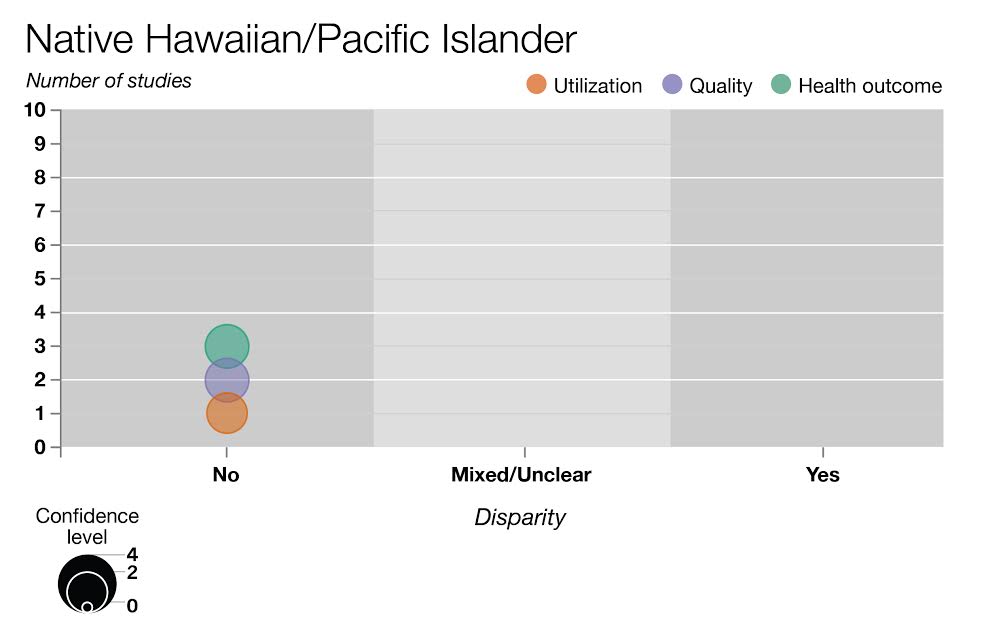


**Legend:** The bubble plot shows the number of studies identified (y-axis) that provided evidence of no disparity, mixed or unclear findings, or a disparity (x-axis) for each outcome category (utilization, quality, patient health outcomes). Bubble size represents the mean confidence score, with a range of -1 to 4.

**Supplemental Digital Content 19. Table: Health Disparities in VHA Patients by Race/Ethnicity – Asian/Pacific Islander**

| *Title* | *Clinical area* | *Total N* | *Outcomes* | *Category* | *Disparity* | *Confi-dence* |
| --- | --- | --- | --- | --- | --- | --- |
| Association between race and survival of patients with non-small-cell lung cancer in the United States Veteran Affairs population[1](#_ENREF_1) | Cancer | 82414 | Mortality | Health Outcome | No | 1 |
| [Demographic determinants of response to statin medications](http://sci-hub.bz/10.2146/ajhp100271) [36](#_ENREF_36) | Cardiovascular (coronary artery disease) | 5191 | Achieving goal of LDL-C <100 | Quality | No | 0 |
| Dental care in an equal access system valuing equity: Are there racial disparities?[64](#_ENREF_64) | Dental | 71315 | Receipt of root canal vs. extraction | Quality | No | 1 |
| Impact of race/ethnicity and gender on HCV screening and prevalence among US Veterans in Department of Veterans Affairs care[95](#_ENREF_95) | HCV | 3638179 | HCV Screening rates, HCV prevalence | Health Outcome | No | 2 |
| Impact of race/ethnicity and gender on HCV screening and prevalence among US Veterans in Department of Veterans Affairs care[95](#_ENREF_95) | HCV | 3638179 | HCV Screening rates, HCV prevalence | Quality | No | 2 |
| Advances in patient safety: racial disparities in Patient Safety Indicator (PSI) rates in the Veterans Health Administration[102](#_ENREF_102) | Inpatient care | 1,032,103 | Patient safety indicators, including postoperative hip fracture, postoperative hemorrhage or hematoma, postoperative physiologic and metabolic derangements, postoperative respiratory failure, postoperative pulmonary embolism or deep vein thrombosis, postoperative sepsis, postoperative wound dehiscence, complications of anesthesia, death in low-mortality Diagnosis-Related Groups, decubitus ulcer, failure to rescue, foreign body left during procedure, iatrogenic pneumothorax, selected infections due to medical care, accidental puncture or laceration, and transfusion reaction | Quality | No | 2 |
| Treatment adherence with lithium and anticonvulsant medications among patients with bipolar disorder[112](#_ENREF_112) | Mental health (Bipolar) | 44637 | Adherence | Quality | Mixed/ Unclear | 1 |
| Racial and ethnic differences in receipt of antidepressants and psychotherapy by veterans with chronic depression[116](#_ENREF_116) | Mental health (depression) | 62095 | Adequate depression care | Quality | Mixed/ Unclear | 2 |
| Asian American and Pacific Islander military veterans in the United States: health service use and perceived barriers to mental health services[189](#_ENREF_189) | Mental health (perceived barriers) | 8315 | Health service use | Health Outcome | No | 1 |
| Asian American and Pacific Islander military veterans in the United States: health service use and perceived barriers to mental health services[189](#_ENREF_189) | Mental health (perceived barriers) | 8315 | Health service use | Quality | No | 0 |
| Asian American and Pacific Islander military veterans in the United States: health service use and perceived barriers to mental health services[189](#_ENREF_189) | Mental health (perceived barriers) | 8315 | Health service use | Utilization | No | 1 |
| Are there racial/ethnic disparities in VA PTSD treatment retention?[121](#_ENREF_121) | Mental health (PTSD) | 6788 | PTSD treatment retention | Quality | No | 2 |
| Race and ethnicity as factors in mental health service use among veterans with PTSD[123](#_ENREF_123) | Mental health (PTSD) | 20284 | Mental health care receipt (psychotropic prescription, AD prescription, counseling) | Utilization | No | 2 |
| Longitudinal patterns of health system retention among veterans with schizophrenia or bipolar disorder[125](#_ENREF_125) | Mental health (serious mental illness) | 164150 | 5-year survival | Health Outcome | No | 2 |
| Reinstitutionalization following psychiatric discharge among VA patients with serious mental illness: a national longitudinal study[126](#_ENREF_126) | Mental health (serious mental illness) | 35527 | Time to reinstitutionalization/rehospitalization | Health Outcome | No | 1 |
| Impact of rural residence on survival of male veterans affairs patients after age 65[133](#_ENREF_133) | Mortality (65+) | 372463 | Mortality | Health Outcome | No | 3 |
| Race-ethnicity and gender differences in VA health care service utilization among US veterans of recent conflicts[157](#_ENREF_157) | Preventive and ambulatory care | 309050 | Healthcare utilization | Utilization | No | 3 |
| The effects of race and other socioeconomic factors on health service use among American military veterans[158](#_ENREF_158) | Preventive and ambulatory care | 19270 | Health service use | Utilization | No | 2 |
| Racial disparities in patient safety indicator (PSI) rates in the Veterans Health Administration[168](#_ENREF_168) | Surgery (postoperative and surgical complications) | 1032103 | Death in low mortality Diagnosis-Related Groups | Health Outcome | No | 3 |
| Predictors of adherence to hormonal contraceptives in a female veteran population[178](#_ENREF_178) | Women’s health (hormonal contraceptives) | 805 | Adherence to hormonal contraceptive medication (medication possession ratio >.9) | Health Outcome | No | 0 |
| Posttraumatic stress disorder and risk of spontaneous preterm birth[181](#_ENREF_181) | Women’s health (preterm birth), Mental health (PTSD) | 16334 | Spontaneous preterm birth | Health Outcome | No | 2 |

**Supplemental Digital Content 20. Evidence Map: Health Disparities in VHA Patients by Race/Ethnicity – Native Hawaiian/Pacific Islander**



**Legend:** The bubble plot shows the number of studies identified (y-axis) that provided evidence of no disparity, mixed or unclear findings, or a disparity (x-axis) for each outcome category (utilization, quality, patient health outcomes). Bubble size represents the mean confidence score, with a range of -1 to 4.

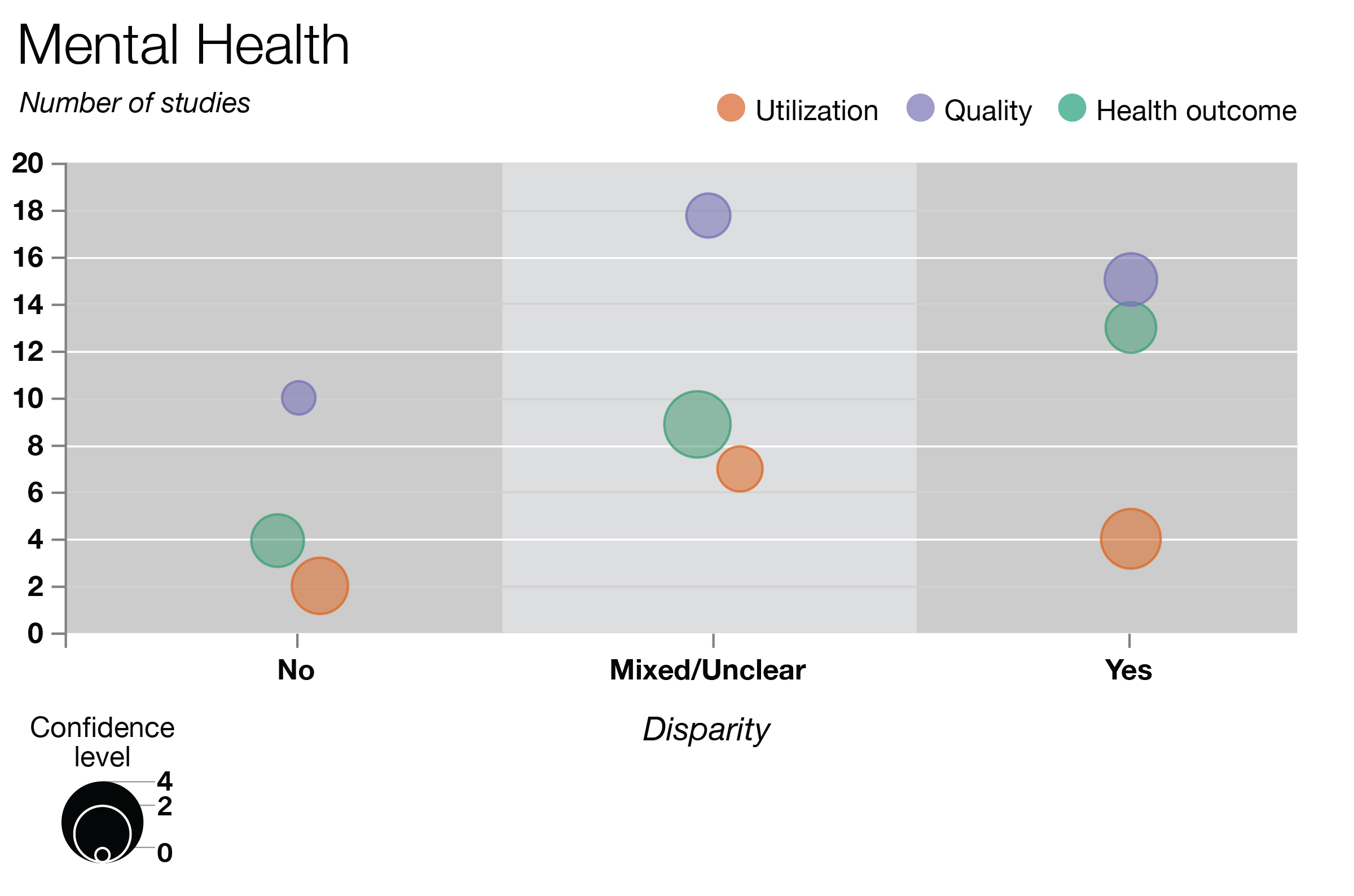
**Supplemental Digital Content 21. Table: Health Disparities in VHA Patients by Race/Ethnicity – Native Hawaiian/Pacific Islander**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| *Title* | *Clinical area* | *Total N* | *Outcomes* | *Category* | *Disparity* | *Confi-dence* |
| Impact of race/ethnicity and gender on HCV screening and prevalence among US Veterans in Department of Veterans Affairs care[95](#_ENREF_95) | HCV | 3630420 | HCV prevalence | Health Outcomes | No | 2 |
| Impact of race/ethnicity and gender on HCV screening and prevalence among US Veterans in Department of Veterans Affairs care[95](#_ENREF_95) | HCV | 3630420 | HCV Screening rates | Quality | No | 2 |
| Are there racial/ethnic disparities in VA PTSD treatment retention?[121](#_ENREF_121) | Mental health (PTSD) | 6788 | PTSD treatment retention | Quality | No | 2 |
| Race and ethnicity as factors in mental health service use among veterans with PTSD[123](#_ENREF_123) | Mental health (PTSD) | 20284 | Mental health care receipt (psychotropic prescription, AD prescription, counseling) | Utilization | No | 2 |
| Impact of rural residence on survival of male veterans affairs patients after age 65[133](#_ENREF_133) | Mortality (65+) | 372463 | Mortality | Health Outcomes | No | 3 |
| Posttraumatic stress disorder and risk of spontaneous preterm birth[181](#_ENREF_181) | Women’s health (preterm birth), Mental health (PTSD) | 16334 | Spontaneous preterm birth | Health Outcomes | No | 2 |

