
VA versus Non-VA Quality of Care: A Living Systematic Review

Updated June 2024

VA



U.S. Department of Veterans Affairs

Veterans Health Administration
Health Systems Research

Recommended citation: Shekelle P, Maggard-Gibbons M, Blegen M, et al. VA versus Non-VA Quality of Care: A Living Systematic Review. Washington, DC: Evidence Synthesis Program, Health Systems Research, Office of Research and Development, Department of Veterans Affairs. VA ESP Project #05-226; 2024.

AUTHORS

Author roles, affiliations, and contributions (using the [CRediT taxonomy](#)) are listed below.

Author	Role and Affiliation	Report Contribution
Paul Shekelle, MD, PhD, MPH	Director, VA Greater Los Angeles Evidence Synthesis Program (ESP) Center Los Angeles, CA	Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Resources, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing
Melinda Maggard-Gibbons, MD	Staff Surgeon, VA Greater Los Angeles Assistant Professor, Surgery UCLA School of Medicine Los Angeles, CA	Conceptualization, Formal analysis, Investigation, Methodology, Supervision, Validation, Writing – original draft, Writing – review & editing
Mariah Blegen, MD	Research Fellow, VA Greater Los Angeles Fellow, National Clinician Scholars Program, UCLA Los Angeles, CA	Conceptualization, Formal analysis, Investigation, Methodology, Validation, Visualization, Writing – original draft, Writing – review & editing
Eric Apaydin, PhD, MPP, MS	Core Investigator, Center for the Study of Healthcare Innovation, Implementation and Policy, VA Greater Los Angeles Los Angeles, CA	Conceptualization, Formal analysis, Investigation, Methodology, Validation, Visualization, Writing – original draft, Writing – review & editing
Neil Paige, MD, MSHS	Staff Physician, VA Greater Los Angeles Los Angeles, CA	Conceptualization, Formal analysis, Investigation, Methodology, Validation, Visualization, Writing – original draft, Writing – review & editing
Jamie Ko, MPH	Research Associate on Surgical Team, VA Greater Los Angeles ESP Center Resident in Department of Surgery, David Geffen School of Medicine at UCLA Los Angeles, CA	Conceptualization, Formal analysis, Investigation, Methodology, Validation, Visualization, Writing – original draft, Writing – review & editing
Jesus Ulloa, MD, MBA, MSHPM	Staff Physician, Vascular Surgery, VA Greater Los Angeles Assistant Clinical Professor, Health Sciences, David Geffen School of Medicine, UCLA Los Angeles, CA	Conceptualization, Formal analysis, Investigation, Methodology, Validation, Visualization, Writing – original draft, Writing – review & editing
Garrett Salzman, MD, MS	Resident in Department of Surgery, David Geffen School of Medicine at UCLA Los Angeles, CA	Conceptualization, Formal analysis, Investigation, Methodology, Validation, Visualization, Writing – original draft, Writing – review & editing
Meron Begashaw, MPH	Project Coordinator, VA Greater Los Angeles ESP Center Los Angeles, CA	Data curation, Project administration, Software, Validation, Visualization, Writing – original draft, Writing – review & editing

Author	Role and Affiliation	Report Contribution
Mark D. Girgis, MD	Staff Surgeon, VA Greater Los Angeles Assistant Professor of Surgery, UCLA Los Angeles, CA	Conceptualization, Investigation, Methodology, Supervision, Validation
Emily Lawson, MSLIS, AHIP	Research and Consulting Librarian, RAND Corporation Santa Monica, CA	Data curation

PREFACE

The VA Evidence Synthesis Program (ESP) was established in 2007 to conduct timely, rigorous, and independent systematic reviews to support VA clinicians, program leadership, and policymakers improve the health of Veterans. ESP reviews have been used to develop evidence-informed clinical policies, practice guidelines, and performance measures; to guide implementation of programs and services that improve Veterans' health and wellbeing; and to set the direction of research to close important evidence gaps. Four ESP Centers are located across the US. Centers are led by recognized experts in evidence synthesis, often with roles as practicing VA clinicians. The Coordinating Center, located in Portland, Oregon, manages program operations, ensures methodological consistency and quality of products, engages with stakeholders, and addresses urgent evidence synthesis needs.

