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

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Appendix

SEARCH STRATEGIES

		Search Statement	Results
PubMed		"United States Department of Veterans Affairs"[mh] OR "Veterans Health"[mh] OR "veterans health services"[mh] OR "Hospitals, Veterans"[mh] OR "veterans affairs"[tiab] OR "veterans health"[tiab] OR "veterans choice"[tiab] AND Compar*[ti] OR "vs"[ti] OR versus[ti] OR difference[ti] OR "dually enrolled"[tiab] OR "dual system*"[tiab] OR "dual enrollment"[tiab] OR "overlapping use"[tiab] OR (examine*[tiab] AND (access*[tiab] OR availab*[tiab])) OR (("community care*"[tiab] OR "Community Health Services"[Majr]) AND impact*[tiab]) OR ((other[tiab] OR "private sector"[tiab] OR "non-VA"[tiab] OR medicare[tiab] OR "commercially managed"[tiab] OR "non veteran*"[tiab] OR "non VAMC"[tiab] OR "non va"[tiab] OR "non federal hospital*"[tiab] OR "university hospital*"[tiab] OR nonveteran*[tiab] OR "nonfederal hospital*"[tiab]) AND (compar*[tiab] OR comparative study[pt]))	
	1	**1/1/2015–3/9/2023**	**2200**
	2	**3/1/2023–10/6/2023**	**224**
	3	**10/1/2023–5/9/2024**	**238**
	4	**5/1/2024–11/14/2024**	**172**
PsycInfo		TI("Veterans Health" OR "veterans affairs" OR "veterans health" OR "veterans choice") OR AB("Veterans Health" OR "veterans affairs" OR "veterans health" OR "veterans choice") AND TI(Compar* OR "vs" OR versus OR difference) OR (TI("dually enrolled" OR "dual system*" OR "dual enrollment" OR "overlapping use") OR AB("dually enrolled" OR "dual system*" OR "dual enrollment" OR "overlapping use")) OR (TI(examine*) AND TI(access* OR availab*)) OR (TI(examine*) AND AB(access* OR availab*)) OR (AB(examine*) AND TI(access* OR availab*)) OR (AB(examine*) AND AB(access* OR availab*)) OR ((TI("community care*") OR AB("community care*") OR MM("Community Mental Health Services")) AND (TI(impact* OR AB(impact*))) OR (TI(other OR "private sector" OR "non-VA" OR medicare OR "commercially managed" OR "non veteran*" OR "non VAMC" OR "non va" OR "non federal hospital*" OR "university hospital*" OR nonveteran* OR "nonfederal hospital*") OR AB(other OR "private sector" OR "non-VA" OR medicare OR	

		"commercially managed" OR "non veteran*" OR "non VAMC" OR "non va" OR "non federal hospital*" OR "university hospital*" OR nonveteran* OR "nonfederal hospital*")) AND (TI(compar*) OR AB(compar*) OR TI("comparative study")))	
	1	**1/1/2015–3/10/2023**	**112**
	2	**3/1/2023–10/6/2023**	**3**
	3	**10/1/2023–5/9/2024**	**7**
	4	**5/1/2024–11/14/2024**	**5**
Web of Science		TI=("veterans affairs" OR "veterans health" OR "veterans choice" OR "veterans hospital") OR AB=("veterans affairs" OR "veterans health" OR "veterans choice" OR "veterans hospital") AND TI=(compar* OR "vs" OR versus OR difference) OR TI=("dually enrolled" OR "dual system*" OR "dual enrollment" OR "overlapping use") OR AB=("dually enrolled" OR "dual system*" OR "dual enrollment" OR "overlapping use") OR ((TI=(examine*) OR AB=(examine*)) AND (TI=(access* OR availab*) OR AB=(access* OR availab*))) OR ((TI=("community care*") OR AB=("community care*")) AND (TI=(impact*) OR AB=(impact*))) OR (TI=(other OR "private sector" OR "non-VA" OR medicare OR "commercially managed" OR "non veteran*" OR "non VAMC" OR "non va" OR "non federal hospital*" OR "university hospital*" OR nonveteran* OR "nonfederal hospital*") OR AB=(other OR "private sector" OR "non-VA" OR medicare OR "commercially managed" OR "non veteran*" OR "non VAMC" OR "non va" OR "non federal hospital*" OR "university hospital*" OR nonveteran* OR "nonfederal hospital*")) AND (TI=(compar*) OR AB=(compar*))	
	1	**1/1/2015–3/15/2023**	**136**
	2	**3/1/2023–10/6/2023**	**17**
	3	**10/1/2023—5/9/2024**	**158**
	4	**5/1/2024–11/14/2024**	**14**
		Total	**3,543**
		Total after deduplication	**2,991**