**Supplemental Digital Content 22. Table: Health Disparities among Women in the VHA**

| *Title* | *Clinical area* | *Total N* | *Outcomes* | *Category* | *Disparity* | *Confi-dence* |
| --- | --- | --- | --- | --- | --- | --- |
| Are gender differences in colorectal cancer screening rates due to differences in self-reporting?[190](#_ENREF_190) | Cancer (colorectal) | 345 | Colorectal cancer screening | Quality | No | 0 |
| Longitudinal adherence to fecal occult blood testing impacts colorectal cancer screening quality[191](#_ENREF_191) | Cancer (colorectal) | 1112645 | Colorectal cancer screening | Quality | No | 2 |
| Demographic determinants of response to statin medications[36](#_ENREF_36) | Cardiovascular (coronary artery disease) | 5191 | Achieving goal of LDL-C <100 | Quality | Yes | 0 |
| Disparities in VA heart failure care[37](#_ENREF_37) | Cardiovascular (heart failure) | NR - likely large | Guideline concordant heart failure care | Quality | Yes | 2 |
| Gender disparities in evidence-based statin therapy in patients with cardiovascular disease[192](#_ENREF_192) | Cardiovascular (Ischemic heart disease) | 972532 | Any statin prescription, high intensity statin prescription | Quality | Yes | 2 |
| Decomposing gender differences in low-density lipoprotein cholesterol among veterans with or at risk for cardiovascular illness[42](#_ENREF_42) | Cardiovascular (lipid management) | 527568 | LDL-C greater than or equal to 130 | Quality | Yes | 3 |
| Sex differences in patient and provider response to elevated low-density lipoprotein cholesterol[193](#_ENREF_193) | Cardiovascular (lipid management) | 41763 | Ordering or Adjusting of Medication with elevated LDL | Quality | Yes | 2 |
| Factors associated with delays in seeking treatment for stroke care in veterans[47](#_ENREF_47) | Cardiovascular (Stroke) | 100 | Delay in seeking care for treatment for stroke care | Utilization | No | 1 |
| Cardiovascular disease risk factors among women veterans at VA medical facilities[51](#_ENREF_51) | Cardiovascular disease | 2527496 | Cardiovascular disease risk factors | Health outcome | No | 2 |
| Women veterans and outcomes after acute myocardial infarction[194](#_ENREF_194) | Cardiovascular disease | 13495 | HF outcomes | Health outcome | No | 2 |
| Cardiovascular disease risk factors among women veterans at VA medical facilities[51](#_ENREF_51) | Cardiovascular disease | 2527496 | Cardiovascular disease risk factors | Quality | No | 2 |
| Frequency and correlates of treatment intensification for elevated cholesterol levels in patients with cardiovascular disease[195](#_ENREF_195) | Cardiovascular disease | 22888 | Intensification of lipid lowering | Quality | Yes | 2 |
| Heart matters: Gender and racial differences cardiovascular disease risk factor control among veterans[55](#_ENREF_55) | Cardiovascular disease | 24965 | Measures of blood pressure, LDL-C values, hemoglobin A1c levels | Quality | Mixed/ Unclear | 2 |
| Women veterans and outcomes after acute myocardial infarction[194](#_ENREF_194) | Cardiovascular disease | 13495 | HF outcomes | Quality | No | 2 |
| Longitudinal ethnic differences in multiple cardiovascular risk factor control in a cohort of US adults with diabetes[60](#_ENREF_60) | Cardiovascular disease, Diabetes | 11203 | CV risk factor control (glycemic, BP, LDL-C) | Quality | No | 1 |
| National comparison of literally homeless male and female VA service users: entry characteristics, clinical needs, and service patterns[196](#_ENREF_196) | Chronic Medical conditions and mental health | 119947 | Rating of physical health, chronic medical conditions (HIV/AIDS, HCV, TB, chronic obstructive pulmonary disease, heart disease, stroke, diabetes, seizures, chronic pain), psychiatric diagnoses (psychiatric disorder, affective disorder, military-related PTSD, non-military-related PTSD, other anxiety disorder, substance use disorder, any psychiatric hospitalization) | Health outcome | Mixed/ Unclear | 3 |
| Predictors of suicide in patients with dementia[197](#_ENREF_197) | Dementia | 294952 | Suicide | Health outcome | No | 3 |
| Dental care in an equal access system valuing equity: are there racial disparities?[64](#_ENREF_64) | Dental | 71315 | Receipt of root canal vs. extraction | Quality | No | 0 |
| Differential impact of longitudinal medication non-adherence on mortality by race/ethnicity among veterans with diabetes[65](#_ENREF_65) | Diabetes | 629563 | Medication non-adherence associated mortality | Health outcome | No | 3 |
| Geographic and racial/ethnic variations in patterns of multimorbidity burden in patients with type 2 diabetes[68](#_ENREF_68) | Diabetes | 892223 | Multimorbidity | Health outcome | Mixed/ Unclear | 3 |
| The association between mental health functioning and nontraumatic lower extremity amputations in veterans with diabetes[71](#_ENREF_71) | Diabetes | 114890 | Major and minor non-traumatic lower extremity amputations | Health outcome | No | 3 |
| Accounting for clinical action reduces estimates of gender disparities in lipid management for diabetic veterans[198](#_ENREF_198) | Diabetes | 668209 | Quality outcomes: low density lipoprotein (LDL-C) levels and clinical action for lipid management | Quality | Yes | 3 |
| Are there gender differences in diabetes care among elderly Medicare enrolled veterans?[199](#_ENREF_199) | Diabetes | 235147 | Hemoglobin A1c, LDL-C values, and eye exams. Intermediate outcomes were hemoglobin A1c and LDL-C values below recommended thresholds | Quality | Mixed/ Unclear | 3 |
| Diabetes care among veteran women with disability[73](#_ENREF_73) | Diabetes | 76874 | Hemoglobin A1c and LDL-C screening and control | Quality | Mixed/ Unclear | 2 |
| Gender disparities in lipid-lowering therapy among veterans with diabetes[200](#_ENREF_200) | Diabetes | 111906 | Lipid Lowering Therapy | Quality | Yes | 3 |
| Longitudinal differences in glycemic control by race/ethnicity among veterans with type 2 diabetes[75](#_ENREF_75) | Diabetes | 8813 | Mean change in A1c; odds of poor control (A1c>8%) | Quality | No | 0 |
| Chronic illness with complexities: mental illness and substance use among veteran clinic users with diabetes[81](#_ENREF_81) | Diabetes, co-occurring substance use and mental health disorders in patients with diabetes | 485893 | Mental health status, substance use disorder, combined mental health and substance use disorder, access to care, and diabetes-related health complications | Health outcome | Mixed/ Unclear | 3 |
| Assistive technology and veterans with severe disabilities: examining the relationships among race, personal factors, medical support, income support, and use[83](#_ENREF_83) | Disability | 16313 | Use of assistive technology by disabled veterans | Quality | No | 2 |
| Equity in Veterans Affairs disability claims adjudication in a national sample of veterans[84](#_ENREF_84) | Disability | 20048 | Disability benefits | Quality | Mixed/ Unclear | 2 |
| A nationwide study comparing end-of-life care for men and women veterans[201](#_ENREF_201) | End-of-life care | 36618 | Receipt of optimal EOL care (frequency of discussion of treatment goals with a family member, receipt of palliative consult, bereavement contact, and chaplain contact with a family member); family member ratings of care | Quality | No | 2 |
| Patient satisfaction of female and male users of Veterans Health Administration services[202](#_ENREF_202) | General health | 74662 | Self-rated quality of care. | Quality | Mixed/ Unclear | 2 |
| Patterns of sex and racial/ethnic differences in patient health care experiences in US Veterans Affairs hospitals[88](#_ENREF_88) | General health | 50471 | Patient reports of positive and negative health care experiences at VA facilities | Quality | Mixed/ Unclear | 2 |
| The burden of illness in the first year home: Do male and female VA users differ in health conditions and healthcare utilization[203](#_ENREF_203) | General health | 163812 | utilization | Utilization | Mixed/ Unclear | 2 |
| Assessing potentially inappropriate prescribing in the elderly Veterans Affairs population using the HEDIS 2006 quality measure[89](#_ENREF_89) | Geriatrics, Prescribing | 1096361 | Potentially inappropriate prescribing based on HEDIS criteria. | Quality | Yes | 3 |
| Potentially inappropriate prescribing for the elderly: effects of geriatric care at the patient and health care system level[91](#_ENREF_91) | Geriatrics, Prescribing | 850154 | Potentially inappropriate prescribing in the elderly | Quality | Yes | 3 |
| Sex differences in inappropriate prescribing among elderly veterans[92](#_ENREF_92) | Geriatrics, Prescribing | 965756 | Zhan criteria for inappropriate prescribing for older adults. | Quality | Yes | 3 |
| Trends in use of high-risk medications for older veterans: 2004 to 2006[93](#_ENREF_93) | Geriatrics, Prescribing | 1567467 | Use of high risk medications for the elderly (HRME) | Quality | Yes | 3 |
| Guideline-concordant hepatitis C virus testing and notification among patients with and without mental disorders[94](#_ENREF_94) | HCV | 19397 | HCV positive | Health outcome | No | 2 |
| Impact of race/ethnicity and gender on HCV screening and prevalence among US Veterans in Department of Veterans Affairs care[95](#_ENREF_95) | HCV | 5500392 | Proportion screened for HCV, HCV infection prevalence | Health outcome | No | 2 |
| An investigation of the quantity and type of female veterans' responses to hepatitis C treatment screening and acceptance[204](#_ENREF_204) | HCV | 4201 | HCV treatment screening | Quality | No | 0 |
| Guideline-concordant hepatitis C virus testing and notification among patients with and without mental disorders[94](#_ENREF_94) | HCV | 19397 | Receipt of HCV testing, notified ≤60 days | Quality | Mixed/ Unclear | 2 |
| Impact of race/ethnicity and gender on HCV screening and prevalence among US Veterans in Department of Veterans Affairs care[95](#_ENREF_95) | HCV | 5500392 | Proportion screened for HCV, HCV infection prevalence | Quality | No | 2 |
| Racial differences in the progression to cirrhosis and hepatocellular carcinoma in HCV-infected veterans[97](#_ENREF_97) | HCV, cancer (liver) | 149407 | Risk of cirrhosis or hepatocellular cancer | Health outcome | No | 3 |
| Rates and predictors of hepatitis C virus treatment in HCV-HIV-coinfected subjects[99](#_ENREF_99) | HCV, HIV | 6502 | Prescribed treatment for HCV | Quality | No | 1 |
| Sex disparities in overall burden of disease among HIV-infected individuals in the Veterans Affairs healthcare system[205](#_ENREF_205) | HIV | 8300 | Overall burden of disease was measured using the VACS Index, an index that incorporates HIV (e.g. CD4 cell count) and non-HIV biomarkers (e.g. hemoglobin) and is highly predictive of all-cause mortality. | Quality | Yes | 1 |
| Changes in suicide mortality for veterans and nonveterans by gender and history of VHA service use, 2000-2010[206](#_ENREF_206) | Mental health | 173969 | Suicide rates (Standardized Mortality Ratio) | Health outcome | Yes | 3 |
| Gender differences in traumatic event exposure and mental health among veteran primary care patients[207](#_ENREF_207) | Mental health | 865 | Mental health diagnoses | Health outcome | Mixed/ Unclear | 0 |
| Health status among 28,000 women veterans. The VA Women's Health Program Evaluation Project[208](#_ENREF_208) | Mental health | 679859 | Physical health survey | Health outcome | No | 3 |
| Mental health encounters and diagnoses following deployment to Iraq and/or Afghanistan, US Armed Forces, 2001–2006[209](#_ENREF_209) | Mental health | 865664 | One or more mental disorder diagnosis | Health outcome | Yes | 2 |
| A comparison of substance use disorder severity and course in American Indian male and female veterans[210](#_ENREF_210) | Mental health | 362 | Mental healthcare utilization | Utilization | Mixed/ Unclear | 1 |
| Self-reported medication treatment adherence among veterans with bipolar disorder[211](#_ENREF_211) | Mental health (Bipolar) | 184 | Self-report of medication adherence | Quality | No | 1 |
| Treatment adherence and illness insight in veterans with bipolar disorder[111](#_ENREF_111) | Mental health (Bipolar) | 435 | Medication adherence (Morisky scale, no missed doses) | Quality | Yes | 0 |
| Treatment adherence with lithium and anticonvulsant medications among patients with bipolar disorder[112](#_ENREF_112) | Mental health (Bipolar) | 44637 | Adherence | Quality | No | 1 |
| Self-reported access to general medical and psychiatric care among veterans with bipolar disorder[113](#_ENREF_113) | Mental health (Bipolar) | 435 | Patient perception of access to health and mental health | Utilization | No | 0 |
| Exploratory data mining analysis identifying subgroups of patients with depression who are at high risk for suicide[114](#_ENREF_114) | Mental health (Depression) | 887869 | Suicide | Health outcome | No | 2 |
| Lifetime major depression and comorbid disorders among current-era women veterans[212](#_ENREF_212) | Mental health (Depression) | 1700 | Lifetime Major depressive disorder (MDD); rates of comorbid disorders | Health outcome | Mixed/ Unclear | 0 |
| Factors associated with receipt of adequate antidepressant pharmacotherapy by VA patients with recurrent depression[213](#_ENREF_213) | Mental health (Depression) | 26770 | Receipt of some antidepressant therapy, adequate acute-phase pharmacotherapy, and adequate continuation-phase pharmacotherapy | Quality | No | 2 |
| Case-finding for depression among medical outpatients in the Veterans Health Administration[214](#_ENREF_214) | Mental health (Depression) | 21489 | Depression screening, screening positive, follow-up evaluation, and subsequent diagnosis. | Utilization | No | 2 |
| Utilization of VA mental health and primary care services among Iraq and Afghanistan veterans with depression: the influence of gender and ethnicity status[215](#_ENREF_215) | Mental health (Depression) | 1556 | Use of VA mental health and primary care services, prescription of antidepressants | Utilization | Mixed/ Unclear | 1 |
| Who receives outpatient monitoring during high-risk depression treatment periods?[117](#_ENREF_117) | Mental health (Depression) | 494673 | Number of outpatient visits following mental health hospitalization or outpatient initiation of antidepressant medication | Utilization | No | 3 |
| Guideline-consistent antidepressant treatment patterns among veterans with diabetes and major depressive disorder[118](#_ENREF_118) | Mental health (Depression), Diabetes | 3953 | Proportion who have guideline-consistent antidepressant treatment | Quality | No | 1 |
| Gender differences in rates of depression, PTSD, pain, obesity, and military sexual trauma among Connecticut War Veterans of Iraq and Afghanistan[216](#_ENREF_216) | Mental health (Depression, PTSD), pain | 1229 | Mental health diagnosis | Health outcome | Mixed/ Unclear | 1 |
| Gender differences among veterans deployed in support of the wars in Afghanistan and Iraq[217](#_ENREF_217) | Mental health (multiple) | 2344 | Mental health conditions | Health outcome | Mixed/ Unclear | 1 |
| Gender differences in combat-related stressors and their association with postdeployment mental health in a nationally representative sample of US OEF/OIF veterans[218](#_ENREF_218) | Mental health (multiple) | 592 | Mental health (PTSD symptomatology, depression, mental health functioning, substance abuse) | Health outcome | No | 0 |
| Gender differences in mental health diagnoses among Iraq and Afghanistan veterans enrolled in veterans affairs health care[219](#_ENREF_219) | Mental health (multiple) | 329049 | Mental health diagnoses (depression, PTSD, substance use, adjustment disorder, anxiety, alcohol use disorder, eating disorders) | Health outcome | Mixed/ Unclear | 2 |
| Predisposing characteristics, enabling resources and need as predictors of utilization and clinical outcomes for veterans receiving mental health services[220](#_ENREF_220) | Mental health (multiple) | 421 | GAF, self-reported mental health (BASIS-24) | Health outcome | No | 2 |
| Psychiatric diagnoses and risk of suicide in veterans[221](#_ENREF_221) | Mental health (multiple) | 3291891 | Suicide | Health outcome | No | 3 |
| Perceptions of quality of health care among veterans with psychiatric disorders[222](#_ENREF_222) | Mental health (multiple) | 55578 | Perception of quality of care | Quality | No | 1 |
| Gender differences in veterans health administration mental health service use: Effects of age and psychiatric diagnosis[223](#_ENREF_223) | Mental health (multiple) | 782789 | Mental health utilization (any mental health service within the VHA and any specialty mental health services in the VHA | Utilization | Mixed/ Unclear | 3 |
| Predisposing characteristics, enabling resources and need as predictors of utilization and clinical outcomes for veterans receiving mental health services[220](#_ENREF_220) | Mental health (multiple) | 421 | Mental health utilization (outpatient, inpatient, residential) | Utilization | Mixed/ Unclear | 2 |
| Psychiatric diagnoses and neurobehavioral symptom severity among OEF/OIF VA patients with deployment-related traumatic brain injury: a gender comparison[224](#_ENREF_224) | Mental health (multiple), TBI | 12605 | Mental health diagnoses | Health outcome | Mixed/ Unclear | 2 |
| Female veterans of Iraq and Afghanistan seeking care from VA specialized PTSD programs: Comparison with male veterans and female war zone veterans of previous eras[225](#_ENREF_225) | Mental health (PTSD) | 11256 | Diagnosis of PTSD, alcohol abuse/depression, drug abuse/depression, anxiety disorder, mood disorder, bipolar disorder, schizophrenia, medical problem; service connection for PTSD, other psychiatric disorder, or medical disorder; psychiatric disability and medical disability | Health outcome | Mixed/ Unclear | 2 |
| Are there racial/ethnic disparities in VA PTSD treatment retention?[121](#_ENREF_121) | Mental health (PTSD) | 6788 | PTSD treatment retention | Quality | No | 1 |
| Female veterans of Iraq and Afghanistan seeking care from VA specialized PTSD programs: Comparison with male veterans and female war zone veterans of previous eras[225](#_ENREF_225) | Mental health (PTSD) | 11256 | Diagnosis of PTSD, alcohol abuse/depression, drug abuse/depression, anxiety disorder, mood disorder, bipolar disorder, schizophrenia, medical problem; service connection for PTSD, other psychiatric disorder, or medical disorder; psychiatric disability and medical disability | Quality | Mixed/ Unclear | 2 |
| Gender differences in prescribing among veterans diagnosed with posttraumatic stress disorder[226](#_ENREF_226) | Mental health (PTSD) | 495309 | Atypical antipsychotics, benzodiazepine, and SSRI/SNRI prescribing | Quality | Mixed/ Unclear | 3 |
| Gender differences in VA disability status for PTSD over time[227](#_ENREF_227) | Mental health (PTSD) | 2998 | Gain or loss of PTSD disability status over a 10-year period. | Quality | No | 1 |
| Military sexual trauma and patient perceptions of Veteran Health Administration health care quality[119](#_ENREF_119) | Mental health (sexual trauma) | 164632 | Patient satisfaction with VHA outpatient care | Quality | Mixed/ Unclear | 2 |
| Associations between AUDIT-C and mortality vary by age and sex[228](#_ENREF_228) | Mental health (serious mental illness) | 225092 | 2-year mortality risk | Health outcome | Yes | 3 |
| Gender differences in health-related quality of life for veterans with serious mental illness[229](#_ENREF_229) | Mental health (serious mental illness) | 18017 | Health-related quality of life- measured via SF-36 (mental health status, physical health status, activities of daily living), global health status question, question on ADL limitations, health interfered with social activities, and extent of bodily pain | Health outcome | Mixed/ Unclear | 2 |
| Longitudinal patterns of health system retention among veterans with schizophrenia or bipolar disorder[125](#_ENREF_125) | Mental health (serious mental illness) | 164150 | 5-year survival | Health outcome | No | 3 |
| Reinstitutionalization following psychiatric discharge among VA patients with serious mental illness: a national longitudinal study[126](#_ENREF_126) | Mental health (serious mental illness) | 35527 | Time to reinstitutionalization/rehospitalization | Health outcome | No | 1 |
| Gender differences in antipsychotics prescribed to veterans with serious mental illness[230](#_ENREF_230) | Mental health (serious mental illness) | 4510 | Likelihood of incident prescription of APMs with low versus medium/high metabolic risk, adjusting for fiscal year of prescribing and selected Veteran demographic, mental health and physical health characteristics. | Quality | No | 1 |
| Racial/ethnic disparities in monitoring metabolic parameters for patients with schizophrenia receiving antipsychotic medications[124](#_ENREF_124) | Mental health (serious mental illness) | 30258 | Monitoring of metabolic dysregulation | Quality | No | 1 |
| Longitudinal patterns of health system retention among veterans with schizophrenia or bipolar disorder[125](#_ENREF_125) | Mental health (serious mental illness) | 164150 | Retention in VA care | Utilization | No | 3 |
| Recognition and management of alcohol misuse in OEF/OIF and other veterans in the VA: a cross-sectional study[231](#_ENREF_231) | Mental health (substance use disorder) | 12092 | Alcohol misuse screening | Health outcome | No | 2 |
| Substance use disorders in Iraq and Afghanistan veterans in VA healthcare, 2001-2010: Implications for screening, diagnosis and treatment[127](#_ENREF_127) | Mental health (substance use disorder) | 456502 | Presence or absence of substance use disorders (alcohol or drug use disorder) | Health outcome | No | 3 |
| Individual and program predictors of attrition from VA substance use treatment[128](#_ENREF_128) | Mental health (substance use disorder) | 8064 | Rates of attrition | Quality | Yes | 1 |
| Quality of care for substance use disorders in patients with serious mental illness[129](#_ENREF_129) | Mental health (substance use disorder) | 8083 | Identification of substance use disorders, initiation of treatment, engagement in treatment | Quality | Mixed/ Unclear | 1 |
| Prevalence, predictors, and service utilization of patients with recurrent use of Veterans Affairs substance use disorder specialty care[232](#_ENREF_232) | Mental health (substance use disorder) | 1640 | Utilization of substance use disorder specialty services following an index encounter | Utilization | No | 0 |
| A comparison of substance use disorder severity and course in American Indian male and female veterans[210](#_ENREF_210) | Mental health (substance use disorder) in American Indians | 362 | Mental health diagnoses | Health outcome | No | 1 |
| Prevalence of suicidality among Hispanic and African American veterans following surgery[132](#_ENREF_132) | Mental health, surgery (organ, bone or joint, cancers, vascular, and amputations) | 89995 | Diagnosis of suicidal behavior or ideation | Health outcome | No | 2 |
| Mental health diagnoses and utilization of VA non-mental health medical services among returning Iraq and Afghanistan veterans[233](#_ENREF_233) | Mental health, utilization | 249440 | Outpatient non-mental health services, primary care, medical subspecialty, ancillary services, laboratory tests/diagnostic procedures, emergency services, and hospitalizations | Utilization | Mixed/ Unclear | 3 |
| Predisposing, enabling, and need factors as predictors of low and high psychotherapy utilization in veterans[234](#_ENREF_234) | Mental health, Utilization | 130331 | Psychotherapy utilization | Utilization | Mixed/ Unclear | 3 |
| Sexual assault, mental health, and service use among male and female veterans seen in Veterans Affairs primary care clinics: a multi-site study[235](#_ENREF_235) | Mental health, Utilization | 816 | Overall utilization | Utilization | No | 0 |
| Pain among veterans of Operations Enduring Freedom and Iraqi Freedom: Do women and men differ?[135](#_ENREF_135) | Pain | 153212 | Pain: reported any pain, reported moderate-severe pain, reported persistent pain | Health outcome | Mixed/ Unclear | 3 |
| Prevalence of painful musculoskeletal conditions in female and male veterans in 7 years after return from deployment in Operation Enduring Freedom/Operation Iraqi Freedom[236](#_ENREF_236) | Pain (back problems, musculoskeletal conditions and joint disorders) | 450329 | Prevalence of back problems, musculoskeletal conditions and joint disorders | Health outcome | Yes | 3 |
| Sex differences in the medical care of VA patients with chronic non-cancer pain[237](#_ENREF_237) | Pain (chronic pain) | 17583 | Diagnosis of two or more pain conditions | Health outcome | Yes | 2 |
| Sex differences in the medical care of VA patients with chronic non-cancer pain[237](#_ENREF_237) | Pain (chronic pain) | 17583 | Prescribed chronic opioid therapy, prescribed benzodiazepine therapy, receiving physical therapy, receiving urine drug testing | Quality | Mixed/ Unclear | 2 |
| Sex differences in the medical care of VA patients with chronic non-cancer pain[237](#_ENREF_237) | Pain (chronic pain) | 17583 | ED visits for pain-related complaint, primary care utilization | Utilization | Mixed/ Unclear | 2 |
| Persistent pain and comorbidity among Operation Enduring Freedom/Operation Iraqi Freedom/Operation New Dawn veterans[142](#_ENREF_142) | Pain (chronic) | 5242 | Persistent pain (either self-rated scale, ICD-9 pain diagnosis, pain clinic visit, or opioid prescription) | Health outcome | Yes | 1 |
| Gender differences in health care utilization among veterans with chronic pain[238](#_ENREF_238) | Pain (chronic) | 1218 | Number of clinic visits | Utilization | Mixed/ Unclear | 0 |
| Headache diagnoses among Iraq and Afghanistan war veterans enrolled in VA: a gender comparison[239](#_ENREF_239) | Pain (Headache) | 470215 | Prevalence and type of headache diagnosis | Health outcome | Mixed/ Unclear | 3 |
| Prescription headache medication in OEF/OIF veterans: results from the Women Veterans Cohort Study[240](#_ENREF_240) | Pain (Headache) | 551 | Taking prescription medication for headache | Quality | Mixed/ Unclear | 0 |
| Brief report: Gender and total knee/hip arthroplasty utilization rate in the VA system[241](#_ENREF_241) | Pain (total knee/hip arthroplasty) | 329461 | Undergoing knee or hip TJA within 2 years | Quality | No | 3 |
| Self-reported pain complaints among Afghanistan/Iraq era men and women veterans with comorbid posttraumatic stress disorder and major depressive disorder[242](#_ENREF_242) | Pain, Mental health (PTSD, MDD) | 1614 | Pain: Back, muscle, and headaches | Health outcome | Yes | 0 |
| Mental and physical health status and alcohol and drug use following return from deployment to Iraq or Afghanistan[243](#_ENREF_243) | Physical and mental health status | 596 | Mental health functioning, physical health functioning, alcohol use, drug use | Health outcome | No | 0 |
| Does sex influence immunization status for influenza and pneumonia in older veterans[159](#_ENREF_159) | Preventive care (immunization status) | 48424 | Receipt of influenza immunization in the prior influenza season and receipt of pneumonia immunization ever. | Quality | Yes | 2 |
| Overall graft loss versus death-censored graft loss: unmasking the magnitude of racial disparities in outcomes among US kidney transplant recipients[161](#_ENREF_161) | Renal | 4918 | overall graft loss, death and death-censored graft loss | Health outcome | No | 1 |
| Gender differences in smoking and smoking cessation treatment: an examination of the organizational features related to care[244](#_ENREF_244) | Smoking cessation | 15033 | patient reported receipt of smoking cessation treatments | Quality | No | 2 |
| Risk of smoking and receipt of cessation services among veterans with mental disorders[167](#_ENREF_167) | Smoking cessation | 224193 | Physician advised quitting, physician recommended medication, physician discussed quitting methods | Quality | No | 3 |
| Healthcare utilization following mild traumatic brain injury in female veterans[155](#_ENREF_155) | TBI | 12144 | Utilization | Utilization | Mixed/ Unclear | 2 |
| Services utilization among recently homeless veterans: a gender-based comparison[245](#_ENREF_245) | Utilization | 584 | Utilization: inpatient, outpatient, ED | Utilization | Mixed/ Unclear | 1 |
| VA health care utilization and costs among male and female veterans in the year after service in Afghanistan and Iraq[246](#_ENREF_246) | Utilization | 406463 | Utilization, service connected disability | Utilization | Mixed/ Unclear | 3 |
| What drives frequent emergency department use in an integrated health system? National data from the Veterans Health Administration[247](#_ENREF_247) | Utilization (ED) | 5531379 | VHA ED utilization | Utilization | No | 3 |
| Effect of health-related quality of life on women and men's Veterans Affairs (VA) health care utilization and mortality[248](#_ENREF_248) | Utilization (inpatient, outpatient) | 36500 | Inpatient and outpatient utilization | Utilization | No | 2 |
| Outpatient medical and mental healthcare utilization models among military veterans: results from the 2001 National Survey of Veterans[249](#_ENREF_249) | Utilization (outpatient medical and mental health) | 20048 | Number of outpatient healthcare visits (VA and non-VA) and receipt of mental health services | Utilization | Yes | 2 |
| Comparison of outpatient health care utilization among returning women and men veterans from Afghanistan and Iraq[250](#_ENREF_250) | Utilization (outpatient) | 1620 | Outpatient utilization (basic, specialty, ancillary) | Utilization | No | 1 |
| Improving trends in gender disparities in the Department of Veterans Affairs: 2008–2013[251](#_ENREF_251) | Women’s health | Ranges by outcome: 1820 to 107,659 | Gender differences by year in % screened for depression, PTSD, cholesterol management for patients with DM and IHD | Quality | Mixed/ Unclear | 2 |
| Gender and use of care: planning for tomorrow's Veterans Health Administration[252](#_ENREF_252) | Women’s health, utilization | 4122381 | Inpatient and outpatient utilization | Utilization | Mixed/ Unclear | 3 |