Nominations of review topics are solicited several times each year and submitted via the [ESP website](#). Topics are selected based on the availability of relevant evidence and the likelihood that a review on the topic would be feasible and have broad utility across the VA system. If selected, topics are refined with input from Operational Partners (below), ESP staff, and additional subject matter experts. Draft ESP reviews undergo external peer review to ensure they are methodologically sound, unbiased, and include all important evidence on the topic. Peer reviewers must disclose any relevant financial or non-financial conflicts of interest. In seeking broad expertise and perspectives during review development, conflicting viewpoints are common and often result in productive scientific discourse that improves the relevance and rigor of the review. The ESP works to balance divergent views and to manage or mitigate potential conflicts of interest.

ACKNOWLEDGMENTS

The authors are grateful to the following individuals for their contributions to this project:

Operational Partners

Operational partners are system-level stakeholders who help ensure relevance of the review topic to the VA, contribute to the development of and approve final project scope and timeframe for completion, provide feedback on the draft report, and provide consultation on strategies for dissemination of the report to the field and relevant groups.

Amy Kilbourne, PhD, MPH

*Acting Director, Health Systems Research
VA Office of Research and Development*

Gerard Cox, MD, MHA

*Assistant Under Secretary for Health for Quality and Patient Safety
Veterans Health Administration (VHA)*

Kristin Cunningham, PMP

*Executive Officer to the Deputy Under Secretary for Health for Community Care
VHA*

Julianne Flynn, MD

Acting Deputy to the Assistant Under Secretary for Health for Office of Community Care Performing the Delegable Duties to the Assistant Under Secretary for Health Office of Community Care

VHA

Chief of Staff

VA South Texas Health Care

Joseph Francis, MD, MPH

Executive Director for the Office of Analytics and Performance Integration in the Office of Quality and Patient Safety

VHA

Executive Summary

KEY FINDINGS

- ▶ This report updates an earlier review of evidence on the quality of VA care compared with non-VA care available through May 2024. Six additional studies published through October 2023 were included in this update, bringing the total number of relevant studies published since 2015 to 63 (23 of surgical care, 45 of non-surgical care, and 5 of both).
 - ▶ Most available studies have found that the quality and safety of VA care is as good as, or better than, care in the community.
 - ▶ Fewer studies have examined access to care, patient experience, and efficiency/cost of care. Findings from available studies are mixed but tend to favor VA care.
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The Department of Veterans Affairs (VA) Veterans Health Administration (VHA) is the nation's largest integrated health care system. Comparing the quality of VA-delivered health care to care delivered in non-VA settings is one way of ensuring VA maintains its commitment to providing high-quality care to Veterans. To support this aim, the VA's Evidence Synthesis Program (ESP) maintains a living systematic review of studies comparing the quality of VA and non-VA health care, which is frequently updated with the most recently available evidence.










CURRENT REVIEW

To identify relevant studies, a research librarian conducted broad searches using terms relating to *Veterans health* and *community health services* or *private sector* in PubMed, APA PsycINFO, and Web of Science databases (1/1/2015–5/9/2024). Studies were included at either the abstract or the full-text level if they were original research studies of any design and made comparisons about the quality of care provided in VA Medical Centers and outpatient clinics compared with care provided in other health systems, *ie*, the general population. We included outcomes in any Institute of Medicine health care domain (clinical quality, safety, efficiency/cost, access, patient experience, or equity). Data were collected by 2 reviewers working independently, with any disagreements resolved by consensus.