STUDIES WITH UNREPRESENTATIVE SAMPLES OR COMPARISONS

Citation
Bartel, M. J., D. J. Robertson and H. Pohl (2016). "Colonoscopy practice for veterans within and outside the Veterans Affairs setting: a matched cohort study." Gastrointest Endosc 84(2): 272-278.
Chao, D., H. Buddha, C. Damodaran, L. Tran, R. Strong and C. S. Jackson (2020). "Outcomes Comparison of the Veterans' Choice Program With the Veterans Affairs Health Care System for Hepatitis C Treatment." Fed Pract 37(Suppl 3): S18-s24.
Cullen, S. W., M. Xie, J. M. Vermeulen and S. C. Marcus (2019). "Comparing Rates of Adverse Events and Medical Errors on Inpatient Psychiatric Units at Veterans Health Administration and Community-based General Hospitals." Med Care 57(11): 913-920.
Dizon, M.P., et al., Comparing the Quality of Ambulatory Surgical Care for Skin Cancer in a Veterans Affairs Clinic and a Fee-For-Service Practice Using Clinical and Patient-Reported Measures. PLoS One, 2017. 12(1): p. e0171253.
Dueker, J. M. and A. Khalid (2020). "Performance of the Veterans Choice Program for Improving Access to Colonoscopy at a Tertiary VA Facility." Fed Pract 37(5): 224-228.
Geraci, T., et al., Lobectomy for Lung Cancer at Veterans Administration Medical Center Versus Academic Medical Center. Ann Thorac Surg, 2017. 103(6): p. 1715-1722.
Grubbs, K. M., J. C. Fortney, J. Pyne, D. Mittal, J. Ray and T. J. Hudson (2018). "A Comparison of Collaborative Care Outcomes in Two Health Care Systems: VA Clinics and Federally Qualified Health Centers." Psychiatr Serv 69(4): 431-437.