**Supplemental Digital Content 23. Evidence Map: Health Disparities in VHA Patients with Mental Illness**

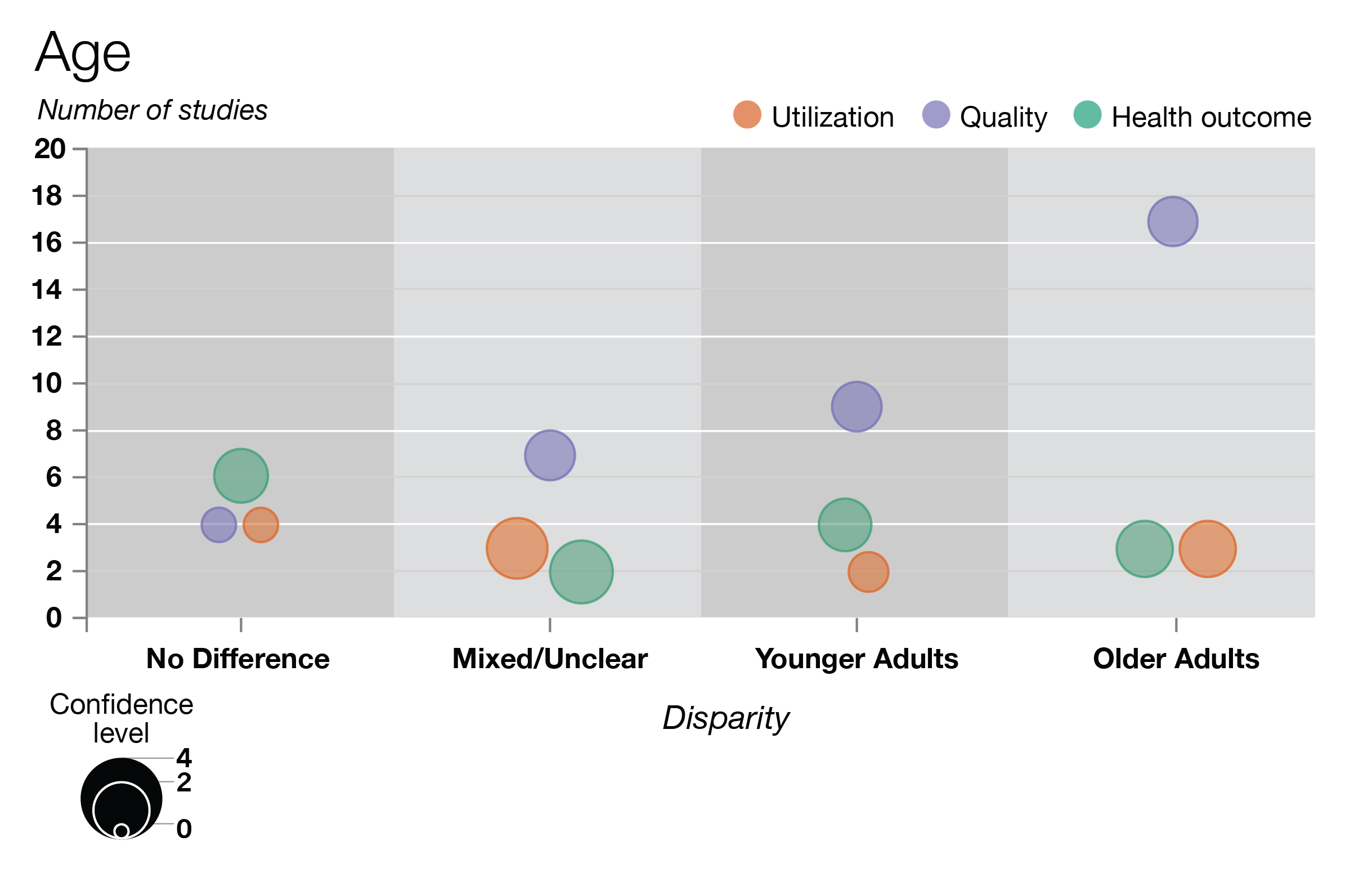


**Legend:** The bubble plot shows the number of studies identified (y-axis) that provided evidence of no disparity, mixed or unclear findings, or a disparity (x-axis) for each outcome category (utilization, quality, patient health outcomes). Bubble size represents the mean confidence score, with a range of -1 to 4.