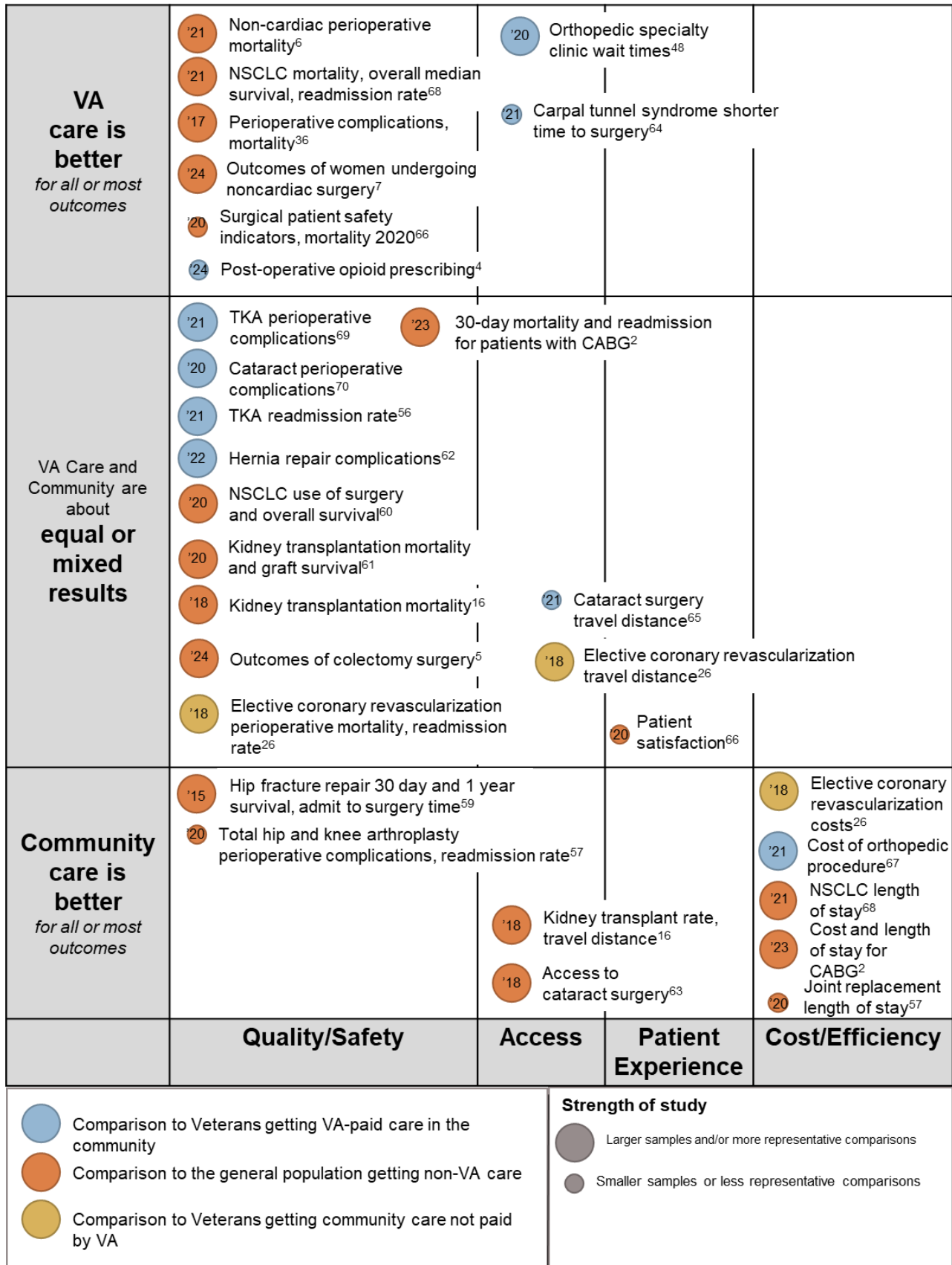
From 2,800 titles, we identified 45 studies of non-surgical care meeting inclusion criteria. From 2,793 titles, we identified 23 studies of surgical care meeting inclusion criteria. Five studies contributed data to both. Characteristics and findings of included studies are summarized in the figures below. In each plot, the domains of care are listed on the horizontal axis (quality/safety, access, patient experience, cost/efficiency, equity), the results of the study are listed on the vertical axis (VA care is better than community care, VA care and community care are about equal, or results are mixed, and community care is better than VA care), and then each study is entered as a shape, with larger shapes being studies of better quality and representativeness than studies depicted by smaller shapes. The color of the shape indicates the type of comparison: blue for studies comparing Veterans getting care from VA to Veterans getting VA-paid care in the community; orange for studies comparing Veterans getting care from VA and non-Veterans, or a general population, getting care in the community; and yellow for studies comparing Veterans getting care from VA to Veterans getting community care not paid by VA. Next to each shape is a brief thumbnail of what the study was about, and inside the shape is the year of publication ('18 = 2018, '19 = 2019, *etc*).