STUDIES EXCLUDED DURING FULL-TEXT SCREENING

NON-SURGICAL CARE

Ineligible Comparison, N = 61

1. Augustine, M.R., et al., Reasons Older Veterans Use the Veterans Health Administration and Non-VHA Care in an Urban Environment. J Am Board Fam Med, 2021. 34(2): p. 291-300.
2. Benzer, J.K., et al., Survey of Patient-Centered Coordination of Care for Diabetes with Cardiovascular and Mental Health Comorbidities in the Department of Veterans Affairs. Journal of General Internal Medicine, 2019. 34(1): p. 43-49.
3. Bouldin, E.D., et al., Medicare-VHA dual use is associated with poorer chronic wound healing. Wound Repair Regen, 2016. 24(5): p. 913-922.
4. Burke, J.F. and B.C. Callaghan, Author response: Neuroimaging overuse is more common in Medicare compared with the VA. Neurology, 2017. 88(6): p. 608.
5. Chen, V.W., et al., Case Sampling vs Universal Review for Evaluating Hospital Postoperative Mortality in US Surgical Quality Improvement Programs. JAMA Surg, 2023.
6. Dayoub, E.J., et al., Federal Payments for Coronary Revascularization Procedures Among Dual Enrollees in Medicare Advantage and the Veterans Affairs Health Care System. JAMA Netw Open, 2020. 3(4): p. e201451.
7. Desmarais, J. and C.Q. Chu, Utility of Anakinra in Acute Crystalline Diseases: A Retrospective Study Comparing a University Hospital with a Veterans Affairs Medical Center. J Rheumatol, 2019. 46(7): p. 748-750.
8. Ebrahimi, R., et al., Trends in Cardiovascular Disease Mortality in US Women Veterans vs Civilians. JAMA Netw Open, 2023. 6(10): p. e2340242.
9. Feyman, Y., A. Legler, and K.N. Griffith, Appointment wait time data for primary & specialty care in veterans health administration facilities vs. community medical centers. Data Brief, 2021. 36: p. 107134.
10. Gidwani-Marszowski, R., et al., Quality Of End-Of-Life Care Is Higher In The VA Compared To Care Paid For By Traditional Medicare. Health Aff (Millwood), 2018. 37(1): p. 95-103.
11. Govier, D.J., et al., Early Impact of VA MISSION Act Implementation on Primary Care Appointment Wait Time. J Gen Intern Med, 2023. 38(4): p. 889-897.
12. Griebling, T.L., Re: Comparing Catheter-Associated Urinary Tract Infection Prevention Programs between Veterans Affairs Nursing Homes and Non-Veterans Affairs Nursing Homes. J Urol, 2018. 200(6): p. 1142.
13. Hebert, P.L., et al., Reliance on Medicare Providers by Veterans after Becoming Age-Eligible for Medicare is Associated with the Use of More Outpatient Services. Health Serv Res, 2018. 53 Suppl 3(Suppl Suppl 3): p. 5159-5180.
14. Johnston, J.C. and T.P. Sartwelle, Letter re: Neuroimaging overuse is more common in Medicare compared with the VA. Neurology, 2017. 88(6): p. 608.
15. Jones, A.L., et al., National Media Coverage of the Veterans Affairs Waitlist Scandal: Effects on Veterans' Distrust of the VA Health Care System. Med Care, 2021. 59(Suppl 3): p. S322-S326.
16. Klyce, D.W., et al., Suicide Attempts and Ideation Among Veterans/Service Members and Non-Veterans Over 5 Years Following Traumatic Brain Injury: A Combined NIDILRR and VA TBI Model Systems Study. J Head Trauma Rehabil, 2023.

17. Krishnamurthy, S., et al., Racial and Ethnic Differences in Health Care Experiences for Veterans Receiving VA Community Care from 2016 to 2021. J Gen Intern Med, 2024. 39(12): p. 2249-2260.
18. Leonard, C., et al., Operationalizing an Implementation Framework to Disseminate a Care Coordination Program for Rural Veterans. Journal of General Internal Medicine, 2019. 34(1): p. 58-66.
19. Lewinski, A.A., et al., Applied Rapid Qualitative Analysis to Develop a Contextually Appropriate Intervention and Increase the Likelihood of Uptake. Med Care, 2021. 59(Suppl 3): p. S242-S251.
20. Loganathan, S.K., et al., Racial and Ethnic Differences in Satisfaction with Care Coordination Among VA and non-VA Medicare Beneficiaries. Health Equity, 2017. 1(1): p. 50-60.
21. Machlin, S.R. and P. Muhuri, Characteristics and Health Care Expenditures of VA Health System Users versus Other Veterans, 2014-2015 (Combined), in Statistical Brief (Medical Expenditure Panel Survey (US)). 2001, Agency for Healthcare Research and Quality (US): Rockville (MD).
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23. Mattocks, K.M., et al., Understanding Maternity Care Coordination for Women Veterans Using an Integrated Care Model Approach. Journal of General Internal Medicine, 2019. 34(1): p. 50-57.
24. McAlpine, K., et al., Surgeon-level versus hospital-level quality variance in kidney cancer surgery. Urol Oncol, 2023. 41(5): p. 257.e7-257.e17.
25. McCreight, M.S., et al., Practical Use of Process Mapping to Guide Implementation of a Care Coordination Program for Rural Veterans. Journal of General Internal Medicine, 2019. 34(1): p. 67-74.
26. Mohr, D.C., et al., Organizational Coordination and Patient Experiences of Specialty Care Integration. Journal of General Internal Medicine, 2019. 34(1): p. 30-36.
27. Morral, A.R., T.L. Schell, and R. Smart, Comparison of Suicide Rates Among US Veteran and Nonveteran Populations. JAMA Netw Open, 2023. 6(7): p. e2324191.
28. Mudumbai, S.C., et al., Perioperative Opioid Prescribing Patterns and Readmissions After Total Knee Arthroplasty in a National Cohort of Veterans Health Administration Patients. Pain Med, 2020. 21(3): p. 595-603.
29. Nadpara, P.A., et al., Risk Factors for Serious Prescription Opioid-Induced Respiratory Depression or Overdose: Comparison of Commercially Insured and Veterans Health Affairs Populations. Pain Med, 2018. 19(1): p. 79-96.
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31. Nelson, R.E., et al., Costs Associated with Health Care Services Accessed through VA and in the Community through Medicare for Veterans Experiencing Homelessness. Health Serv Res, 2018. 53 Suppl 3(Suppl Suppl 3): p. 5352-5374.
32. New, M.L., et al., Differences in VA and Non-VA Pulmonary Nodules: All Evaluations Are not Created Equal. Clin Lung Cancer, 2023. 24(5): p. 407-414.
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34. Nuti, S.V., L. Qin, and H.M. Krumholz, Outcome After Admission at Veterans Affairs vs Non-Veterans Affairs Hospitals--Reply. Jama, 2016. 316(3): p. 346.