**Supplemental Digital Content 24. Table: Health Disparities in VHA Patients with Mental Illness**

| *Title* | *Clinical area* | *Total N* | *Outcomes* | *Category* | *Disparity* | *Confi-dence* |
| --- | --- | --- | --- | --- | --- | --- |
| Mental illness: is there an association with cancer screening among women veterans?[253](#_ENREF_253) | Cancer (breast) | 606 | Breast cancer screening, Colon cancer screening (fecal occult blood test in 3 years, flexible sigmoidoscopy in 5 years, or colonoscopy in 10 years), Cervical cancer screening (pap smear 1-3 years) | Quality | Mixed/ Unclear | 0 |
| Receipt of cervical cancer screening in female Veterans: impact of posttraumatic stress disorder and depression[254](#_ENREF_254) | Cancer (cervical) | 34123 | Cervical cancer screening | Quality | Mixed/ Unclear | 2 |
| Mental health, frequency of healthcare visits, and colorectal cancer screening[255](#_ENREF_255) | Cancer (colorectal) | 885 | Colorectal cancer screening | Quality | Yes | 0 |
| [The interrelationships between and contributions of background, cognitive, and environmental factors to colorectal cancer screening adherence](http://sci-hub.bz/10.1007/s10552-010-9563-0)[256](#_ENREF_256) | Cancer (colorectal) | 2416 | Colorectal cancer screening adherence | Quality | No | 1 |
| Excess heart-disease-related mortality in a national study of patients with mental disorders: identifying modifiable risk factors[257](#_ENREF_257) | Cardiovascular | 147193 | Heart disease mortality | Health Outcome | Mixed/ Unclear | 3 |
| Efficacy of a pharmacist-led cardiovascular risk reduction clinic for diabetic patients with and without mental health conditions[258](#_ENREF_258) | Cardiovascular | 297 | Total cholesterol, LDL-C, hemoglobin A1c, SBP, | Quality | Mixed/ Unclear | -1 |
| [Severe mental illness and mortality of hospitalized ACS patients in the VHA](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2082028/)[259](#_ENREF_259) | Cardiovascular (Acute Coronary Syndrome) | 14194 | 1-year all-cause mortality, combined 1-year all-cause mortality/re-hospitalization | Health Outcome | No | 2 |
| [Disparities in VA heart failure care](http://www.hsrd.research.va.gov/research/abstracts.cfm?Project_ID=2141699487) [37](#_ENREF_37) | Cardiovascular (heart failure) | NR - likely large | Mortality, rehospitalization | Health Outcome | Yes | 2 |
| [Disparities in VA heart failure care](http://www.hsrd.research.va.gov/research/abstracts.cfm?Project_ID=2141699487) [37](#_ENREF_37) | Cardiovascular (heart failure) | NR - likely large | Guideline concordant heart failure care | Quality | No | 2 |
| Quality of care for cardiovascular disease-related conditions in patients with and without mental disorders[41](#_ENREF_41) | Cardiovascular (hyperlipidemia screening) | 46430 | Hyperlipidemia screening, Receipt of a foot exam, eye exam, renal test, and hemoglobin A1c >9 | Quality | Mixed/ Unclear | 2 |
| Quality of care for cardiometabolic disease: associations with mental disorder and rurality[260](#_ENREF_260) | Cardiovascular (hypertension) | 23780 | Blood pressure control, poor blood pressure, Foot exam, retinal exam, renal testing, hemoglobin A1c >9, LDL-C <100, blood pressure control | Quality | Mixed/ Unclear | 2 |
| Decomposing gender differences in low-density lipoprotein cholesterol among veterans with or at risk for cardiovascular illness[42](#_ENREF_42) | Cardiovascular (lipid management) | 527568 | LDL-C greater than or equal to 130 | Quality | Mixed/ Unclear | 3 |
| Health care utilization and receipt of cholesterol testing by veterans with and those without mental illness[261](#_ENREF_261) | Cardiovascular (lipid management) | 64490 | Cholesterol screening | Quality | Yes | 2 |
| [Post-traumatic stress disorder, coronary atherosclerosis, and mortality](http://sci-hub.bz/10.1016/j.amjcard.2011.02.340)[262](#_ENREF_262) | Cardiovascular disease | 637 | Cardiovascular mortality | Health Outcome | Yes | 1 |
| [Post-traumatic stress disorder, coronary atherosclerosis, and mortality](http://sci-hub.bz/10.1016/j.amjcard.2011.02.340)[262](#_ENREF_262) | Cardiovascular disease | 637 | Coronary calcium levels | Quality | Yes | 1 |
| [Longitudinal ethnic differences in multiple cardiovascular risk factor control in a cohort of US adults with diabetes](http://sci-hub.bz/10.1016/j.diabres.2011.08.003)[60](#_ENREF_60) | Cardiovascular disease, Diabetes | 11203 | Cardiovascular risk factor control (glycemic, BP, LDL-C) | Quality | No | 1 |
| Predictors of suicide in patients with dementia[197](#_ENREF_197) | Dementia | 294952 | Suicide | Health Outcome | Mixed/ Unclear | 3 |
| Dental care in an equal access system valuing equity: Are there racial disparities?[64](#_ENREF_64) | Dental | 71315 | Receipt of root canal vs. extraction | Quality | Mixed/ Unclear | 0 |
| [Differential impact of longitudinal medication non-adherence on mortality by race/ethnicity among veterans with diabetes](http://sci-hub.bz/10.1007/s11606-012-2200-8)[65](#_ENREF_65) | Diabetes | 629563 | Medication non-adherence associated mortality | Health Outcome | Mixed/ Unclear | 3 |
| Impact of medical and psychiatric multi-morbidity on mortality in diabetes: emerging evidence[263](#_ENREF_263) | Diabetes | 625903 | Mortality | Health Outcome | Yes | 2 |
| Post-traumatic stress disorder and diabetes: co-morbidity and outcomes in a male veterans sample[264](#_ENREF_264) | Diabetes | 14438 | Hemoglobin A1c, cholesterol, weight, BMI | Health Outcome | Yes | 2 |
| The association between mental health functioning and nontraumatic lower extremity amputations in veterans with diabetes[71](#_ENREF_71) | Diabetes | 114890 | Major and minor non-traumatic lower extremity amputations | Health Outcome | Mixed/ Unclear | 3 |
| Adherence to antihyperlipidemic medication and lipid control in diabetic Veterans Affairs patients with psychotic disorders[265](#_ENREF_265) | Diabetes | 124 | Adherence, lipid control | Quality | Mixed/ Unclear | -1 |
| Diabetes treatment among VA patients with comorbid serious mental illness[266](#_ENREF_266) | Diabetes | 36546 | Process Measures: percentage of patients who had at least one hemoglobin A1c level obtained in the past year, the hemoglobin A1c level and the percentage of patients with a high-risk hemoglobin A1c level (≥9.5 percent) based on the last value obtained, the percentage of patients who had a LDL-C measure in the past year, the LDL-C level and the percentage of patients with high-risk LDL-C values based on the most recent test using a cutoff of 130 mg/dl, and the percentage of patients who had a total cholesterol test. | Quality | No | 1 |
| [Longitudinal differences in glycemic control by race/ethnicity among veterans with type 2 diabetes](http://sci-hub.bz/10.1097/mlr.0b013e3181d558dc)[75](#_ENREF_75) | Diabetes | 8813 | Mean change in A1c; odds of poor control (A1c>8%) | Quality | Yes | 0 |
| Maintenance of risk factor control in diabetic patients with and without mental health conditions after discharge from a cardiovascular risk reduction clinic[267](#_ENREF_267) | Diabetes | 231 | Hemoglobin A1c level, blood pressure | Quality | No | 0 |
| Post-traumatic stress disorder and diabetes: co-morbidity and outcomes in a male veterans sample[264](#_ENREF_264) | Diabetes | 14438 | Hemoglobin A1c level, cholesterol, weight, BMI | Quality | Mixed/ Unclear | 2 |
| Diabetes treatment among VA patients with comorbid serious mental illness[266](#_ENREF_266) | Diabetes | 36546 | Quality Utilization: Inpatient utilization (number and percentage of patients with at least one inpatient stay and the average length of stay per patient). Outpatient care (total number of outpatient visits and the average number of visits per patient). Outpatient visits were classified as: primary care only; mental health care only; specialty care only; or a multi-clinic visit. | Utilization | No | 1 |
| Chronic illness with complexities: Mental illness and substance use among veteran clinic users with diabetes[81](#_ENREF_81) | Diabetes, co-occurring substance use and mental health disorders in patients with diabetes | 485893 | Mental health status, substance use disorder, combined mental health and substance use disorder, access to care, and diabetes-related health complications | Health Outcome | Yes | 3 |
| [End-of-life care for veterans with schizophrenia and cancer](http://sci-hub.bz/10.1176/ps.2010.61.7.725)[268](#_ENREF_268) | End-of-life care | 256 | Quality of end-of-life care in Veterans with cancer | Quality | No | 0 |
| Potentially inappropriate prescribing for the elderly: effects of geriatric care at the patient and health care system level[91](#_ENREF_91) | Geriatrics, prescribing | 850154 | Potentially inappropriate prescribing in the elderly | Quality | Yes | 3 |
| Guideline-concordant hepatitis C virus testing and notification among patients with and without mental disorders[94](#_ENREF_94) | HCV | 19397 | HCV positive | Health Outcome | Mixed/ Unclear | 2 |
| Guideline-concordant hepatitis C virus testing and notification among patients with and without mental disorders[94](#_ENREF_94) | HCV | 19397 | Receipt of HCV testing, notified ≤60 days | Quality | Mixed/ Unclear | 2 |
| [Rates and predictors of hepatitis C virus treatment in HCV-HIV-coinfected subjects](http://sci-hub.bz/10.1111/j.1365-2036.2006.03020.x)[99](#_ENREF_99) | HCV, HIV | 6502 | Prescribed treatment for HCV | Quality | Yes | 1 |
| [Understanding associations between serious mental illness and HIV among patients in the VA health system](http://dx.doi.org.sci-hub.bz/10.1176/ps.2007.58.9.1165)[269](#_ENREF_269) | HIV | 279590 | HIV diagnosis | Health Outcome | No | 3 |
| Barriers to care for women veterans with posttraumatic stress disorder and depressive symptoms[270](#_ENREF_270) | Mental health | 3593 | Reported unmet healthcare needs. | Quality | Yes | 0 |
| [Health care utilization patterns among high-cost VA patients with mental health conditions](http://sci-hub.bz/10.1176/appi.ps.201400286)[271](#_ENREF_271) | Mental health | 261,515 | Inpatient (number, LOS [behavioral, residential-domiciliary, medical-surgical, long-term care]), and outpatient (mental health, ED, primary care, specialty) utilization | Utilization | Mixed/ Unclear | 3 |
| Self-reported medication treatment adherence among veterans with bipolar disorder[211](#_ENREF_211) | Mental health (bipolar) | 184 | Self-report of medication adherence | Quality | No | 0 |
| [Exploratory data mining analysis identifying subgroups of patients with depression who are at high risk for suicide](http://sciencesupport.org/esp/espDocuments/ESPs/2131/Ilgen%202009%20enl.1989.pdf)[114](#_ENREF_114) | Mental health (Depression) | 887869 | Suicide | Health Outcome | Yes | 2 |
| Suicide mortality among individuals receiving treatment for depression in the Veterans Affairs health system: Associations with patient and treatment setting characteristics[115](#_ENREF_115) | Mental health (Depression) | 807694 | Suicide mortality | Health Outcome | Mixed/ Unclear | 3 |
| Case-finding for depression among medical outpatients in the Veterans Health Administration[214](#_ENREF_214) | Mental health (Depression) | 21489 | Depression screening | Quality | Yes | 2 |
| Factors associated with receipt of adequate antidepressant pharmacotherapy by VA patients with recurrent depression[213](#_ENREF_213) | Mental health (Depression) | 26770 | Receipt of *some* antidepressant therapy, adequate acute-phase pharmacotherapy, and adequate continuation-phase pharmacotherapy | Quality | Mixed/ Unclear | 1 |
| [Health care utilization and its costs for depressed veterans with and without comorbid PTSD symptoms](http://sci-hub.bz/10.1176/ps.2009.60.12.1612)[272](#_ENREF_272) | Mental health (Depression) | 606 | Utilization (outpatient, general medical, mental health, inpatient, antidepressant use) | Utilization | Mixed/ Unclear | 1 |
| Predisposing characteristics, enabling resources and need as predictors of utilization and clinical outcomes for veterans receiving mental health services[220](#_ENREF_220) | Mental health (multiple) | 421 | GAF, self-reported mental health (BASIS-24) | Health Outcome | No | 2 |
| [Psychiatric diagnoses and risk of suicide in veterans](http://sci-hub.bz/10.1001/archgenpsychiatry.2010.129)[221](#_ENREF_221) | Mental health (multiple) | 3291891 | Suicide | Health Outcome | Mixed/ Unclear | 3 |
| Predisposing characteristics, enabling resources and need as predictors of utilization and clinical outcomes for veterans receiving mental health services[220](#_ENREF_220) | Mental health (multiple) | 421 | Mental health utilization (outpatient, inpatient, residential) | Utilization | Mixed/ Unclear | 2 |
| Access to PTSD care among Veterans with and without substance use diagnoses[273](#_ENREF_273) | Mental health (PTSD and substance use disorders) | 424211 | Attended recommended number of psychotherapy sessions | Quality | Yes | 3 |
| [Access to PTSD care among Veterans with and without substance use diagnoses](http://www.hsrd.research.va.gov/research/abstracts.cfm?Project_ID=2141702533) [273](#_ENREF_273) | Mental health (PTSD and substance use disorders) | 424211 | Utilization of specialty mental health services | Utilization | Yes | 3 |
| Medical care needs of returning veterans with PTSD: their other burden[274](#_ENREF_274) | Mental health (PTSD) | 90558 | Mean number of medical conditions (comorbidities) | Health Outcome | Yes | 2 |
| Posttraumatic stress disorder and odds of major invasive procedures among U.S. Veterans Affairs patients[275](#_ENREF_275) | Mental health (PTSD) | 501489 | Odds of invasive hip/knee, digestive system, coronary artery bypass graft (CABG)/percutaneous coronary intervention, and vascular procedures | Quality | Yes | 3 |
| Posttraumatic stress disorder screening status is associated with increased VA medical and surgical utilization in women[276](#_ENREF_276) | Mental health (PTSD) | 2578 | Outpatient diagnostic tests: laboratory, non-interventional radiology, ultrasound, pulmonary function, ECG, MRI, EEG, nuclear medicine, computerized tomography, electromyogram. | Quality | Yes | 2 |
| Posttraumatic stress disorder screening status is associated with increased VA medical and surgical utilization in women[276](#_ENREF_276) | Mental health (PTSD) | 2578 | Primary care, All medical and surgical subspecialty clinics staffed by MD or Advanced Registered Nurse Practitioner (ARNP) providers, ancillary care. Surgical procedures that required inpatient stays and operating room visits were categorized by ICD codes into cardiopulmonary, gastrointestinal, genitourinary, musculoskeletal, or plastic surgery. Surgical procedure subtypes were not analyzed separately in adjusted models. , ED visits | Utilization | Mixed/ Unclear | 2 |
| Influence of schizophrenia diagnosis on providers' practice decisions[277](#_ENREF_277) | Mental health (schizophrenia) | 275 | Likelihood of referral to weight reduction, pain management, sleep study. | Quality | Mixed/ Unclear | 1 |
| Eight-year trends of cardiometabolic morbidity and mortality in patients with schizophrenia[278](#_ENREF_278) | Mental health (schizophrenia), Cardiometabolic illness | 130724 | Diabetes, coronary artery disease, mortality | Health Outcome | Mixed/ Unclear | 2 |
| Eight-year trends of cardiometabolic morbidity and mortality in patients with schizophrenia[278](#_ENREF_278) | Mental health (schizophrenia), Cardiometabolic illness | 130724 | Hypertension, BMI >30kg/m2, dyslipidemia | Quality | Mixed/ Unclear | 2 |
| Are VA patients with serious mental illness dying younger?[279](#_ENREF_279) | Mental health (serious mental illness) | 5000888 | Mortality (all-cause and heart disease specific), years of potential life lost (YPLLs) | Health Outcome | Mixed/ Unclear | 3 |
| Reinstitutionalization following psychiatric discharge among VA patients with serious mental illness: a national longitudinal study[126](#_ENREF_126) | Mental health (serious mental illness) | 35527 | Time to reinstitutionalization/rehospitalization | Health Outcome | Yes | 1 |
| Access to and satisfaction with care comparing patients with and without serious mental illness[280](#_ENREF_280) | Mental health (serious mental illness) | 7187 | Self-report ratings on access to and satisfaction with care questions from the LHSV. | Quality | Yes | 1 |
| Medication adherence and glycemic control in patients with psychotic disorders in the Veterans Affairs healthcare system[281](#_ENREF_281) | Mental health (serious mental illness) | 124 | Medication adherence: **a**dherence medication was determined by refill records to calculate the cumulative mean gap ratio. Hemoglobin A1C values were utilized to compare glycemic control between groups and compared to glycemic goals established by diabetes treatment guidelines. | Quality | No | -1 |
| Racial/ethnic disparities in monitoring metabolic parameters for patients with schizophrenia receiving antipsychotic medications[124](#_ENREF_124) | Mental health (serious mental illness) | 30258 | Monitoring of metabolic dysregulation | Quality | Mixed/ Unclear | 1 |
| Serious mental illnesses associated with receipt of surgery in retrospective analysis of patients in the Veterans Health Administration[282](#_ENREF_282) | Mental health (serious mental illness) | 321131 | Qualifying inpatient operations were invasive procedures requiring either preoperative or immediate (same-day) postoperative hospitalization with at least one overnight. For patients with multiple qualifying operations, the first surgery during the study period FY2006- FY2009 was used. | Quality | No | 3 |
| [Substance use disorders in Iraq and Afghanistan veterans in VA healthcare, 2001-2010: Implications for screening, diagnosis and treatment](http://sci-hub.cc/10.1016/j.drugalcdep.2010.11.027) [127](#_ENREF_127) | Mental health (substance use disorder) | 456502 | Presence or absence of substance use disorders (alcohol or drug use disorder) | Health Outcome | Yes | 3 |
| Individual and program predictors of attrition from VA substance use treatment[128](#_ENREF_128) | Mental health (substance use disorder) | 8064 | Rates of attrition | Quality | Mixed/ Unclear | 1 |
| Quality of care for substance use disorders in patients with serious mental illness[129](#_ENREF_129) | Mental health (substance use disorder) | 8083 | Identification of substance use disorders, initiation of treatment, engagement in treatment | Quality | Mixed/ Unclear | 1 |
| [Prevalence, predictors, and service utilization of patients with recurrent use of Veterans Affairs substance use disorder specialty care](http://sci-hub.bz/10.1016/j.jsat.2011.11.002)[232](#_ENREF_232) | Mental health (substance use disorder) | 1640 | Utilization of substance use disorder specialty services following an index encounter | Utilization | Mixed/ Unclear | 0 |
| The relationship between body mass index and mental health among Iraq and Afghanistan veterans[283](#_ENREF_283) | Mental health, BMI | 496722 | BMI | Quality | Yes | 3 |
| [Posttraumatic stress disorder symptom severity and socioeconomic factors associated with Veterans Health Administration use among women veterans](http://sci-hub.bz/10.1016/j.whi.2015.05.003)[284](#_ENREF_284) | Mental health, General VA use | 617 | Utilization of VA health care within past year | Utilization | Mixed/ Unclear | 0 |
| Perceptions of quality of health care among veterans with psychiatric disorders[222](#_ENREF_222) | Mental health, Quality of Care | 55578 | Perception of quality of care | Quality | Mixed/ Unclear | 1 |
| Mental health diagnoses and utilization of VA non-mental health medical services among returning Iraq and Afghanistan veterans[233](#_ENREF_233) | Mental health, Utilization | 249440 | Outpatient non-mental health services, primary care, medical subspecialty, ancillary services, laboratory tests/diagnostic procedures, emergency services, and hospitalizations | Utilization | No | 3 |
| [Mental illness-related disparities in length of stay: algorithm choice influences results](http://sci-hub.bz/10.1682/jrrd.2009.08.0112)[285](#_ENREF_285) | Mental health, Utilization | 92255 | Average length of stay | Utilization | Yes | 1 |
| [Predicting utilization of healthcare services in the Veterans Health Administration by returning women veterans: The role of trauma exposure and symptoms of posttraumatic stress](http://sci-hub.bz/10.1037/ser0000057)[286](#_ENREF_286) | Mental health, Utilization | 133 | VHA service utilization | Utilization | Mixed/ Unclear | 1 |
| [Persistent pain and comorbidity among Operation Enduring Freedom/Operation Iraqi Freedom/Operation New Dawn veterans](http://sci-hub.bz/10.1111/pme.12388) [142](#_ENREF_142) | Pain (chronic) | 5242 | Persistent pain (either self-rated scale, ICD-9 pain diagnosis, pain clinic visit, or opioid prescription) | Health Outcome | Yes | 1 |
| [Self-reported pain complaints among Afghanistan/Iraq era men and women veterans with comorbid posttraumatic stress disorder and major depressive disorder](http://sci-hub.bz/10.1111/pme.12208) [242](#_ENREF_242) | Pain, Mental health (PTSD, MDD) | 1614 | Pain: Back, muscle, and headaches | Health Outcome | Yes | 0 |
| Risk of smoking and receipt of cessation services among veterans with mental disorders[167](#_ENREF_167) | Smoking cessation | 224193 | Physician advised quitting, physician recommended medication, physician discussed quitting methods | Quality | Mixed/ Unclear | 3 |
| Ethnicity and race variations in receipt of surgery among Veterans with and without depression[169](#_ENREF_169) | Surgery, Mental health (Depression) | 309068 | Coronary artery bypass graft (CABG), vascular, hip/knee, or digestive system surgeries | Quality | Yes | 2 |
| What drives frequent emergency department use in an integrated health system? National data from the Veterans Health Administration[247](#_ENREF_247) | Utilization (ED) | 5531379 | VHA ED utilization | Utilization | Yes | 3 |
| Outpatient medical and mental healthcare utilization models among military veterans: results from the 2001 National Survey of Veterans[249](#_ENREF_249) | Utilization (outpatient medical and mental health) | 20048 | Number of outpatient healthcare visits (VA and non-VA) and receipt of mental health services | Utilization | Yes | 2 |
| Posttraumatic stress disorder and risk of spontaneous preterm birth[181](#_ENREF_181) | Women’s health (PTSD, preterm birth) | 16334 | Spontaneous preterm birth | Health Outcome | Yes | 1 |
| Adherence to hormonal contraception among women veterans: differences by race/ethnicity and contraceptive supply[177](#_ENREF_177) | Women’s health (hormonal contraceptives) | 6946 | Adherence to hormonal contraceptive medication (time between refills, total months of contraceptive coverage, whether the woman had contraceptive coverage during the last week of FY 2008) | Health Outcome | Yes | 1 |
| Predictors of adherence to hormonal contraceptives in a female veteran population[178](#_ENREF_178) | Women’s health (hormonal contraceptives) | 805 | Adherence to hormonal contraceptive medication (medication possession ratio >.9) | Health Outcome | No | 0 |
| Hormone therapy use in women veterans accessing Veterans Health Administration care: a national cross-sectional study[180](#_ENREF_180) | Women’s health (hormone therapy) | 157195 | Prescription of hormone therapy | Quality | Yes | 3 |
| [Infertility care among OEF/OIF/OND women veterans in the Department of Veterans Affairs](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4410265/)[182](#_ENREF_182) | Women’s health (Reproductive health) | 1323 | Received an infertility assessment | Quality | No | 0 |

**Supplemental Digital Content 25. Evidence Map: Health Disparities in VHA Patients According to Age**

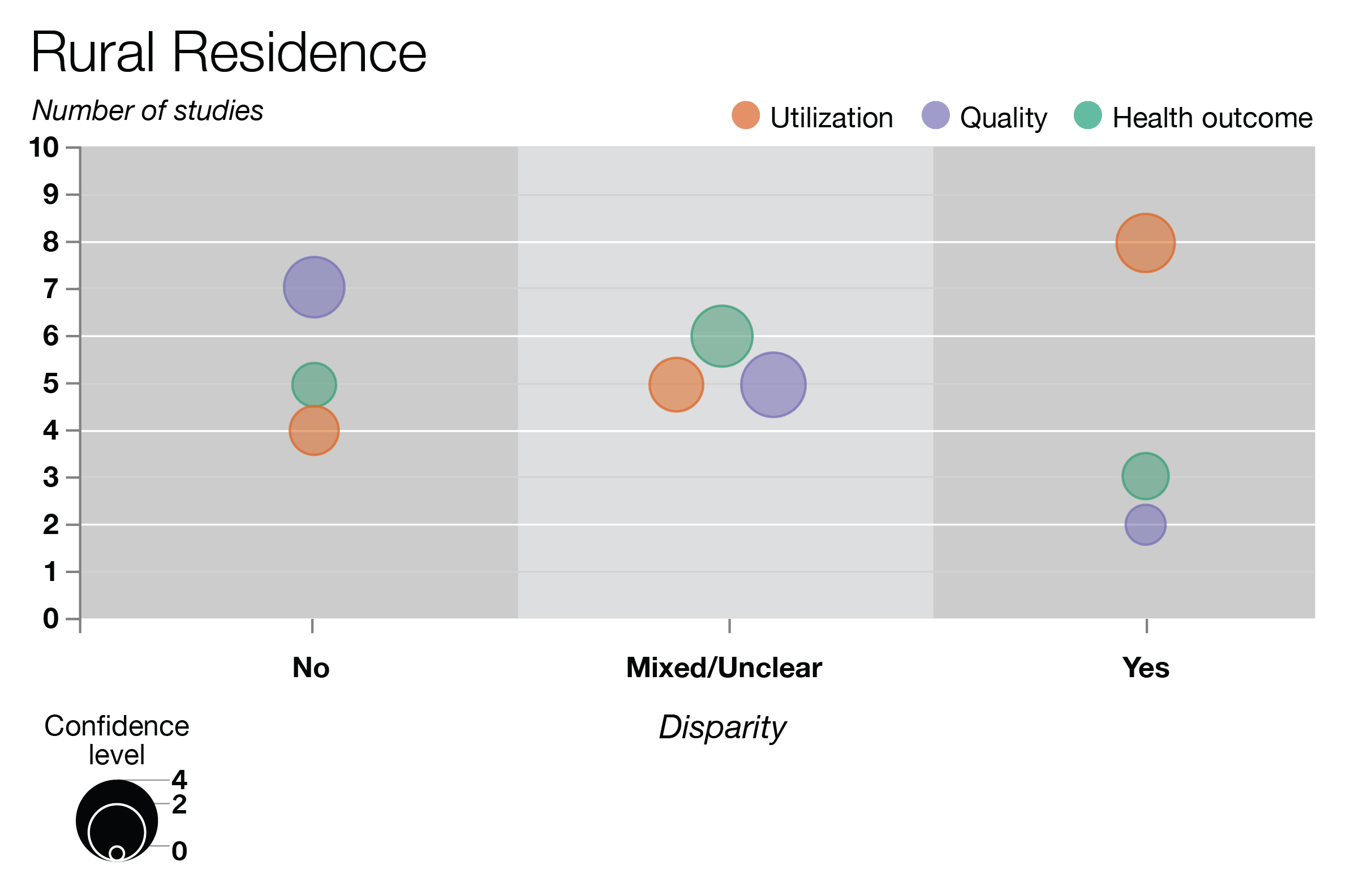


**Legend:** The bubble plot shows the number of studies identified (y-axis) that provided evidence of no disparity, mixed or unclear findings, or a disparity (x-axis) for each outcome category (utilization, quality, patient health outcomes). Bubble size represents the mean confidence score, with a range of -1 to 4.