ES Figure 1. Evidence Map of Studies on the Quality of Non-Surgical Care

<p>VA care is better <i>for all or most outcomes</i></p>	<ul style="list-style-type: none"> '16 Post-stroke rehabilitation in nursing homes³¹ '18 Quality/safety outcomes in patients with elective coronary revascularization²⁶ '19 Outpatient chronic dialysis patients' two-year mortality³² '22 Completing genetic consultation after referral and engaging in cancer risk-reducing care after consultation⁴⁴ '22 Adenoma detection rate and compliance with surveillance guidelines in colorectal cancer care²⁰ '16 Medication treatment for patients with mental disorders⁴⁰ '17 Hospital patient safety indicators³⁶ '21 COPD mortality & readmission rates³⁸ 	<ul style="list-style-type: none"> '15 Several measures of mortality in patients with advanced chronic systolic HF¹⁴ '16 Inappropriate neuroimaging for headache and/or neuropathy¹⁷ '21 Diabetes process & outcome measures in patients without CVD¹⁵ '18 Use of dialysis and mortality in patients with ESRD³⁴ '20 Potentially avoidable hospitalizations after receipt of chemotherapy⁴³ '21 Rehospitalizations, successful nursing home discharges, & post-discharge ED visits among nursing home residents³⁰ '21 Post-kidney transplant care³⁵ '22 Mortality following ER visits⁴² '23 Mortality from COVID-19⁴¹ '23 Prescribing following acute myocardial infarction admission²⁹
<p><i>VA care and community care are about</i> equal or mixed results</p>	<ul style="list-style-type: none"> '18 Risk of hospitalization after dialysis³³ '22 Change in depression and PTSD outcomes¹⁹ '16 Acute myocardial infarction, heart failure & pneumonia mortality & readmission rates²⁷ '18 Various inpatient and outpatient experience measures³⁷ 	<ul style="list-style-type: none"> '17 Activities related to catheter-associated UTIs in nursing homes¹⁵ '22 Aggressive care at end of life²⁵ '23 Antibiotic prophylaxis for dental procedures⁴⁵ '18 Adequacy of antihypertensive medication treatment²⁸ '23 30-day mortality and readmission for several medical conditions²
<p>Community care is better <i>for all or most outcomes</i></p>	<ul style="list-style-type: none"> '18 Pulmonary rehabilitation use in COPD patients³⁹ '16 ED visits, hospitalizations, and readmissions for HF patients²³ 	<ul style="list-style-type: none"> '17 Quality of inpatient psychiatric care²⁴ '18 Mortality & receipt of kidney transplant¹⁶
Clinical Quality/Safety		
<p>Comparison being made: Veterans getting VA care vs...</p> <ul style="list-style-type: none"> ● Comparison to Veterans getting VA-paid care in the community ● Comparison to the general population getting non-VA care ● Comparison to Veterans getting community care not paid by VA 		<p>Strength of study</p> <ul style="list-style-type: none"> ● Larger samples and/or more representative comparisons ● Smaller samples or less representative comparisons