35. O'Hanlon, C.E., C. Farmer, and C. Gidengil, Comparing VA to Non-VA Care. J Gen Intern Med, 2017. 32(2): p. 152.
36. Olmos-Ochoa, T.T., et al., Staff Perspectives on Primary Care Teams as De Facto "Hubs" for Care Coordination in VA: a Qualitative Study. Journal of General Internal Medicine, 2019. 34(1): p. 82-89.
37. Pershing, S., et al., Treating age-related macular degeneration: comparing the use of two drugs among medicare and veterans affairs populations. Health Aff (Millwood), 2015. 34(2): p. 229-38.
38. Peterson, K., et al., Health Care Coordination Theoretical Frameworks: a Systematic Scoping Review to Increase Their Understanding and Use in Practice. Journal of General Internal Medicine, 2019. 34(1): p. 90-98.
39. Radomski, T.R., M.J. Fine, and W.F. Gellad, Outcome After Admission at Veterans Affairs vs Non-Veterans Affairs Hospitals. Jama, 2016. 316(3): p. 345-6.
40. Radomski, T.R., et al., The Impact of Medication-Based Risk Adjustment on the Association Between Veteran Health Outcomes and Dual Health System Use. J Gen Intern Med, 2017. 32(9): p. 967-973.
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43. Rinne, S.T., et al., VA Provider Perspectives on Coordinating COPD Care Across Health Systems. Journal of General Internal Medicine, 2019. 34(1): p. 37-42.
44. Rose, D.E., et al., Variations in VA and Medicare Use Among Veterans With Diabetes: Impacts on Ambulatory Care Sensitive Conditions Hospitalizations for 2008, 2009, and 2010. Med Care, 2019. 57(6): p. 425-436.
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46. Rosen, A.K., et al., Racial and Ethnic and Rural Variations in Access to Primary Care for Veterans Following the MISSION Act. JAMA Health Forum, 2024. 5(6): p. e241568.
47. Rosenberg, K., End-Of-Life Cancer Care For Veterans Through The VA Vs. Medicare. Am J Nurs, 2018. 118(5): p. 70.
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49. Trivedi, A.N., et al., Agreement Between HEDIS Performance Assessments in the VA and Medicare Advantage: Is Quality in the Eye of the Beholder? Inquiry, 2016. 53.
50. Tummalapalli, S.L. and S. Keyhani, Trends in Preventative Health Services for Veterans with Military Coverage Compared to Non-Military Coverage. J Gen Intern Med, 2020. 35(4): p. 1330-1333.
51. Valle, J.A., et al., Dual antiplatelet therapy in non-ST elevation acute coronary syndromes at Veterans Affairs Hospitals. Heart, 2019. 105(20): p. 1575-1582.
52. Veet, C.A., et al., Impact of Healthcare Delivery System Type on Clinical, Utilization, and Cost Outcomes of Patient-Centered Medical Homes: a Systematic Review. J Gen Intern Med, 2020. 35(4): p. 1276-1284.
53. Ward, R., et al., An Evaluation of Statin Use Among Patients with Type 2 Diabetes at High Risk of Cardiovascular Events Across Multiple Health Care Systems. J Manag Care Spec Pharm, 2020. 26(9): p. 1090-1098.