**Supplemental Digital Content 26. Table: Health Disparities in VHA Patients According to Age**

| *Title* | *Clinical area* | *Total N* | *Outcomes* | *Category* | *Disparity* | *Confi-dence* |
| --- | --- | --- | --- | --- | --- | --- |
| Access to care for women veterans: delayed healthcare and unmet need[287](#_ENREF_287) | Access | 3608 | Delays in obtaining needed healthcare and instances of going without needed care in the prior 12 months. | Utilization | Younger Adults | 0 |
| Reasons for underuse of recommended therapies for colorectal and lung cancer in the Veterans Health Administration[3](#_ENREF_3) | Cancer | 584 | Access, recommendation and receipt of recommended cancer therapy | Quality | Older Adults | 1 |
| Examining potential colorectal cancer care disparities in the Veterans Affairs health care system[9](#_ENREF_9) | Cancer (colorectal) | 2022 | Guideline concordant care | Quality | Older Adults | 1 |
| Patient-reported quality of supportive care among patients with colorectal cancer in the Veterans Affairs Health Care System[288](#_ENREF_288) | Cancer (colorectal) | 1109 | Receipt of help for: bowel problems, pain, fatigue, depression, and other physical symptoms | Quality | Older Adults | 1 |
| The interrelationships between and contributions of background, cognitive, and environmental factors to colorectal cancer screening adherence[256](#_ENREF_256) | Cancer (colorectal) | 2416 | Colorectal cancer screening adherence | Quality | Younger Adults | 1 |
| The association of race with timeliness of care and survival among Veterans Affairs health care system patients with late-stage non-small cell lung cancer[17](#_ENREF_17) | Cancer (non-small cell lung carcinoma) | 2200 | Survival | Health Outcome | Older Adults | 1 |
| The association of race with timeliness of care and survival among Veterans Affairs health care system patients with late-stage non-small cell lung cancer[17](#_ENREF_17) | Cancer (non-small cell lung carcinoma) | 2200 | Guideline concordant care | Quality | None Found | 1 |
| Severe mental illness and mortality of hospitalized ACS patients in the VHA[259](#_ENREF_259) | Cardiovascular (Acute Coronary Syndrome) | 14194 | 1-year all-cause mortality, combined 1-year all-cause mortality/re-hospitalization | Health Outcome | None Found | 2 |
| Demographic determinants of response to statin medications[36](#_ENREF_36) | Cardiovascular (coronary artery disease) | 5191 | Achieving goal of LDL-C <100 | Quality | Mixed/ Unclear | 0 |
| Disparities in VA heart failure care[37](#_ENREF_37) | Cardiovascular (heart failure) | NR - likely large | Guideline concordant heart failure care | Quality | Older Adults | 2 |
| Examining patients' trust in physicians and the VA healthcare system in a prospective cohort followed for six-months after an exacerbation of heart failure[39](#_ENREF_39) | Cardiovascular (heart failure) | 159 | Trust in VHA | Quality | Older Adults | 2 |
| Decomposing gender differences in low-density lipoprotein cholesterol among veterans with or at risk for cardiovascular illness[42](#_ENREF_42) | Cardiovascular (lipid management) | 527568 | LDL-C greater than or equal to 130 | Quality | Mixed/ Unclear | 3 |
| Does inpatient quality of care differ by age among US veterans with ischemic stroke?[289](#_ENREF_289) | Cardiovascular (Stroke) | 3939 | Quality indicators: dysphagia screening, NIHSS completed, thrombolysis given, antithrombotic therapy, HD2, DVT prophylaxis, early ambulation, fall risk assessment, pressure ulcer risk assessment, rehabilitation consultation/FIM, antithrombotic therapy, discharge, atrial fibrillation management, smoking cessation counseling, stroke education | Quality | Mixed/ Unclear | 1 |
| Postdischarge quality of care: do age disparities exist among Department of Veterans Affairs ischemic stroke patients?[290](#_ENREF_290) | Cardiovascular (Stroke) | 3196 | Post-stroke care quality indicators | Quality | None Found | 1 |
| Exploring racial and sociodemographic trends in physician behavior, physician trust and their association with blood pressure control[54](#_ENREF_54) | Cardiovascular disease | 793 | Blood pressure control | Quality | Older Adults | 1 |
| Longitudinal ethnic differences in multiple cardiovascular risk factor control in a cohort of US adults with diabetes[60](#_ENREF_60) | Cardiovascular disease, Diabetes | 11203 | CV risk factor control (glycemic, BP, LDL-C) | Quality | None Found | 1 |
| The association between processes, structures and outcomes of secondary prevention care among VA ischemic heart disease patients[291](#_ENREF_291) | Cardiovascular health | 14114 | Concordance with LDL-C and blood pressure guidelines | Quality | Older Adults | 2 |
| Adherence to long-acting inhaled therapies among patients with chronic obstructive pulmonary disease (COPD)[62](#_ENREF_62) | Chronic obstructive pulmonary disease | 376 | Medication Adherence | Quality | Younger Adults | 2 |
| Dental care in an equal access system valuing equity: Are there racial disparities?[64](#_ENREF_64) | Dental | 71315 | Receipt of root canal vs. extraction | Quality | Older Adults | 0 |
| The association between mental health functioning and nontraumatic lower extremity amputations in veterans with diabetes[71](#_ENREF_71) | Diabetes | 114890 | Major and minor non-traumatic lower extremity amputations | Health Outcome | None Found | 3 |
| Interplay of chronic illness, race, age and sex in glycemic control[292](#_ENREF_292) | Diabetes | 79249 | Glycemic control | Quality | Younger Adults | 2 |
| Longitudinal differences in glycemic control by race/ethnicity among veterans with type 2 diabetes[75](#_ENREF_75) | Diabetes | 8813 | Mean change in A1c; odds of poor control (A1c>8%) | Quality | Mixed/ Unclear | 0 |
| Chronic illness with complexities: Mental illness and substance use among veteran clinic users with diabetes[81](#_ENREF_81) | Diabetes, co-occurring substance use and mental health disorders in patients with diabetes | 485893 | Mental health status, substance use disorder, combined mental health and substance use disorder, access to care, and diabetes-related health complications | Health Outcome | Older Adults | 3 |
| Equity in Veterans Affairs disability claims adjudication in a national sample of veterans[84](#_ENREF_84) | Disability | 20048 | Disability benefits | Quality | Older Adults | 2 |
| Myelosuppression monitoring after immunomodulator initiation in veterans with inflammatory bowel disease: a national practice audit[87](#_ENREF_87) | Gastroenterology (IBD) | 6045 | WBC monitoring | Quality | Older Adults | 1 |
| Assessing potentially inappropriate prescribing in the elderly Veterans Affairs population using the HEDIS 2006 quality measure[89](#_ENREF_89) | Geriatrics, prescribing | 1096361 | Potentially inappropriate prescribing based on HEDIS criteria. | Quality | Older Adults | 3 |
| Sex differences in inappropriate prescribing among elderly veterans[92](#_ENREF_92) | Geriatrics, Prescribing | 965756 | Zhan criteria for inappropriate prescribing for older adults. | Quality | Older Adults | 2 |
| Guideline-concordant hepatitis C virus testing and notification among patients with and without mental disorders[94](#_ENREF_94) | HCV | 19397 | HCV positive | Health Outcome | Older Adults | 2 |
| Guideline-concordant hepatitis C virus testing and notification among patients with and without mental disorders[94](#_ENREF_94) | HCV | 19397 | Receipt of HCV testing, notified ≤60 days | Quality | Younger Adults | 2 |
| Rates and predictors of hepatitis C virus treatment in HCV-HIV-coinfected subjects[99](#_ENREF_99) | HCV, HIV | 6502 | Prescribed treatment for HCV | Quality | Older Adults | 1 |
| Treatment adherence and illness insight in veterans with bipolar disorder[111](#_ENREF_111) | Mental health | 435 | Medication adherence (Morisky scale, no missed doses) | Quality | Younger Adults | 0 |
| Age as a predictive factor of mental health service use among adults with depression and/or anxiety disorder receiving care through the Veterans Health Administration[293](#_ENREF_293) | Mental health | 583692 | Mental health service utilization | Utilization | Older Adults | 3 |
| Posttraumatic stress disorder symptom severity and socioeconomic factors associated with Veterans Health Administration use among women veterans[284](#_ENREF_284) | Mental health | 617 | Utilization of VA health care within past year for patients with PTSD | Utilization | None Found | 0 |
| Self-reported access to general medical and psychiatric care among veterans with bipolar disorder[113](#_ENREF_113) | Mental health (Bipolar) | 435 | Patient perception of access to health and mental health | Utilization | None Found | 0 |
| Case-finding for depression among medical outpatients in the Veterans Health Administration[214](#_ENREF_214) | Mental health (Depression) | 21489 | screening positive | Health Outcome | Younger Adults | 2 |
| Case-finding for depression among medical outpatients in the Veterans Health Administration[214](#_ENREF_214) | Mental health (Depression) | 21489 | Depression screening, screening positive, follow-up evaluation, and subsequent diagnosis. | Quality | Younger Adults | 2 |
| Who receives outpatient monitoring during high-risk depression treatment periods?[117](#_ENREF_117) | Mental health (Depression) | 494673 | Number of outpatient visits following mental health hospitalization or outpatient initiation of antidepressant medication | Utilization | Older Adults | 3 |
| Military sexual trauma and patient perceptions of Veteran Health Administration health care quality[119](#_ENREF_119) | Mental health (military sexual trauma) | 164632 | Patient satisfaction with VHA outpatient care | Quality | Younger Adults | 2 |
| Predisposing characteristics, enabling resources and need as predictors of utilization and clinical outcomes for veterans receiving mental health services[220](#_ENREF_220) | Mental health (multiple) | 421 | GAF, self-reported mental health (BASIS-24) | Health Outcome | Mixed/ Unclear | 2 |
| Predisposing characteristics, enabling resources and need as predictors of utilization and clinical outcomes for veterans receiving mental health services[220](#_ENREF_220) | Mental health (multiple) | 421 | Mental health utilization (outpatient, inpatient, residential) | Utilization | Mixed/ Unclear | 2 |
| Age differences in posttraumatic stress disorder, psychiatric disorders, and healthcare service use among veterans in Veterans Affairs primary care clinics[294](#_ENREF_294) | Mental health (PTSD) | 745 | PTSD diagnosis (CAPS), PTSD severity | Health Outcome | Younger Adults | 1 |
| Are there racial/ethnic disparities in VA PTSD treatment retention?[121](#_ENREF_121) | Mental health (PTSD) | 6788 | PTSD treatment retention | Quality | Older Adults | 2 |
| Pharmacotherapy for older veterans diagnosed with posttraumatic stress disorder in Veterans Administration[295](#_ENREF_295) | Mental health (PTSD) | 244947 | Receipt of psychotropic medication | Quality | Mixed/ Unclear | 3 |
| Associations between AUDIT-C and mortality vary by age and sex[228](#_ENREF_228) | Mental health (serious mental illness) | 225092 | 2-year mortality risk | Health Outcome | Mixed/ Unclear | 3 |
| Reinstitutionalization following psychiatric discharge among VA patients with serious mental illness: a national longitudinal study[126](#_ENREF_126) | Mental health (serious mental illness) | 35527 | Time to reinstitutionalization/rehospitalization | Health Outcome | None Found | 1 |
| Substance use disorders in Iraq and Afghanistan veterans in VA healthcare, 2001-2010: Implications for screening, diagnosis and treatment[127](#_ENREF_127) | Mental health (substance use disorder) | 456502 | Presence or absence of substance use disorders (alcohol or drug use disorder) | Health Outcome | None Found | 3 |
| Individual and program predictors of attrition from VA substance use treatment[128](#_ENREF_128) | Mental health (substance use disorder) | 8064 | Rates of attrition | Quality | Older Adults | 1 |
| Quality of care for substance use disorders in patients with serious mental illness[129](#_ENREF_129) | Mental health (substance use disorder) | 8083 | Identification of substance use disorders, initiation of treatment, engagement in treatment | Quality | Mixed/ Unclear | 1 |
| Prevalence, predictors, and service utilization of patients with recurrent use of Veterans Affairs substance use disorder specialty care[232](#_ENREF_232) | Mental health (substance use disorder) | 1640 | Utilization of substance use disorder specialty services following an index encounter | Utilization | None Found | 0 |
| Mental health encounters and diagnoses following deployment to Iraq and/or Afghanistan, US Armed Forces, 2001–2006[209](#_ENREF_209) | Mental health diagnoses | 865674 | PTSD diagnosis | Health Outcome | Younger Adults | 2 |
| Mental illness and substance use disorders among women veterans with diabetes[131](#_ENREF_131) | Mental health in women with diabetes | 16368 | Serious mental illness and/or substance use disorder diagnoses | Health Outcome | Younger Adults | 2 |
| Perceptions of quality of health care among veterans with psychiatric disorders[222](#_ENREF_222) | Mental health, Quality of Care | 55578 | Perception of quality of care | Quality | Younger Adults | 1 |
| Predisposing, enabling, and need factors as predictors of low and high psychotherapy utilization in veterans[234](#_ENREF_234) | Mental health, Utilization | 130331 | Psychotherapy utilization | Utilization | Mixed/ Unclear | 3 |
| Self-reported pain complaints among Afghanistan/Iraq era men and women veterans with comorbid posttraumatic stress disorder and major depressive disorder[242](#_ENREF_242) | Pain, Mental health (PTSD, MDD) | 1614 | Pain: Back, muscle, and headaches | Health Outcome | None Found | 0 |
| Healthcare utilization following mild traumatic brain injury in female veterans[155](#_ENREF_155) | Preventive and ambulatory care | 12144 | Healthcare utilization, outpatient | Utilization | Younger Adults | 2 |
| Risk of smoking and receipt of cessation services among veterans with mental disorders[167](#_ENREF_167) | Smoking cessation | 224193 | Physician advised quitting, physician recommended medication, physician discussed quitting methods | Quality | Older Adults | 3 |
| What drives frequent emergency department use in an integrated health system? National data from the Veterans Health Administration[247](#_ENREF_247) | Utilization (ED) | 5531379 | VHA ED utilization | Utilization | None Found | 3 |
| Outpatient medical and mental healthcare utilization models among military veterans: results from the 2001 National Survey of Veterans[249](#_ENREF_249) | Utilization (outpatient medical and mental health) | 20048 | Number of outpatient healthcare visits (VA and non-VA) and receipt of mental health services | Utilization | Mixed/ Unclear | 2 |
| The quality of care provided to patients with varices in the department of Veterans Affairs[174](#_ENREF_174) | Varices care | 550 | Rate of meeting specified quality indicators for variceal care | Quality | Older Adults | 1 |
| Determinants of hormone therapy discontinuation among female veterans nationally[179](#_ENREF_179) | Women’s health (hormone therapy) | 36222 | Hormone therapy discontinuation | Quality | Younger Adults | 2 |
| Hormone therapy use in women veterans accessing Veterans Health Administration care: a national cross-sectional study[180](#_ENREF_180) | Women’s health (hormone therapy) | 157195 | Prescription of hormone therapy | Quality | Mixed/ Unclear | 3 |
| Posttraumatic stress disorder and risk of spontaneous preterm birth[181](#_ENREF_181) | Women’s health (preterm birth), mental health (PTSD) | 16334 | Spontaneous preterm birth | Health Outcome | None Found | 2 |
| Infertility care among OEF/OIF/OND women veterans in the Department of Veterans Affairs[182](#_ENREF_182) | Women’s health (Reproductive health) | 1323 | Received an infertility assessment | Quality | None Found | 0 |
| Depression treatment patterns among women veterans with cardiovascular conditions or diabetes[183](#_ENREF_183) | Women’s health (women Veterans with cardiovascular conditions or diabetes) | 8147 | Services: antidepressants, psychotherapy | Utilization | Older Adults | 0 |

**Supplemental Digital Content 27. Evidence Map: Health Disparities in VHA Patients Living in Rural Areas**

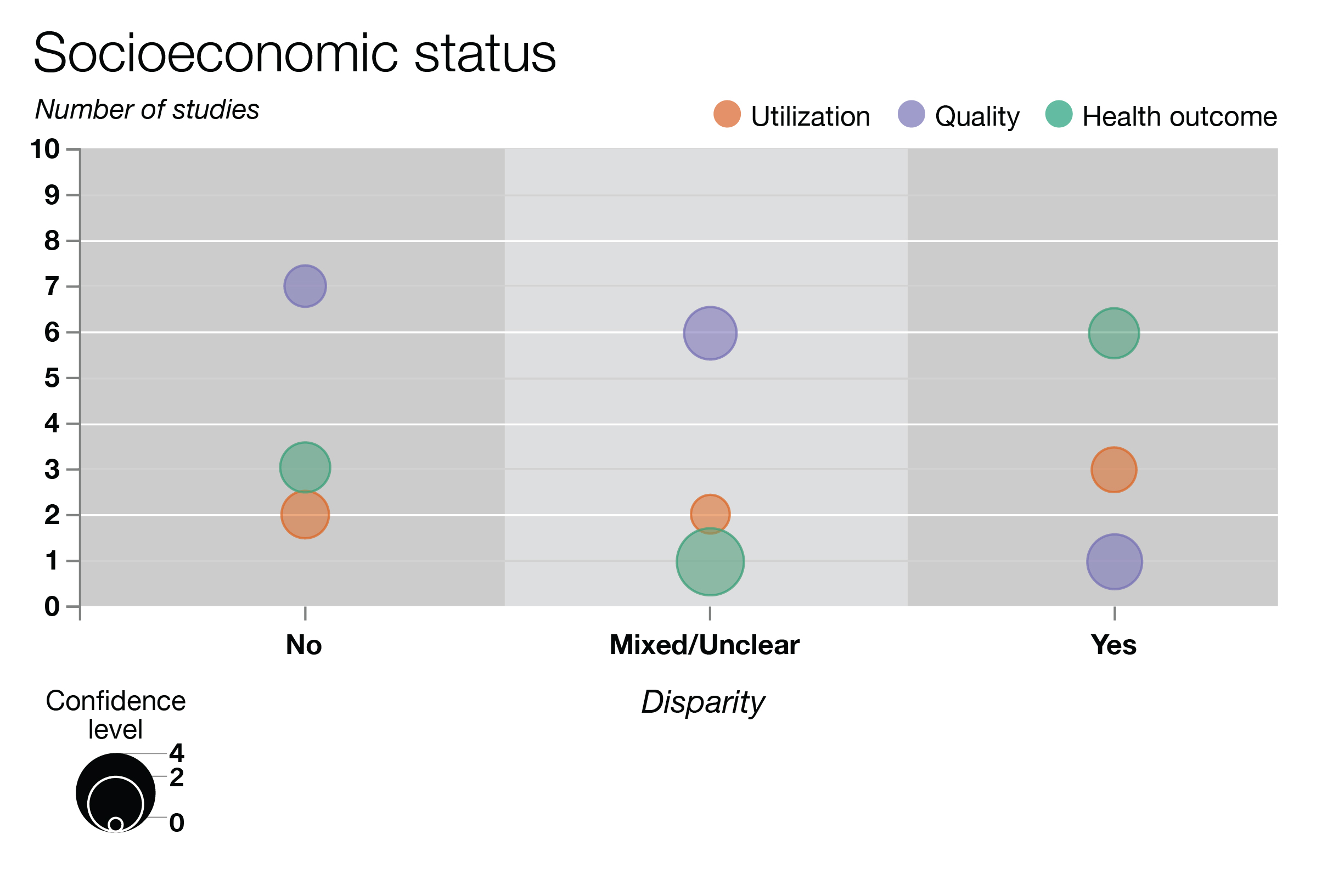


**Legend:** The bubble plot shows the number of studies identified (y-axis) that provided evidence of no disparity, mixed or unclear findings, or a disparity (x-axis) for each outcome category (utilization, quality, patient health outcomes). Bubble size represents the mean confidence score, with a range of -1 to 4.