<p>VA care is better <i>for all or most outcomes</i></p>	<p>'20 Cardiology, gastroenterology, orthopedics, & urology wait times⁴⁸</p> <p>'21 Physical therapy, orthopedic care, optometry, & dental care decreases in wait times⁴⁷</p> <p>'22 Wait times in primary, mental health, & all other specialty care⁴⁹</p> <p>'19 Primary care, dermatology, cardiology, & orthopedics wait times⁴⁶</p> <p>'22 Receipt of influenza vaccine⁵⁵</p> <p>'24 End of life care³</p>	<p>'20 Outpatient primary, specialty, & mental health care patient-reported access to care⁵⁰</p> <p>'21 Outpatient primary & specialty care patient-reported provider ratings⁵¹</p> <p>'17 Prostate cancer patients receipt of guideline concordant care & imaging staging tests⁵²</p> <p>'22 Downstream utilization and cost-related to low-value PSA testing⁵⁴</p> <p>'22 Receipt of influenza vaccine⁵⁵</p> <p>'24 Racial and socioeconomic disparities in patients with prostate cancer¹</p>
<p><i>VA care and community care are about</i> equal or mixed results</p>	<p>'20 Outpatient primary, specialty, & mental health care patient-reported provider ratings⁵⁰</p> <p>'21 Outpatient primary & specialty care patient-reported provider ratings⁵¹</p> <p>'22 Barriers to mental health care¹⁹</p> <p>'22 Patient centeredness in mental health care¹⁹</p> <p>'17 Numerous patient experience indicators³⁶</p> <p>'18 Numerous patient experience indicators³⁷</p>	<p>'17 Yelp ratings for hospitals²¹</p> <p>'18 Cost/efficiency outcomes in patients with elective coronary revascularization²⁶</p> <p>'18 Days of hospitalization after dialysis³³</p> <p>'22 Number of encounters for mental health care¹⁹</p> <p>'21 Total inpatient, outpatient, & drug costs for end-of-life cancer care⁵³</p>
<p>Community care is better <i>for all or most outcomes</i></p>	<p>'18 Access outcomes in patients with elective coronary revascularization²⁶</p> <p>'22 Time to colonoscopy²⁰</p> <p>'23 Cost and length of stay for patients with several medical conditions²</p>	<p>'17 Self-reported delay in care in last 12 months¹⁸</p> <p>'18 Median distance to transplant center in miles¹⁶</p>
<p>Access, Patient Experience, Cost/Efficiency, Equity</p>		
<p>Comparison being made: Veterans getting VA care vs...</p> <ul style="list-style-type: none">  Comparison to Veterans getting VA-paid care in the community  Comparison to the general population getting non-VA care  Comparison to Veterans getting community care not paid by VA 		<p>Strength of study</p> <ul style="list-style-type: none">  Larger samples and/or more representative comparisons  Smaller samples or less representative comparisons <p> Access  Patient Experience  Cost/Efficiency  Equity</p>

ES Figure 2. Evidence Map of Studies on the Quality of Surgical Care



The large majority of studies assessed quality and safety, followed by comparisons of access to care. Few studies assessed patient experience or cost/efficiency. We found 1 study comparing VA to non-VA care on equity. Most studies found that the quality and safety of VA care is as good as, or better than, care in the community. This was the case for both surgical care and non-surgical care, and for community care of Veterans and community care of non-Veterans. For the domains of access and of cost/efficiency, findings were more mixed and about the same number of studies found that VA care is better, VA and community care are about the same, or that community care is better. The few studies of patient experience found that VA care and community care were about the same, or VA care was better. We did not identify any study that found that patient experience was better in community care. With only 1 exception in both the surgical and the non-surgical studies, VA-delivered care was as good as or better than Veterans received from VA-paid community care. We did not identify any studies comparing care for some conditions for which the MISSION act has resulted in increased community care, such as Physical Medicine and Rehabilitation.