54. Weeks, W.B., Comparing VA to Non-VA Care. J Gen Intern Med, 2017. 32(2): p. 150-151.
55. Weinberger, D.M., et al., Excess Mortality Among Patients in the Veterans Affairs Health System Compared With the Overall US Population During the First Year of the COVID-19 Pandemic. JAMA Netw Open, 2023. 6(5): p. e2312140.
56. Wong, E.S., et al., Impact of VHA's primary care intensive management program on dual system use. Healthc (Amst), 2020. 8(3): p. 100450.
57. Wray, C.M., M. Khare, and S. Keyhani, Access to Care, Cost of Care, and Satisfaction With Care Among Adults With Private and Public Health Insurance in the US. JAMA Netw Open, 2021. 4(6): p. e2110275.
58. Wray, C.M., L. Lopez, and S. Keyhani, "Comparing VA and Non-VA Care Quality". J Gen Intern Med, 2019. 34(4): p. 485.
59. Yoon, J., et al., Use of the Veterans' Choice Program and Attrition From Veterans Health Administration Primary Care. Med Care, 2020. 58(12): p. 1091-1097.
60. Yu, M.K., et al., Trends in Timing of Dialysis Initiation within Versus Outside the Department of Veterans Affairs. Clin J Am Soc Nephrol, 2015. 10(8): p. 1418-27.
61. Zulman, D.M., et al., Effects of Intensive Primary Care on High-Need Patient Experiences: Survey Findings from a Veterans Affairs Randomized Quality Improvement Trial. Journal of General Internal Medicine, 2019. 34(1): p. 75-81.

Ineligible Outcome, N = 3

1. Dismuke-Greer, C.E., et al., Economic impact of comorbid TBI-dementia on VA facility and non-VA facility costs, 2000-2020. Brain Inj, 2022. 36(5): p. 673-682.
2. Wray, C., et al., Digital Health Skillsets and Digital Preparedness: Comparison of Veterans Health Administration Users and Other Veterans Nationally. JMIR Form Res, 2022. 6(1): p. e32764.
3. Scruggs-Wodkowski, E., et al., Comparing practices to prevent infectious diseases transmission among Veterans Affairs and Nonveterans Affairs hospitals: Results from a national survey in the United States. Am J Infect Control, 2024. 52(4): p. 495-497.

Ineligible Setting (Surgery), N = 9

1. Billig, J.I., et al., The Impact of Community Care Referral on Time to Surgery for Veterans With Carpal Tunnel Syndrome. Med Care, 2021. 59(Suppl 3): p. S279-S285.
2. Buys, M.J., et al., Postsurgical opioid prescribing among veterans using community care for orthopedic surgery at non-VA hospitals compared to a VA hospital with a transitional pain service: a retrospective cohort study. Reg Anesth Pain Med, 2024.
3. George, E.L., et al., Comparing Veterans Affairs and Private Sector Perioperative Outcomes After Noncardiac Surgery. JAMA Surg, 2021.
4. George, E.L., et al., Outcomes of Women Undergoing Noncardiac Surgery in Veterans Affairs Compared With Non-Veterans Affairs Care Settings. JAMA Surg, 2024. 159(5): p. 501-509.
5. Harris, A.H.S., et al., Comparing Complication Rates After Elective Total Knee Arthroplasty Delivered Or Purchased By The VA. Health Aff (Millwood), 2021. 40(8): p. 1312-1320.
6. Pettey, W.B.P., et al., Comparing Driving Miles for Department of Veterans Affairs-delivered Versus Department of Veterans Affairs-purchased Cataract Surgery. Med Care, 2021. 59(Suppl 3): p. S307-S313.
7. Rosen, A. K., E. E. Beilstein-Wedel, A. H. S. Harris, M. Shwartz, M. E. Vanneman, T. H. Wagner and N. J. Giori (2022). "Comparing Postoperative Readmission Rates Between

Veterans Receiving Total Knee Arthroplasty in the Veterans Health Administration Versus Community Care." Med Care 60(2): 178-186.
8. Simmonds, A., et al., Comparing Outcomes in Patients Undergoing Colectomy at Veteran Affairs Hospitals and Non-Veteran Affairs Hospitals: A Multiinstitutional Study. J Surg Res, 2024. 295: p. 449-456.
9. Tripathi, S.H., et al., Comparison of Outcomes After Cochlear Implantation in a Veteran Versus Nonveteran Population. Otol Neurotol Open, 2024. 4(3): p. e058.