**Supplemental Digital Content 28. Table: Health Disparities in VHA Patients Living in Rural Areas**

| *Title* | *Clinical area* | *Total N* | *Outcomes* | *Category* | *Disparity* | *Confi-dence* |
| --- | --- | --- | --- | --- | --- | --- |
| Trends and geographic variation of potentially avoidable hospitalizations in the Veterans Health-Care System[296](#_ENREF_296) | Access (ambulatory care-sensitive condition hospitalizations) | NR (100,000+) | Ambulatory care-sensitive condition (ACSC) hospitalizations | Utilization | Yes | 3 |
| Quality of prostate cancer care among rural men in the Veterans Health Administration[297](#_ENREF_297) | Cancer (prostate) | 11333 | Prostate cancer care | Quality | No | 1 |
| Quality of prostate cancer care among rural men in the Veterans Health Administration[297](#_ENREF_297) | Cancer (prostate) | 11333 | Utilization of facilities with comprehensive cancer resources | Utilization | Yes | 1 |
| Mortality and revascularization following admission for acute myocardial infarction: implication for rural veterans[298](#_ENREF_298) | Cardiovascular (Acute MI) | 15608 | 30-day mortality | Health outcome | No | 2 |
| Quality of care for cardiometabolic disease: associations with mental disorder and rurality[260](#_ENREF_260) | Cardiovascular (hypertension) | 23780 | Blood pressure control, poor blood pressure | Quality | No | 2 |
| Decomposing gender differences in low-density lipoprotein cholesterol among veterans with or at risk for cardiovascular illness[42](#_ENREF_42) | Cardiovascular (lipid management) | 527568 | LDL-C greater than or equal to 130 | Quality | Mixed/ Unclear | 3 |
| Rural-urban differences in inpatient quality of care in US Veterans with ischemic stroke[299](#_ENREF_299) | Cardiovascular (Stroke) | 3889 | Ischemic stroke treatment | Quality | Mixed/ Unclear | 1 |
| Rural access to clinical pharmacy services[300](#_ENREF_300) | Clinical pharmacy services | 3040635 | Utilization of clinical pharmacy services | Utilization | No | 3 |
| Rural-urban differences in preventable hospitalizations among community-dwelling veterans with dementia[301](#_ENREF_301) | Dementia | 1186 | ACSH (ambulatory care sensitive hospitalizations) | Utilization | Yes | 1 |
| Differential impact of longitudinal medication non-adherence on mortality by race/ethnicity among veterans with diabetes[65](#_ENREF_65) | Diabetes | 629563 | Medication non-adherence associated mortality | Health outcome | Mixed/ Unclear | 3 |
| Disparities in diabetes self-management and quality of care in rural versus urban veterans[302](#_ENREF_302) | Diabetes | 10472 | Diabetes self-management behaviors (lifestyle and self-monitoring) and quality of care indicators (provider visits, laboratory monitoring and preventive measures) | Quality | No | 2 |
| Regional, geographic, and ethnic differences in medication adherence among adults with type 2 diabetes[77](#_ENREF_77) | Diabetes | 690968 | Medication adherence (MPR-med possession ratio) | Quality | No | 3 |
| Regional, geographic, and racial/ethnic variation in glycemic control in a national sample of veterans with diabetes[78](#_ENREF_78) | Diabetes | 690698 | Hemoglobin A1c level, poor control of hemoglobin A1c level (<80%) | Quality | No | 3 |
| Mental illness and substance use disorders among women veterans with diabetes[131](#_ENREF_131) | Diabetes, Mental health | 16023 | Serious mental illness and/or substance use disorder diagnoses | Health outcome | No | 2 |
| Equity in Veterans Affairs disability claims adjudication in a national sample of veterans[84](#_ENREF_84) | Disability | 20048 | Disability benefits | Quality | No | 2 |
| Potentially inappropriate prescribing for the elderly: effects of geriatric care at the patient and health care system level[91](#_ENREF_91) | Geriatrics, Prescribing | 850154 | Potentially inappropriate prescribing in the elderly | Quality | No | 3 |
| Regional differences in prescribing quality among elder veterans and the impact of rural residence[303](#_ENREF_303) | Geriatrics, Prescribing | 1549824 | Inappropriate prescribing | Quality | Mixed/ Unclear | 3 |
| Impact of rural residence and health system structure on quality of liver care[304](#_ENREF_304) | HCV | 151965 | HCV quality indicators | Quality | Mixed/ Unclear | 3 |
| Impact of rural residence and health system structure on quality of liver care[304](#_ENREF_304) | HCV | 151965 | Utilization of HCV specialty care | Utilization | Yes | 3 |
| Rural residence is associated with delayed care entry and increased mortality among veterans with human immunodeficiency virus infection[305](#_ENREF_305) | HIV | 8489 | HIV-related severity and mortality | Health outcome | Mixed/ Unclear | 1 |
| Rural residence and adoption of a novel HIV therapy in a national, equal-access healthcare system[306](#_ENREF_306) | HIV | 1222 | Initiation of new HIV therapy (raltegravir) for eligible patients | Quality | Yes | 1 |
| Geographic access and use of infectious diseases specialty and general primary care services by veterans with HIV infection: Implications for telehealth and shared care programs[307](#_ENREF_307) | HIV | 23639 | Utilization of infectious disease clinics (HIV patients) | Utilization | No | 2 |
| Rural residence is associated with delayed care entry and increased mortality among veterans with human immunodeficiency virus infection[305](#_ENREF_305) | HIV | 8489 | HIV-related severity and mortality | Utilization | No | 1 |
| Deployment-related sequelae and treatment utilization in rural and urban war veterans in Hawaii[308](#_ENREF_308) | Mental health | 233 | Deployment-related health issues | Health outcome | Yes | 0 |
| Effect of rural residence on use of VHA mental health care among OEF/OIF veterans[309](#_ENREF_309) | Mental health | 4782 | Risk of PTSD diagnosis, utilization of mental health treatments from Jan 2008 to Mar 2009 | Health outcome | Yes | 1 |
| Deployment-related sequelae and treatment utilization in rural and urban war veterans in Hawaii[308](#_ENREF_308) | Mental health | 233 | Utilization of mental health services | Utilization | No | 0 |
| Effect of rural residence on use of VHA mental health care among OEF/OIF veterans[309](#_ENREF_309) | Mental health | 4782 | Utilization of mental health treatments from Jan 2008 to Mar 2009 | Utilization | Yes | 1 |
| Trauma and substance use disorders in rural and urban veterans[310](#_ENREF_310) | Mental health (PTSD) | 60 | PTSD symptoms | Health outcome | No | 0 |
| VA intensive mental health case management in urban and rural areas: veteran characteristics and service delivery[311](#_ENREF_311) | Mental health (severe and persistent) | 5221 | GAF, QOL, activities of daily living, symptom severity | Health outcome | No | 0 |
| Use of psychotherapy by rural and urban veterans[312](#_ENREF_312) | Mental health care | 214791 | Psychotherapy initiation, delay from diagnosis, and dose (number of sessions) | Utilization | Yes | 3 |
| Impact of rural residence on survival of male veterans affairs patients after age 65[133](#_ENREF_133) | Mortality (65+) | 372463 | Mortality | Health outcome | Mixed/ Unclear | 3 |
| Access to multiple sclerosis specialty care[313](#_ENREF_313) | Pain (Multiple sclerosis) | 14723 | Specialty care visit, receipt of medical services | Utilization | Yes | 2 |
| A cross-sectional, multi-year examination of rural and urban Veterans Administration users: 2002-2006[314](#_ENREF_314) | Physical and mental health status | Between 263,000-420,000/year | Physical health status, mental health status | Health outcome | Mixed/ Unclear | 3 |
| A longitudinal analysis of rural and urban veterans' health-related quality of life[315](#_ENREF_315) | Quality of life, health-related | 163709 | Physical and mental HRQOL | Health outcome | Mixed/ Unclear | 3 |
| Rural-urban disparities in health-related quality of life within disease categories of Veterans[316](#_ENREF_316) | Quality of life, health-related | 570512 | Health related quality of life - PCS and MCS summaries. | Health outcome | Yes | 3 |
| Risk of smoking and receipt of cessation services among veterans with mental disorders[167](#_ENREF_167) | Smoking cessation | 224193 | Physician advised quitting, physician recommended medication, physician discussed quitting methods | Quality | Mixed/ Unclear | 3 |
| Rural veterans and access to high-quality care for high-risk surgeries[317](#_ENREF_317) | Surgery (Open heart) | NR (24K+) | Open heart surgery at higher or lower performing (mortality) hospital). | Utilization | Mixed/ Unclear | 2 |
| What drives frequent emergency department use in an integrated health system? National data from the Veterans Health Administration[247](#_ENREF_247) | Utilization (ED) | 5531379 | VHA ED utilization | Utilization | Mixed/ Unclear | 3 |
| Outpatient medical and mental healthcare utilization models among military veterans: results from the 2001 National Survey of Veterans[249](#_ENREF_249) | Utilization (outpatient medical and mental health) | 20048 | Number of outpatient healthcare visits (VA and non-VA) and receipt of mental health services | Utilization | Mixed/ Unclear | 2 |
| The impact of living in rural and urban areas: vitamin D and medical costs in veterans[318](#_ENREF_318) | Vitamin D levels | 9396 | Vitamin D levels | Quality | Yes | 1 |
| The impact of living in rural and urban areas: vitamin D and medical costs in veterans[318](#_ENREF_318) | Vitamin D levels | 9396 | Utilization and medical costs | Utilization | Mixed/ Unclear | 1 |
| Rural women veterans demographic report: defining VA users' health and health care access in rural areas[319](#_ENREF_319) | Women’s health (veterans seeking outpatient visits for primary care, mental health care, and women’s specific services) | 327785 | Diagnosis | Health outcome | No | 2 |
| Rural women veterans demographic report: defining VA users' health and health care access in rural areas[319](#_ENREF_319) | Women’s health (veterans seeking outpatient visits for primary care, mental health care, and women’s specific services) | 327785 | utilization | Utilization | Yes | 3 |
| Chronic lower limb wound outcomes among rural and urban veterans[320](#_ENREF_320) | Wound care (Chronic lower limb wounds) | 320 | Health care utilization for chronic lower limb wounds; amputations; death | Health outcome | Mixed/ Unclear | 1 |
| Chronic lower limb wound outcomes among rural and urban veterans[320](#_ENREF_320) | Wound care (Chronic lower limb wounds) | 320 | Health care utilization for chronic lower limb wounds; amputations; death | Utilization | Mixed/ Unclear | 1 |

**Supplemental Digital Content 29. Evidence Map: Health Disparities in VHA Patients According to Socioeconomic Status**

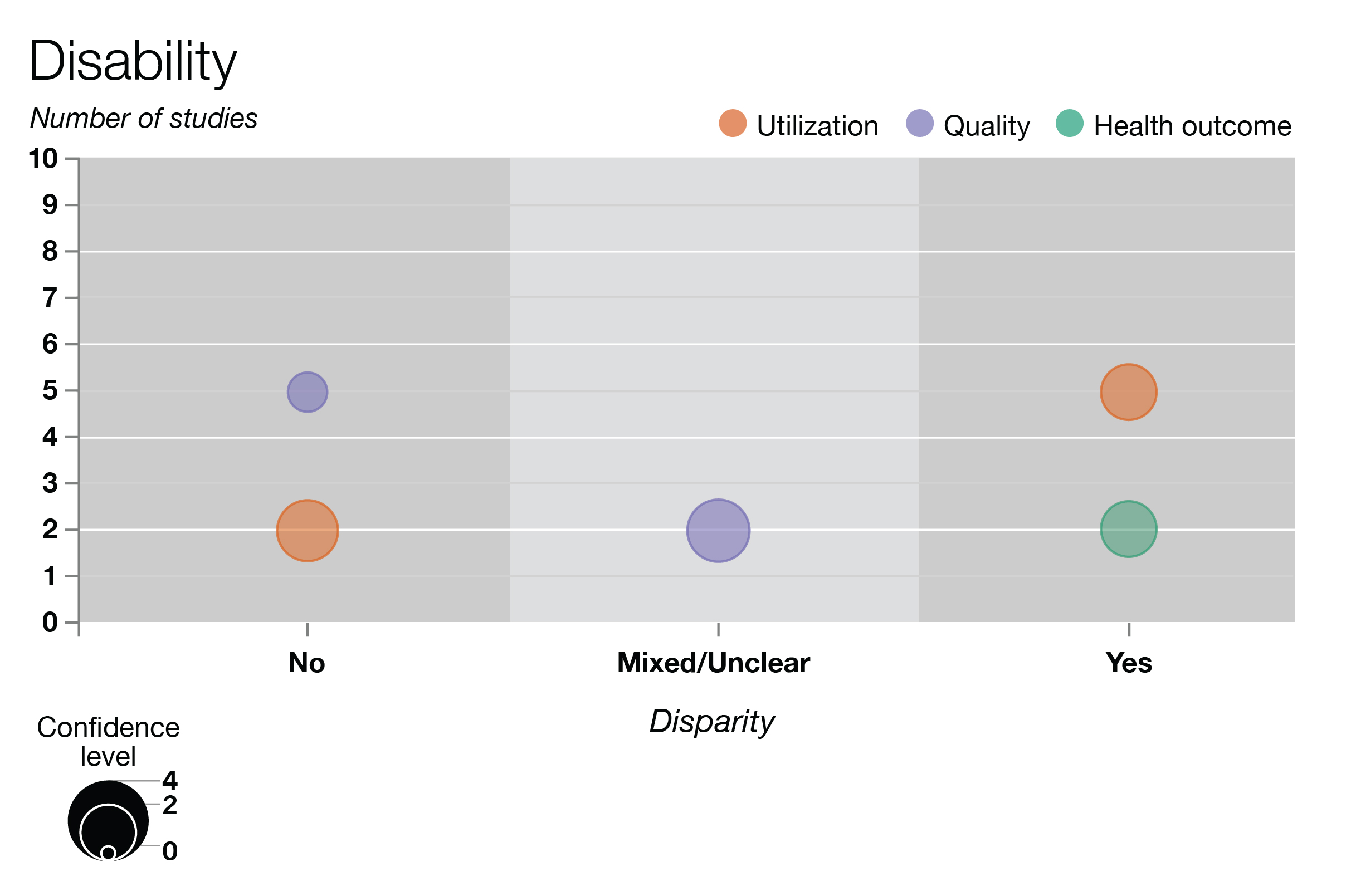


**Legend:** The bubble plot shows the number of studies identified (y-axis) that provided evidence of no disparity, mixed or unclear findings, or a disparity (x-axis) for each outcome category (utilization, quality, patient health outcomes). Bubble size represents the mean confidence score, with a range of -1 to 4.

**Supplemental Digital Content 30. Table: Health Disparities in VHA Patients According to Socioeconomic Status**

| *Title* | *Clinical area* | *Total N* | *Outcomes* | *Category* | *Disparity* | *Confi-dence* |
| --- | --- | --- | --- | --- | --- | --- |
| Access to care for women veterans: delayed healthcare and unmet need[287](#_ENREF_287) | Access | 3608 | Delays in obtaining needed healthcare and instances of going without needed care in the prior 12 months. | Utilization | Mixed/ unclear | 0 |
| Trends and geographic variation of potentially avoidable hospitalizations in the Veterans Health-Care System[296](#_ENREF_296) | Access (ambulatory care-sensitive condition hospitalizations) | NR (100,000+) | Ambulatory care-sensitive condition (ACSC) hospitalizations | Utilization | Yes | 3 |
| The impact of health literacy on racial differences in cancer stage at presentation[330](#_ENREF_330) | Cancer | 296 | Advanced stage cancer at presentation | Health outcome | Yes | 1 |
| The interrelationships between and contributions of background, cognitive, and environmental factors to colorectal cancer screening adherence[256](#_ENREF_256) | Cancer (colorectal) | 2416 | Colorectal cancer screening adherence | Quality | No | 1 |
| Education predicts quality of life among men with prostate cancer cared for in the Department of Veterans Affairs: a longitudinal quality of life analysis from CaPSURE[331](#_ENREF_331) | Cancer (prostate) | 248 | Self-reported HRQOL, SF-36, UCLA Prostate Cancer Index (PCI) at baseline and posttreatment (6 or 12 months) | Health Outcome | Yes | 1 |
| Examining patients' trust in physicians and the VA healthcare system in a prospective cohort followed for six-months after an exacerbation of heart failure[39](#_ENREF_39) | Cardiovascular (heart failure) | 159 | Trust in physician, trust in VHA | Quality | Yes | 2 |
| Racial disparities in prescriptions for cardioprotective drugs and cardiac outcomes in Veterans Affairs Hospitals[53](#_ENREF_53) | Cardiovascular disease | 474565 | Prescriptions for cardioprotective drugs (aspirin, beta-blocker, statin, angiotensin-converting enzyme inhibitor) | Health Outcome | Yes | 3 |
| Exploring racial and sociodemographic trends in physician behavior, physician trust and their association with blood pressure control[54](#_ENREF_54) | Cardiovascular disease | 793 | Blood pressure control | Quality | No | 2 |
| Racial disparities in prescriptions for cardioprotective drugs and cardiac outcomes in Veterans Affairs Hospitals[53](#_ENREF_53) | Cardiovascular disease | 474565 | Prescriptions for cardioprotective drugs (aspirin, beta-blocker, statin, angiotensin-converting enzyme inhibitor) | Quality | Mixed/ Unclear | 3 |
| Adherence to long-acting inhaled therapies among patients with chronic obstructive pulmonary disease (COPD)[62](#_ENREF_62) | Chronic obstructive pulmonary disease | 376 | Medication Adherence | Quality | Mixed/ Unclear | 2 |
| The association between mental health functioning and nontraumatic lower extremity amputations in veterans with diabetes[71](#_ENREF_71) | Diabetes | 114890 | Major and minor non-traumatic lower extremity amputations | Health outcome | Mixed/ Unclear | 3 |
| Racial/ethnic and educational-level differences in diabetes care experiences in primary care[185](#_ENREF_185) | Diabetes | 189 | Patient with diabetes perceptions of alignment with chronic care model (Patient Assessment of Chronic Illness Care) | Quality | No | 0 |
| Racial, income, and marital status disparities in hospital readmissions within a veterans-integrated health care network[104](#_ENREF_104) | Inpatient/acute care | 8718 | Number of hospital readmissions | Utilization | No | 1 |
| Perceptions of quality of health care among veterans with psychiatric disorders[222](#_ENREF_222) | Mental health | 55578 | Perception of quality of care | Quality | Mixed/ Unclear | 1 |
| Self-reported medication treatment adherence among veterans with bipolar disorder[211](#_ENREF_211) | Mental health (bipolar) | 184 | Self-report of medication adherence | Quality | No | 0 |
| Are there racial/ethnic disparities in VA PTSD treatment retention?[121](#_ENREF_121) | Mental health (PTSD) | 6788 | PTSD treatment retention | Quality | No | 2 |
| Military sexual trauma and patient perceptions of Veteran Health Administration health care quality[119](#_ENREF_119) | Mental health (sexual trauma) | 164632 | Patient satisfaction with VHA outpatient care | Quality | Mixed/ Unclear | 2 |
| Quality of care for substance use disorders in patients with serious mental illness[129](#_ENREF_129) | Mental health (serious mental illness) | 8083 | Identification of substance use disorders, initiation of treatment, engagement in treatment | Quality | Mixed/ Unclear | 1 |
| Posttraumatic stress disorder symptom severity and socioeconomic factors associated with Veterans Health Administration use among women veterans[284](#_ENREF_284) | Mental health, Utilization | 617 | Utilization of VA health care within past year | Utilization | Yes | 0 |
| Impact of rural residence on survival of male veterans affairs patients after age 65[133](#_ENREF_133) | Mortality (65+) | 372463 | Mortality | Health Outcome | Yes | 3 |
| Pain among veterans of Operations Enduring Freedom and Iraqi Freedom: Do women and men differ?[135](#_ENREF_135) | Pain | 153212 | Pain: reported any pain, reported moderate-severe pain, reported persistent pain | Health outcome | No | 3 |
| Persistent pain and comorbidity among Operation Enduring Freedom/Operation Iraqi Freedom/Operation New Dawn veterans[142](#_ENREF_142) | Pain (chronic) | 5242 | Persistent pain (either self-rated scale, ICD-9 pain diagnosis, pain clinic visit, or opioid prescription) | Health outcome | No | 1 |
| Neighborhood environment and health status and mortality among veterans[332](#_ENREF_332) | Physical and mental health status | 15889 | Physical and mental health status, mortality | Health outcome | Yes | 2 |
| Does sex influence immunization status for influenza and pneumonia in older veterans[159](#_ENREF_159) | Preventive care (immunization status), older adults | 48424 | Receipt of influenza immunization in the prior influenza season and receipt of pneumonia immunization ever. | Quality | Mixed/ Unclear | 2 |
| Overall graft loss versus death-censored graft loss: unmasking the magnitude of racial disparities in outcomes among US kidney transplant recipients[161](#_ENREF_161) | Renal | 4918 | Overall graft loss, death and death-censored graft loss | Health outcome | No | 1 |
| The effects of race and other socioeconomic factors on health service use among American military veterans[158](#_ENREF_158) | Utilization | 19270 | Health service use | Utilization | No | 2 |
| VA health service utilization for homeless and low-income Veterans: a spotlight on the VA Supportive Housing (VASH) program in greater Los Angeles[333](#_ENREF_333) | Utilization | 62459 | Differences in service utilization (primary care, hospital, mental health, specialty) | Utilization | Yes | 1 |
| Outpatient medical and mental healthcare utilization models among military veterans: results from the 2001 National Survey of Veterans[249](#_ENREF_249) | Utilization (outpatient medical and mental health) | 20048 | Number of outpatient healthcare visits (VA and non-VA) and receipt of mental health services | Utilization | Mixed/ unclear | 2 |
| Contraceptive care in the VA health care system[176](#_ENREF_176) | Women’s health (contraceptive care) | 103950 | Receipt and type of contraception | Quality | No | 3 |
| Predictors of adherence to hormonal contraceptives in a female veteran population[178](#_ENREF_178) | Women’s health (hormonal contraceptives) | 805 | Adherence to hormonal contraceptive medication (medication possession ratio >.9) | Health outcome | Yes | 0 |
| Infertility care among OEF/OIF/OND women veterans in the Department of Veterans Affairs[182](#_ENREF_182) | Women’s health (Reproductive health) | 1323 | Received an infertility assessment | Quality | No | 0 |