NEW EVIDENCE SINCE OCTOBER 2023

This report updates an earlier review, which included evidence available through October 2023. Six additional studies published through May 2024 were included in this update. One study reported outcomes for both surgical care and non-surgical care, giving 4 new studies of surgical care and 3 new studies of non-surgical care. Among these is a second study assessing equity outcomes, which found that racial and socioeconomic disparities in prostate cancer outcomes seen in non-VA care were not present in VA care in California.¹

In a new study about clinical quality, Yoon and colleagues used data from VA and from 11 states with all-payer discharge data about non-VA care to compare mortality following Veterans being hospitalized for acute myocardial infarction, CABG, gastrointestinal hemorrhage, heart failure, pneumonia, and stroke at VA or non-VA hospitals.² In models adjusted for numerous clinical factors, Veteran patients treated in VA hospitals had lower 30-day mortality for stroke and for heart failure, although the latter was only seen in patients 65 years of age and over. There were no statistically significant differences in mortality outcomes for patients discharged for the other non-surgical conditions. Regarding CABG, 30-day operative mortality was not significantly different, but 30-day all-cause readmission rates favored VA. Length of stay and costs, however, were consistently higher for patients treated in VA as compared to non-VA hospitals.

In a study based on responses by family members to the VA Bereaved Family Survey, Wachterman and colleagues compared data on Veterans receiving end-of-life (EOL) care in VA Community Living Centers (CLC) or in VA-contracted community nursing homes (CNH).³ On all 15 items in the survey, family members of Veterans receiving EOL care in CLCs rated the care as superior to families of Veterans treated in CNHs (such as “staff always took time to listen,” “staff were always kind, caring and respectful,” staff always provided enough emotional support,” *etc*). The findings, however, are limited by the low response rates (overall = 35%) to the survey.

A study about joint replacement surgery compared the post-operative prescription of opioids. Between 2018 and 2021 there were 239 Veterans who received VA-paid care in the community and 323 Veterans who got surgery at the Salt Lake VAMC.⁴ The median number of opioids prescribed at discharge was 10 less at the VAMC (30.0, IQR = 10.0-47.5) compared to VA-paid community care (40.0, IQR = 30.0-60.0, $p < 0.01$).

Simmonds et al used data from VA Surgical Quality Improvement Program (VASQIP) and National Surgical Quality Improvement Program (NSQIP) to compare the outcomes of colectomy surgery.⁵ After excluding emergency cases, there were 235,097 cases in NSQIP and 11,115 cases in VASQIP. In the non-emergency cases, there was no statistically significant difference in adjusted 30-day mortality (1.2% vs 1.4%, $p = 0.145$) but overall morbidity favored care at VA (17.7% vs 22%, $p < 0.001$). In unadjusted results, some outcomes favored VA (organ space infection, post-operative pneumonia, DVT, UTI) while others favored non-VA care (return to OR, wound dehiscence, prolonged use of ventilator, cardiac arrest, post-operative sepsis). Stratified analysis showed greater variability in outcomes after open surgery between VA and non-VA care compared to laparoscopic cases.

In a study included in a prior report, George and colleagues⁶ compared mortality after non-cardiac surgery between VA NSQIP ($N = 3,174,274$) and NSQIP ($N = 736,477$).¹¹ The authors found that VA care was associated with lower risk of overall postoperative death (adjusted relative risk = 0.59, 95% CI [0.47, 0.75]; $p < 0.001$) and lower risk of postoperative death after a complication (adjusted relative risk = 0.55, 95% CI [0.44, 0.68]). For this update, these authors have extended this analysis to focus only on women Veterans, and observed similar results: adjusted relative risk of 30-day mortality was lower in VA (0.41, 95% CI [0.23, 0.76]; $p < 0.001$) and adjusted relative risk for failure to rescue was also lower in VA (0.41, 95% CI [0.18, 0.92]; $p < 0.001$).⁷

CONCLUSIONS

In general, most published studies of comparisons of quality of care show that Veterans getting care from VA get the same or better quality care than Veterans getting community care or the general public getting non-VA care. The most recently available evidence, published between October 2023 and May 2024, continues to support this conclusion.