Ineligible Publication Type, N = 6

1. Garvin, L.A., et al., Interorganizational Care Coordination of Rural Veterans by Veterans Affairs and Community Care Programs: A Systematic Review. Med Care, 2021. 59(Suppl 3): p. S259-S269.
2. Gordon, S.H., et al., County-level Predictors of Growth in Community-based Primary Care Use Among Veterans. Med Care, 2021. 59(Suppl 3): p. S301-S306.
3. Greenstone, C.L., et al., Standardizing Care Coordination Within the Department of Veterans Affairs. Journal of General Internal Medicine, 2019. 34(1): p. 4-6.
4. Hynes, D.M., et al., Veterans' Use of Veterans Health Administration Primary Care in an Era of Expanding Choice. Med Care, 2021. 59(Suppl 3): p. S292-S300.
5. Mattocks, K.M., et al., Understanding VA's Use of and Relationships With Community Care Providers Under the MISSION Act. Med Care, 2021. 59(Suppl 3): p. S252-S258.
6. Vashi, A.A., et al., Community Urgent Care Use Following Implementation of the Veterans Affairs Maintaining Internal Systems and Strengthening Integrated Outside Networks Act. Med Care, 2021. 59(Suppl 3): p. S314-S321.

Ineligible Design (Non-Research or Qualitative Study), N = 8

1. Cordasco, K.M., et al., Coordinating Care Across VA Providers and Settings: Policy and Research Recommendations from VA's State of the Art Conference. Journal of General Internal Medicine, 2019. 34(1): p. 11-17.
2. Cordasco, K.M., et al., Improving Care Coordination for Veterans Within VA and Across Healthcare Systems. Journal of General Internal Medicine, 2019. 34(1): p. 1-3.
3. Gittell, J.H. and L. Hajjar, Strengthening Patient-Centered Care in the VHA: A Relational Model of Change. Journal of General Internal Medicine, 2019. 34(1): p. 7-10.
4. Lafferty, M., D. J. Govier, S. E. Golden, N. G. Disher, D. M. Hynes and C. G. Slatore (2023). "VA-Delivered or VA-Purchased Care: Important Factors for Veterans Navigating Care Decisions." J Gen Intern Med 38(7): 1647-1654.
5. Mattocks, K.M., et al., Recommendations for the Evaluation of Cross-System Care Coordination from the VA State-of-the-art Working Group on VA/Non-VA Care. Journal of General Internal Medicine, 2019. 34(1): p. 18-23.
6. Mattocks, K.M., et al., Innovations in Community Care Programs, Policies, and Research. Med Care, 2021. 59(Suppl 3): p. S229-S231.
7. McDonald, K.M., et al., Incorporating Theory into Practice: Reconceptualizing Exemplary Care Coordination Initiatives from the US Veterans Health Delivery System. Journal of General Internal Medicine, 2019. 34(1): p. 24-29.
8. Mengeling, M.A., et al., Partnership Forum: The Role of Research in the Transformation of Veterans Affairs Community Care. Med Care, 2021. 59(Suppl 3): p. S232-S241.

Unrepresentative Sample or Comparison, N = 5

1. Bartel, M.J., D.J. Robertson, and H. Pohl, Colonoscopy practice for veterans within and outside the Veterans Affairs setting: a matched cohort study. Gastrointest Endosc, 2016. 84(2): p. 272-8.
2. Chao, D., et al., Outcomes Comparison of the Veterans' Choice Program With the Veterans Affairs Health Care System for Hepatitis C Treatment. Fed Pract, 2020. 37(Suppl 3): p. S18-s24.
3. Cullen, S.W., et al., Comparing Rates of Adverse Events and Medical Errors on Inpatient Psychiatric Units at Veterans Health Administration and Community-based General Hospitals. Med Care, 2019. 57(11): p. 913-920.
4. Dueker, J.M. and A. Khalid, Performance of the Veterans Choice Program for Improving Access to Colonoscopy at a Tertiary VA Facility. Fed Pract, 2020. 37(5): p. 224-228.
5. Grubbs, K.M., et al., A Comparison of Collaborative Care Outcomes in Two Health Care Systems: VA Clinics and Federally Qualified Health Centers. Psychiatr Serv, 2018. 69(4): p. 431-437.