**Supplemental Digital Content 31. Evidence Map: Health Disparities in VHA Patients with Disability**

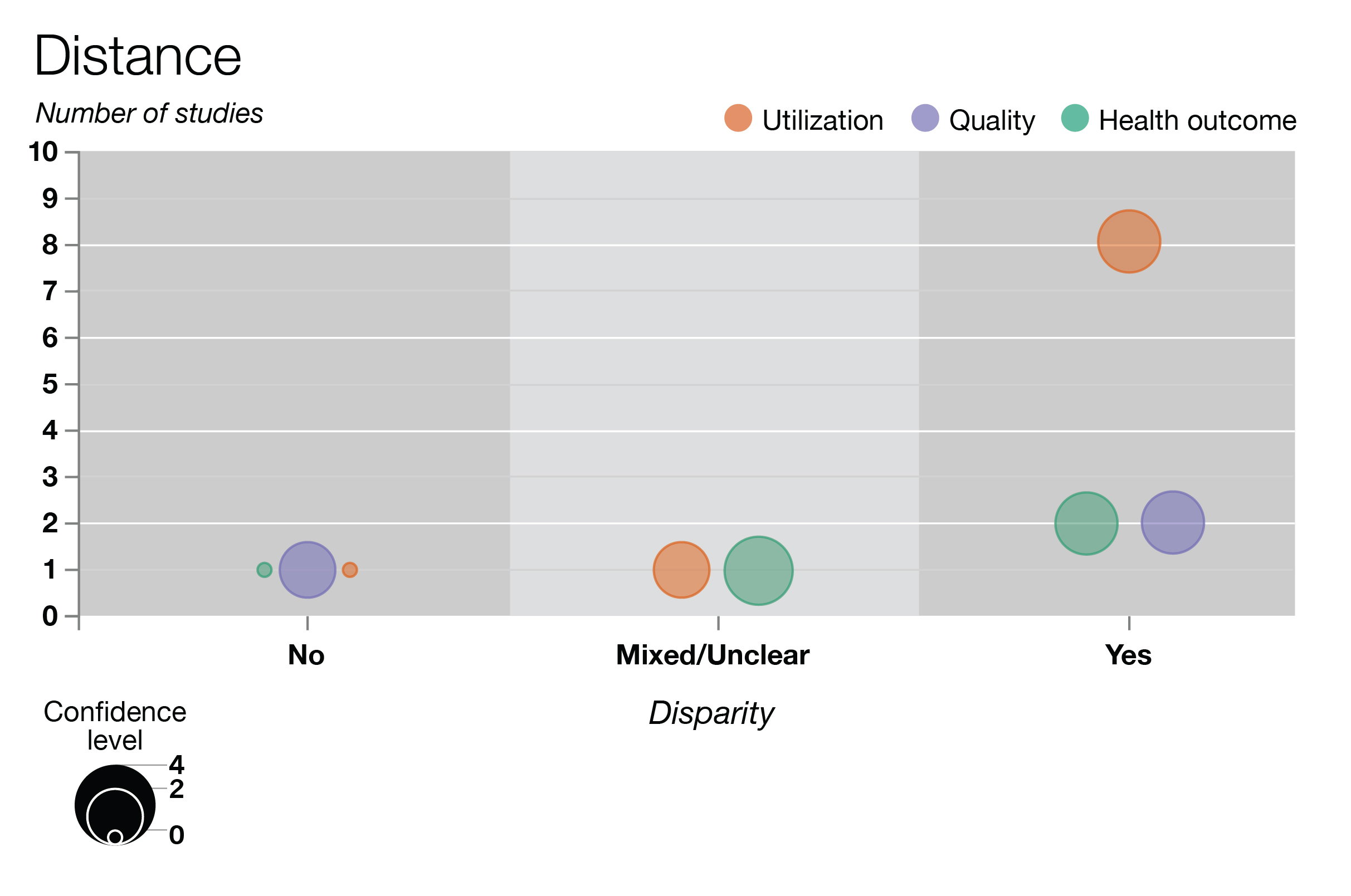


**Legend:** The bubble plot shows the number of studies identified (y-axis) that provided evidence of no disparity, mixed or unclear findings, or a disparity (x-axis) for each outcome category (utilization, quality, patient health outcomes). Bubble size represents the mean confidence score, with a range of -1 to 4.

**Supplemental Digital Content 32. Table: Health Disparities in VHA Patients with Disability**

| *Title* | *Clinical area* | *Total N* | *Outcomes* | *Category* | *Disparity* | *Confi-dence* |
| --- | --- | --- | --- | --- | --- | --- |
| Trends and geographic variation of potentially avoidable hospitalizations in the Veterans Health-Care System[296](#_ENREF_296) | Access (ambulatory care-sensitive condition hospitalizations) | NR (100,000+) | Ambulatory care-sensitive condition (ACSC) hospitalizations | Utilization | Yes | 3 |
| Decomposing gender differences in low-density lipoprotein cholesterol among veterans with or at risk for cardiovascular illness[42](#_ENREF_42) | Cardiovascular (lipid management) | 527568 | LDL-C greater than or equal to 130 | Quality | No | 3 |
| The association between processes, structures and outcomes of secondary prevention care among VA ischemic heart disease patients[291](#_ENREF_291) | Cardiovascular health | 14114 | Concordance with LDL-C and blood pressure guidelines | Quality | No | 2 |
| Geographic and racial/ethnic variations in patterns of multimorbidity burden in patients with type 2 diabetes[68](#_ENREF_68) | Diabetes | 892223 | Multimorbidity | Health outcome | Yes | 3 |
| Diabetes care among veteran women with disability[73](#_ENREF_73) | Diabetes | 5110 | Hemoglobin A1c level and LDL-C screening | Quality | No | 1 |
| Use of VA and Medicare services by dually eligible veterans with psychiatric problems[323](#_ENREF_323) | Mental health (Dual Diagnosis) | 264619 | Total expenditures: acute and non-acute inpatient and outpatient utilization (VA and Medicare) and pharmacy utilization (VA only) | Utilization | Yes | 3 |
| Reinstitutionalization following psychiatric discharge among VA patients with serious mental illness: a national longitudinal study[126](#_ENREF_126) | Mental health (serious mental illness) | 35527 | Time to reinstitutionalization/ rehospitalization | Health outcome | Yes | 1 |
| Perceptions of quality of health care among veterans with psychiatric disorders[222](#_ENREF_222) | Mental health, Quality of Care | 55578 | Perception of quality of care | Quality | No | 1 |
| Predisposing, enabling, and need factors as predictors of low and high psychotherapy utilization in veterans[234](#_ENREF_234) | Mental health, Utilization | 130331 | Psychotherapy utilization | Utilization | Yes | 3 |
| Preventive services in veterans in relation to disability[349](#_ENREF_349) | Preventive care/screening | 72855 | Influenza, pneumococcal vaccinations; fecal occult blood test; lower gastrointestinal endoscopy; cholesterol screening; weight management counseling; HIV test; mammography; pap smear | Quality | Mixed/ Unclear | 2 |
| Risk of smoking and receipt of cessation services among veterans with mental disorders[167](#_ENREF_167) | Smoking cessation | 224193 | Physician advised quitting, physician recommended medication, physician discussed quitting methods | Quality | Mixed/ Unclear | 3 |
| What drives frequent emergency department use in an integrated health system? National data from the Veterans Health Administration[247](#_ENREF_247) | Utilization (ED) | 5531379 | VHA ED utilization | Utilization | No | 3 |
| Outpatient medical and mental healthcare utilization models among military veterans: results from the 2001 National Survey of Veterans[249](#_ENREF_249) | Utilization (outpatient medical and mental health) | 20048 | Number of outpatient healthcare visits (VA and non-VA) and receipt of mental health services | Utilization | Yes | 2 |
| Comparison of outpatient health care utilization among returning women and men veterans from Afghanistan and Iraq[250](#_ENREF_250) | Utilization (outpatient) | 1620 | Outpatient utilization (basic, specialty, ancillary) | Utilization | No | 1 |
| Infertility care among OEF/OIF/OND women veterans in the Department of Veterans Affairs[182](#_ENREF_182) | Women’s health (reproductive health) | 1323 | Received an infertility assessment | Quality | No | 0 |
| Women Veterans ambulatory care use project, phase II[184](#_ENREF_184) | Women's health | 2174 | Utilization of VA women's health services | Utilization | Yes | 1 |

**Supplemental Digital Content 33. Evidence Map: Health Disparities in VHA Patients According to Distance from Care**

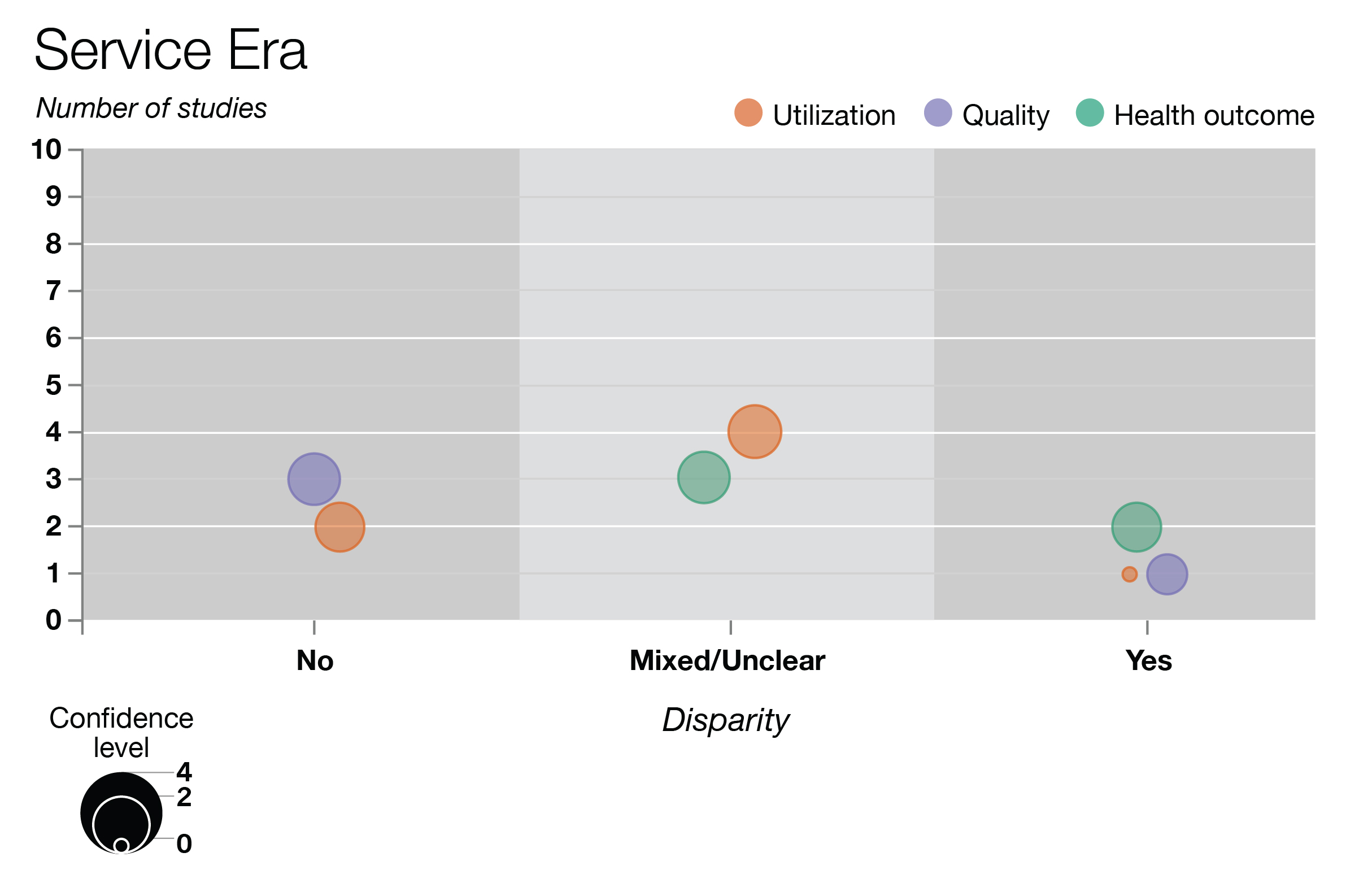


**Legend:** The bubble plot shows the number of studies identified (y-axis) that provided evidence of no disparity, mixed or unclear findings, or a disparity (x-axis) for each outcome category (utilization, quality, patient health outcomes). Bubble size represents the mean confidence score, with a range of -1 to 4.

**Supplemental Digital Content 34. Table: Health Disparities in VHA Patients According to Distance from Care**

| *Title* | *Clinical area* | *Total N* | *Outcomes* | *Category* | *Disparity* | *Confi-dence* |
| --- | --- | --- | --- | --- | --- | --- |
| Trends and geographic variation of potentially avoidable hospitalizations in the Veterans Health-Care System[296](#_ENREF_296) | Access (ambulatory care-sensitive condition hospitalizations) | NR (100,000+) | Ambulatory care-sensitive condition (ACSC) hospitalizations | Utilization | Yes | 3 |
| How does geographic access affect in-hospital mortality for veterans with acute ischemic stroke?[321](#_ENREF_321) | Cardiovascular (Stroke) | 10430 | In hospital mortality | Health Outcome | Yes | 3 |
| The association between processes, structures and outcomes of secondary prevention care among VA ischemic heart disease patients[291](#_ENREF_291) | Cardiovascular health | 14114 | Concordance with LDL-C and blood pressure guidelines | Quality | No | 2 |
| Geographic access and use of infectious diseases specialty and general primary care services by veterans with HIV infection: Implications for telehealth and shared care programs[307](#_ENREF_307) | HIV | 23639 | Utilization of infectious disease clinics (HIV patients) | Utilization | Yes | 2 |
| Impact of distance and facility of initial diagnosis on depression treatment[322](#_ENREF_322) | Mental health (Depression) | 132329 | Psychotherapy and pharmaceutical treatment of depression | Utilization | Yes | 3 |
| Use of VA and Medicare services by dually eligible veterans with psychiatric problems[323](#_ENREF_323) | Mental health (Dual Diagnosis) | 264619 | Total expenditures: acute and non-acute inpatient and outpatient utilization (VA and Medicare) and pharmacy utilization (VA only) | Utilization | Yes | 3 |
| Veterans Affairs Health System and mental health treatment retention among patients with serious mental illness: evaluating accessibility and availability barriers[324](#_ENREF_324) | Mental health (serious mental illness) | 156631 | VA service utilization, mental health utilization | Utilization | Yes | 3 |
| Suicide among patients in the Veterans Affairs health system: rural-urban differences in rates, risks, and methods[325](#_ENREF_325) | Mental health (Suicidality) | 11139863 | Suicide | Health Outcome | Mixed/ Unclear | 3 |
| Predisposing, enabling, and need factors as predictors of low and high psychotherapy utilization in veterans[234](#_ENREF_234) | Mental health, Utilization | 130331 | Psychotherapy utilization | Utilization | Yes | 3 |
| Access to multiple sclerosis specialty care[313](#_ENREF_313) | Pain (Multiple sclerosis) | 14723 | Specialty care visit, receipt of medical services | Utilization | Yes | 2 |
| Post-endovascular aneurysm repair patient outcomes and follow-up are not adversely impacted by long travel distance to tertiary vascular surgery centers[326](#_ENREF_326) | Surgery follow-up | 126 | Post-surgery outcomes | Health Outcome | No | 0 |
| Post-endovascular aneurysm repair patient outcomes and follow-up are not adversely impacted by long travel distance to tertiary vascular surgery centers[326](#_ENREF_326) | Surgery follow-up | 126 | Post-surgery follow-up | Utilization | No | 0 |
| Association of distance from a transplant center with access to waitlist placement, receipt of liver transplantation, and survival among US veterans[327](#_ENREF_327) | Transplantation (liver) | 50637 | Receiving a liver transplant, mortality | Health Outcome | Yes | 2 |
| Association of distance from a transplant center with access to waitlist placement, receipt of liver transplantation, and survival among US veterans[327](#_ENREF_327) | Transplantation (liver) | 50637 | Waitlisted for liver transplantation | Quality | Yes | 2 |
| Utilization and expenditures of veterans obtaining primary care in community clinics and VA medical centers: an observational cohort study[328](#_ENREF_328) | Utilization (Primary care) | 61144 | Primary care utilization | Utilization | Mixed/ Unclear | 2 |
| Travel time and attrition from VHA care among women veterans: how far is too far?[329](#_ENREF_329) | Women’s health | 266301 | An “attriter” did not return for VHA care during the 2nd through 3rd years after her first 2009 visit (T0). Drive time (log minutes) was between the patient’s residence and her regular source of VHA care. “New” patients had no VHA visits within three years before T0 | Quality | Yes | 3 |
| Women Veterans ambulatory care use project, phase II[184](#_ENREF_184) | Women's health | 2174 | Utilization of VA women's health services | Utilization | Yes | 1 |

**Supplemental Digital Content 35. Evidence Map: Health Disparities in VHA Patients by Era of Military Service**

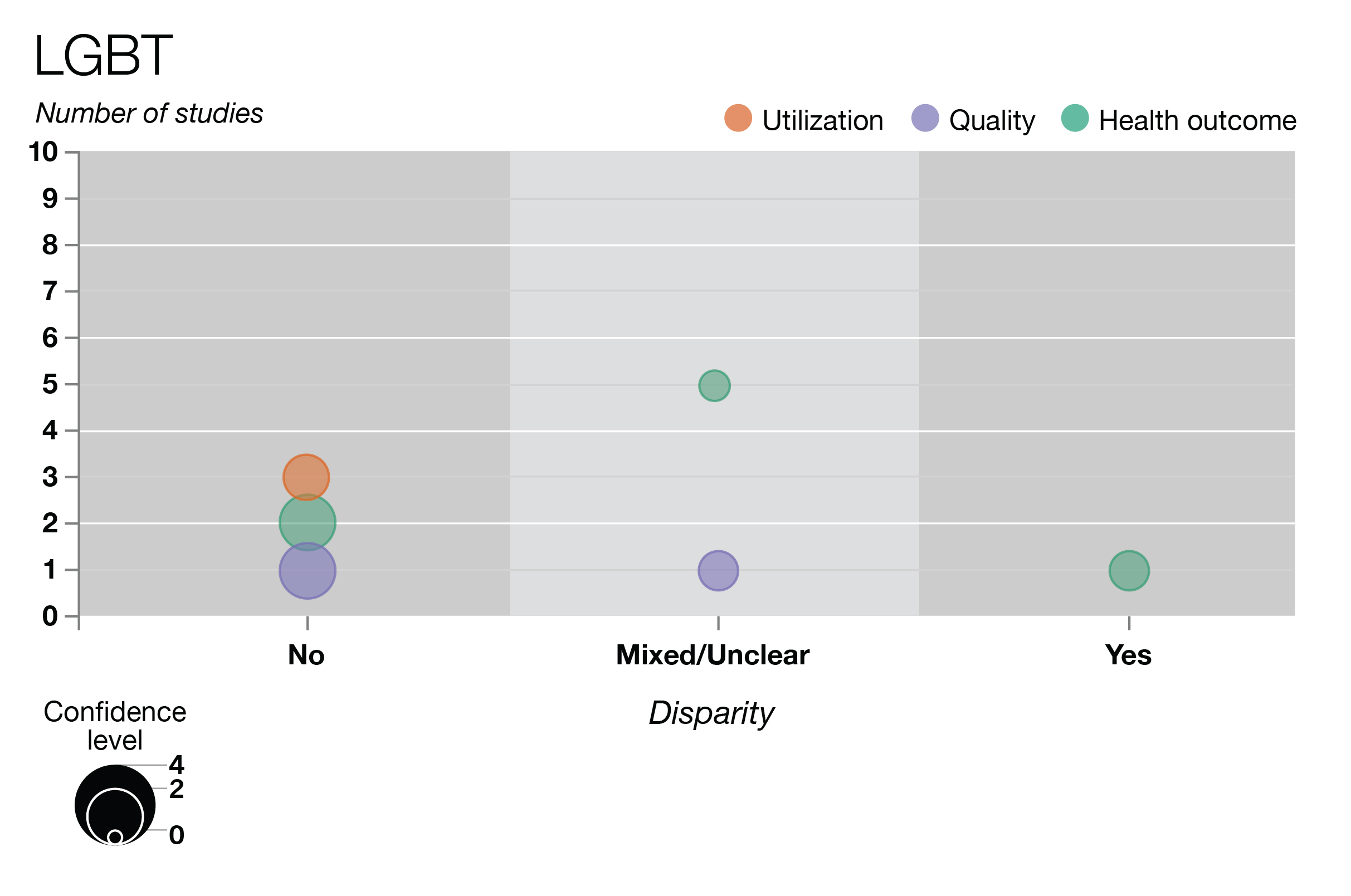


**Legend:** The bubble plot shows the number of studies identified (y-axis) that provided evidence of no disparity, mixed or unclear findings, or a disparity (x-axis) for each outcome category (utilization, quality, patient health outcomes). Bubble size represents the mean confidence score, with a range of -1 to 4.

**Supplemental Digital Content 36. Table: Health Disparities in VHA Patients by Era of Military Service**

| *Title* | *Clinical area* | *Total N* | *Outcomes* | *Category* | *Disparity* | *Confi-dence* |
| --- | --- | --- | --- | --- | --- | --- |
| Racial differences in the progression to cirrhosis and hepatocellular carcinoma in HCV-infected veterans[97](#_ENREF_97) | HCV, cancer (liver) | 149407 | Risk of cirrhosis or hepatocellular cancer | Health Outcome | Yes | 3 |
| Compensation and treatment: disability benefits and outcomes of U.S. veterans receiving residential PTSD treatment[334](#_ENREF_334) | Mental health (PTSD) | 786 | PTSD and Depression symptoms | Health Outcome | Yes | 0 |
| Female veterans of Iraq and Afghanistan seeking care from VA specialized PTSD programs: Comparison with male veterans and female war zone veterans of previous eras[225](#_ENREF_225) | Mental health (PTSD) | 1738 women | Diagnosis of PTSD, alcohol abuse/depression, drug abuse/depression, anxiety disorder, mood disorder, bipolar disorder, schizophrenia, medical problem; service connection for PTSD, other psychiatric disorder, or medical disorder; psychiatric disability and medical disability | Health Outcome | Mixed/ Unclear | 1 |
| Do Veterans with posttraumatic stress disorder receive first-line pharmacotherapy? Results from the Longitudinal Veterans Health Survey[335](#_ENREF_335) | Mental health (PTSD) | 972 | Initiating and receiving a therapeutic trial of an SSRI/SNRI | Quality | Yes | 1 |
| Compensation and treatment: disability benefits and outcomes of U.S. veterans receiving residential PTSD treatment[334](#_ENREF_334) | Mental health (PTSD) | 786 | Residential length of stay for PTSD | Utilization | Yes | 0 |
| Recent trends in the treatment of posttraumatic stress disorder and other mental disorders in the VHA[336](#_ENREF_336) | Mental health (PTSD) | 1100564 | Utilization (mental health visits) | Utilization | Mixed/ Unclear | 2 |
| Recognition and management of alcohol misuse in OEF/OIF and other veterans in the VA: a cross-sectional study[231](#_ENREF_231) | Mental health (substance use disorder) | 12092 | Prevalence of alcohol misuse | Health Outcome | Mixed/ Unclear | 2 |
| Recognition and management of alcohol misuse in OEF/OIF and other veterans in the VA: a cross-sectional study[231](#_ENREF_231) | Mental health (substance use disorder) | 12092 | Treatment for alcohol misuse | Quality | No | 2 |
| The quality of mental health care for veterans of Operation Enduring Freedom/Operation Iraqi Freedom[337](#_ENREF_337) | Mental health (substance use disorder) | 836699 | 11 processes of care were examined | Quality | No | 3 |
| Prevalence, predictors, and service utilization of patients with recurrent use of Veterans Affairs substance use disorder specialty care[232](#_ENREF_232) | Mental health (substance use disorder) | 1640 | Utilization of substance use disorder specialty services following an index encounter | Utilization | No | 0 |
| The quality of mental health care for veterans of Operation Enduring Freedom/Operation Iraqi Freedom[337](#_ENREF_337) | Mental health (substance use disorder) | 836699 | 7 utilization performance indicators were examined | Utilization | Mixed/ Unclear | 3 |
| Military generation and its relationship to mortality in women Veterans in the Women's Health Initiative[338](#_ENREF_338) | Mortality | 3719 | All-cause mortality (baseline-2010, max of 17 years) | Health Outcome | Mixed/ Unclear | 2 |
| Comparison of satisfaction with current prosthetic care in veterans and servicemembers from Vietnam and OIF/OEF conflicts with major traumatic limb loss[339](#_ENREF_339) | Prosthetic care | 581 | Patient satisfaction with care and current prosthesis | Quality | No | 0 |
| The effects of race and other socioeconomic factors on health service use among American military veterans[158](#_ENREF_158) | Utilization | 19270 | Utilization (outpatient, mental health) | Utilization | Mixed/ Unclear | 2 |
| What drives frequent emergency department use in an integrated health system? National data from the Veterans Health Administration[247](#_ENREF_247) | Utilization (ED) | 5531379 | VHA ED utilization | Utilization | No | 3 |
| Women veterans' healthcare delivery preferences and use by military service era: findings from the National Survey of Women Veterans[340](#_ENREF_340) | Women’s health, Utilization | 3607 | Utilization: any, VA, Women's health, primary care, mental health, specialty care, regular source of care | Utilization | Mixed/ Unclear | 0 |

**Supplemental Digital Content 37. Evidence Map: Health Disparities among LGBT Patients in the VHA**



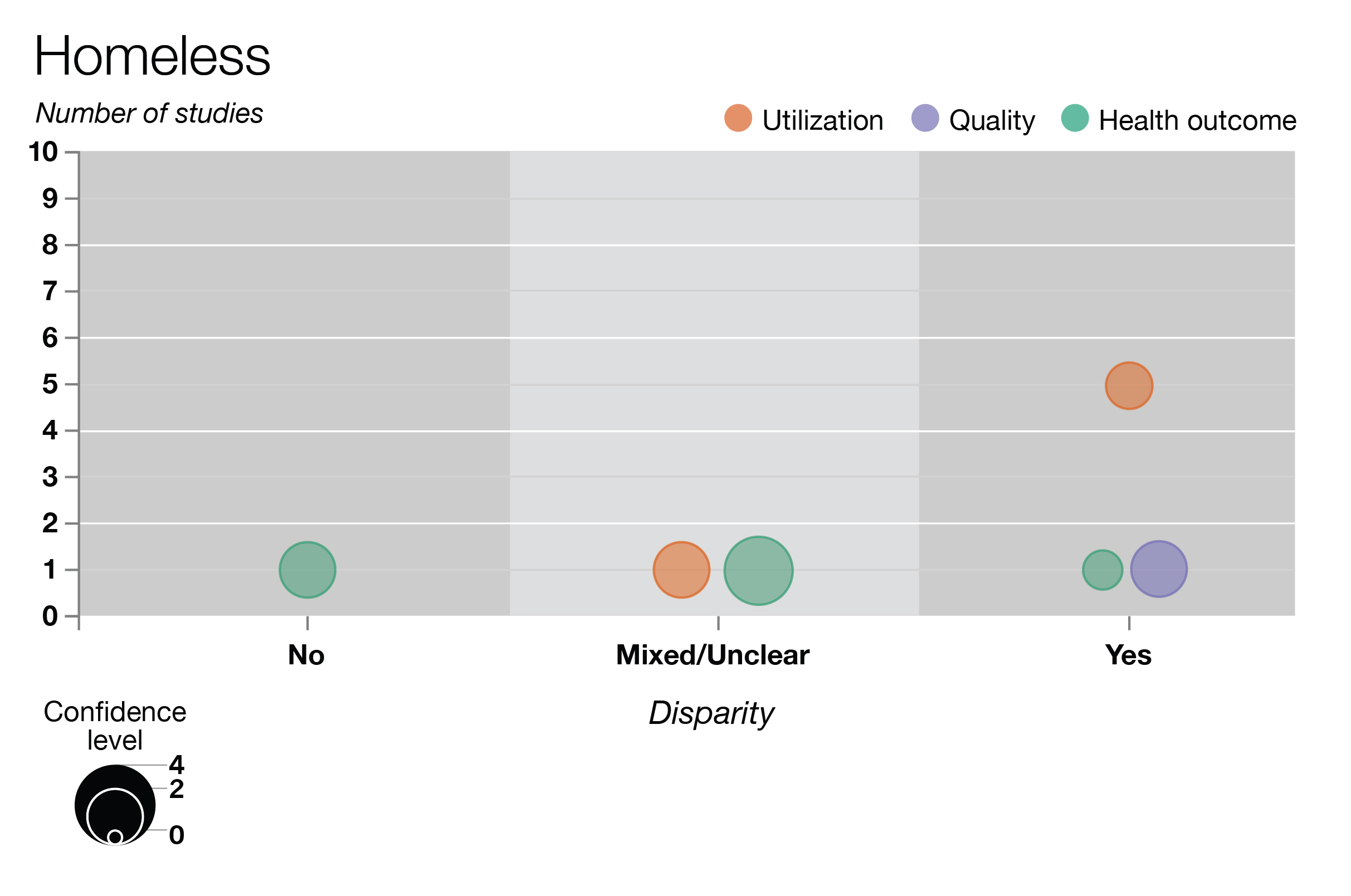
**Abbreviations:** LGBT =lesbian, gay, bisexual, and transgender.

**Legend:** The bubble plot shows the number of studies identified (y-axis) that provided evidence of no disparity, mixed or unclear findings, or a disparity (x-axis) for each outcome category (utilization, quality, patient health outcomes). Bubble size represents the mean confidence score, with a range of -1 to 4.

**Supplemental Digital Content 38. Table: Health Disparities among LGBT Patients in the VHA**

| *Title* | *Clinical area* | *Total N* | *Outcomes* | *Category* | *Disparity* | *Confi-dence* |
| --- | --- | --- | --- | --- | --- | --- |
| Health care utilization and health indicators among a national sample of U.S. veterans in same-sex partnerships[341](#_ENREF_341) | General health | 13927 | Health status | Health Outcome | No | 2 |
| Health disparities among sexual minority women veterans[342](#_ENREF_342) | General health | 1908 | Frequent mental distress, low satisfaction with life, >14 days poor physical health, disability requiring assistive device | Health outcome | Mixed/ Unclear | 1 |
| Physical health indicators among lesbian, gay, and bisexual US veterans[343](#_ENREF_343) | General health | 11665 | HRQOL | Health Outcome | No | 2 |
| Sexual victimization, health status, and VA healthcare utilization among lesbian and bisexual OEF/OIF veterans[344](#_ENREF_344) | General health | 335 | Diagnosed mental health condition, patient ratings of mental health status | Health Outcome | Mixed/ Unclear | 0 |
| Health disparities among sexual minority women veterans[342](#_ENREF_342) | General health | 1908 | Overweight, obesity, activity limitations, poor sleep, | Quality | Mixed/ Unclear | 1 |
| Physical health indicators among lesbian, gay, and bisexual US veterans[343](#_ENREF_343) | General health | 11665 | Flu shot in past 12 months, HIV test | Quality | No | 2 |
| Health care utilization and health indicators among a national sample of U.S. veterans in same-sex partnerships[341](#_ENREF_341) | General health | 13927 | VHA utilization | Utilization | No | 2 |
| Physical health indicators among lesbian, gay, and bisexual US veterans[343](#_ENREF_343) | General health | 11665 | Access | Utilization | No | 2 |
| Mental health and medical health disparities in 5135 transgender Veterans receiving healthcare in the Veterans Health Administration: a case-control study[345](#_ENREF_345) | Mental health | 20540 | Mental and physical health diagnoses | Health Outcome | Mixed/ Unclear | 2 |
| Trauma, posttraumatic stress disorder, and depression among sexual minority and heterosexual women veterans[346](#_ENREF_346) | Mental health (PTSD and Depression) | 706 | PTSD and depression diagnoses in hetero vs sexual minority women vets | Health outcome | Mixed/ Unclear | -1 |
| Examining sexual orientation disparities in alcohol misuse among women veterans[347](#_ENREF_347) | Mental health (substance use disorder) | 699 | Alcohol misuse | Health Outcome | Yes | 1 |
| Examining sexual orientation disparities in alcohol misuse among women veterans[347](#_ENREF_347) | Mental health (substance use disorder) | 699 | PTSD, depressive symptoms | Health Outcome | Yes | 1 |
| Suicidality among Veterans: implications of sexual minority status[348](#_ENREF_348) | Mental health (Suicidality) | 444 | Suicidal ideation and attempts | Health Outcome | Mixed/ Unclear | 1 |
| Sexual victimization, health status, and VA healthcare utilization among lesbian and bisexual OEF/OIF veterans[344](#_ENREF_344) | Mental health, Utilization | 335 | Utilization (medical, mental health) | Utilization | No | 0 |

**Supplemental Digital Content 39. Evidence Map:** **Health Disparities among Homeless VHA Patients**



**Legend:** The bubble plot shows the number of studies identified (y-axis) that provided evidence of no disparity, mixed or unclear findings, or a disparity (x-axis) for each outcome category (utilization, quality, patient health outcomes). Bubble size represents the mean confidence score, with a range of -1 to 4.

**Supplemental Digital Content 40. Table:** **Health Disparities among Homeless VHA Patients**

| *Title* | *Clinical area* | *Total N* | *Outcomes* | *Category* | *Disparity* | *Confi-dence* |
| --- | --- | --- | --- | --- | --- | --- |
| Self-reported access to general medical and psychiatric care among veterans with bipolar disorder[113](#_ENREF_113) | Mental health (Bipolar) | 435 | Patient perception of access to health and mental health | Utilization | Yes | 0 |
| Predisposing characteristics, enabling resources and need as predictors of utilization and clinical outcomes for veterans receiving mental health services[220](#_ENREF_220) | Mental health (multiple) | 421 | GAF, self-reported mental health (BASIS-24) | Health Outcome | No | 2 |
| Predisposing characteristics, enabling resources and need as predictors of utilization and clinical outcomes for veterans receiving mental health services[220](#_ENREF_220) | Mental health (multiple) | 421 | Mental health utilization (outpatient, inpatient, residential) | Utilization | Mixed/ Unclear | 2 |
| Reinstitutionalization following psychiatric discharge among VA patients with serious mental illness: a national longitudinal study[126](#_ENREF_126) | Mental health (serious mental illness) | 35527 | Time to reinstitutionalization/ rehospitalization | Health Outcome | Yes | 1 |
| New to care: demands on a health system when homeless veterans are enrolled in a medical home model[350](#_ENREF_350) | Utilization | 233 | Utilization: primary care, mental health, specialty care, ED | Utilization | Yes | 0 |
| VA health service utilization for homeless and low-income Veterans: a spotlight on the VA Supportive Housing (VASH) program in greater Los Angeles[333](#_ENREF_333) | Utilization | 62459 | Differences in service utilization (primary care, hospital, mental health, specialty) | Utilization | Yes | 1 |
| What drives frequent emergency department use in an integrated health system? National data from the Veterans Health Administration[247](#_ENREF_247) | Utilization (ED) | 5531379 | VHA ED utilization | Utilization | Yes | 3 |
| When health insurance is not a factor: national comparison of homeless and nonhomeless US veterans who use Veterans Affairs Emergency Departments[351](#_ENREF_351) | Utilization, mental and physical health | 930712 | Physical conditions and mental health | Health Outcome | Mixed/ Unclear | 3 |
| When health insurance is not a factor: national comparison of homeless and nonhomeless US veterans who use Veterans Affairs Emergency Departments[351](#_ENREF_351) | Utilization, mental and physical health | 930712 | Psychotropic medication | Quality | Yes | 2 |
| When health insurance is not a factor: national comparison of homeless and nonhomeless US veterans who use Veterans Affairs Emergency Departments[351](#_ENREF_351) | Utilization, mental and physical health | 930712 | ED Utilization | Utilization | Yes | 3 |