SURGICAL CARE

Ineligible Comparison, N = 21

1. Benzer, J.K., et al., Survey of Patient-Centered Coordination of Care for Diabetes with Cardiovascular and Mental Health Comorbidities in the Department of Veterans Affairs. Journal of General Internal Medicine, 2019. 34(1): p. 43-49.
2. Billig, J.I., et al., Surgical Timing for Carpal Tunnel Syndrome: A Comparison of Health Care Delivery in the Veterans Administration and Private Sector. J Hand Surg Am, 2021. 46(7): p. 544-551.
3. Clarke, E.L., et al., Association of Tumor Characteristics With Insurance Type Among Patients Undergoing Mohs Micrographic Surgery for Nonmelanoma Skin Cancer. JAMA Dermatol, 2022. 158(8): p. 919-922.
4. Dayoub, E.J., et al., Federal Payments for Coronary Revascularization Procedures Among Dual Enrollees in Medicare Advantage and the Veterans Affairs Health Care System. JAMA Netw Open, 2020. 3(4): p. e201451.
5. Jones, A.L., et al., National Media Coverage of the Veterans Affairs Waitlist Scandal: Effects on Veterans' Distrust of the VA Health Care System. Med Care, 2021. 59(Suppl 3): p. S322-S326.
6. Krishnamurthy, S., et al., Racial and Ethnic Differences in Health Care Experiences for Veterans Receiving VA Community Care from 2016 to 2021. J Gen Intern Med, 2024. 39(12): p. 2249-2260.
7. Leonard, C., et al., Operationalizing an Implementation Framework to Disseminate a Care Coordination Program for Rural Veterans. Journal of General Internal Medicine, 2019. 34(1): p. 58-66.
8. Lewinski, A.A., et al., Applied Rapid Qualitative Analysis to Develop a Contextually Appropriate Intervention and Increase the Likelihood of Uptake. Med Care, 2021. 59(Suppl 3): p. S242-S251.
9. Mattocks, K.M., et al., Understanding Maternity Care Coordination for Women Veterans Using an Integrated Care Model Approach. Journal of General Internal Medicine, 2019. 34(1): p. 50-57.
10. McCreight, M.S., et al., Practical Use of Process Mapping to Guide Implementation of a Care Coordination Program for Rural Veterans. Journal of General Internal Medicine, 2019. 34(1): p. 67-74.
11. Mohr, D.C., et al., Organizational Coordination and Patient Experiences of Specialty Care Integration. Journal of General Internal Medicine, 2019. 34(1): p. 30-36.
12. Mudumbai, S.C., et al., Perioperative Opioid Prescribing Patterns and Readmissions After Total Knee Arthroplasty in a National Cohort of Veterans Health Administration Patients. Pain Med, 2020. 21(3): p. 595-603.
13. Mull, H.J., et al., Emergency Department Use After Outpatient Surgery Among Dually Enrolled VA and Medicare Patients. Qual Manag Health Care, 2019. 28(4): p. 191-199.
14. Napolitano, M.A., et al., Direct Comparison of Outcomes After Transcatheter Aortic Valve Replacement in Veterans and Non-Veterans Using the Transcatheter Valve Therapy Registry. J Invasive Cardiol, 2022. 34(8): p. E601-e610.
15. Olmos-Ochoa, T.T., et al., Staff Perspectives on Primary Care Teams as De Facto “Hubs” for Care Coordination in VA: a Qualitative Study. Journal of General Internal Medicine, 2019. 34(1): p. 82-89.

16. Peterson, K., et al., Health Care Coordination Theoretical Frameworks: a Systematic Scoping Review to Increase Their Understanding and Use in Practice. Journal of General Internal Medicine, 2019. 34(1): p. 90-98.
17. Rinne, S.T., et al., VA Provider Perspectives on Coordinating COPD Care Across Health Systems. Journal of General Internal Medicine, 2019. 34(1): p. 37-42.
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Ineligible Setting (Non-Surgery), N = 25

1. Axon, R.N., et al., Trends in Veteran hospitalizations and associated readmissions and emergency department visits during the MISSION Act era. Health Serv Res, 2024. 59(5): p. e14332.
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6. Davila, H., et al., Rural Veterans' Experiences With Outpatient Care in the Veterans Health Administration Versus Community Care. Med Care, 2021. 59(Suppl 3): p. S286-S291.
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17. Resnik, L., A.I. Roberts, and M. Borgia, Racial disparities in prosthesis use, satisfaction, and physical function in upper limb amputation and the impact of veteran status. Pm r, 2024.
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Ineligible Publication Type, N = 11

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2. Gordon, S.H., et al., County-level Predictors of Growth in Community-based Primary Care Use Among Veterans. Med Care, 2021. 59(Suppl 3): p. S301-S306.
3. Greenstone, C.L., et al., Standardizing Care Coordination Within the Department of Veterans Affairs. Journal of General Internal Medicine, 2019. 34(1): p. 4-6.
4. Hynes, D.M., et al., Veterans' Use of Veterans Health Administration Primary Care in an Era of Expanding Choice. Med Care, 2021. 59(Suppl 3): p. S292-S300.
5. Mattocks, K.M., et al., Understanding VA's Use of and Relationships With Community Care Providers Under the MISSION Act. Med Care, 2021. 59(Suppl 3): p. S252-S258.
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Ineligible Design (Non-Research), N = 7

1. Cordasco, K.M., et al., Coordinating Care Across VA Providers and Settings: Policy and Research Recommendations from VA's State of the Art Conference. Journal of General Internal Medicine, 2019. 34(1): p. 11-17.
2. Cordasco, K.M., et al., Improving Care Coordination for Veterans Within VA and Across Healthcare Systems. Journal of General Internal Medicine, 2019. 34(1): p. 1-3.
3. Gittell, J.H. and L. Hajjar, Strengthening Patient-Centered Care in the VHA: A Relational Model of Change. Journal of General Internal Medicine, 2019. 34(1): p. 7-10.
4. Mattocks, K.M., et al., Recommendations for the Evaluation of Cross-System Care Coordination from the VA State-of-the-art Working Group on VA/Non-VA Care. Journal of General Internal Medicine, 2019. 34(1): p. 18-23.
5. Mattocks, K.M., et al., Innovations in Community Care Programs, Policies, and Research. Med Care, 2021. 59(Suppl 3): p. S229-S231.
6. McDonald, K.M., et al., Incorporating Theory into Practice: Reconceptualizing Exemplary Care Coordination Initiatives from the US Veterans Health Delivery System. Journal of General Internal Medicine, 2019. 34(1): p. 24-29.
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Unrepresentative Sample or Comparison, N = 2

1. Dizon, M.P., et al., Comparing the Quality of Ambulatory Surgical Care for Skin Cancer in a Veterans Affairs Clinic and a Fee-For-Service Practice Using Clinical and Patient-Reported Measures. PLoS One, 2017. 12(1): p. e0171253.
2. Geraci, T., et al., Lobectomy for Lung Cancer at Veterans Administration Medical Center Versus Academic Medical Center. Ann Thorac Surg, 2017. 103(6): p. 1715-1722.

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STUDY CHARACTERISTICS

NON-SURGICAL CARE

Author **Year** **Large Database** (Y/N) **Study Design** **Medical Condition** **Outcome Domains**	**Years of Source Data** **Comparison Group** **Data Source(s)**	**VA Care:** **N** **Outcomes (Raw Values)**	**Non-VA Care:** **N (Population)** **Outcomes (Raw Value)**	**Comparison Statistics** **Adjusted Model Findings**	**Statistical Method** **Other Methods of Controlling** **Covariates in Model**	**Bias Criteria Met?**	**Comments & Reason If Bias Criteria Not Met**
Nuti, 2016[26] Y (**National**) Retrospective Acute myocardial infarction, heart failure, pneumonia Clinical quality/safety	2013-2016, vs. other non-VA; CMS Standard Analytic Files and Enrollment Database vs. VA administrative claims	N: 7929-26,231 Mortality (AMI): M 13.52/30d, 95% CI 13.38 to 13.66; Mortality (HF): M 11.43/30d, 95% CI 11.11 to 11.75; Mortality (Pneu): M 12.63/30d, 95% CI 12.19 to 13.07; Readmissions (AMI): M 17.84/30d, 95% CI 17.71 to 17.96; Readmissions (HF): M 24.66/30d, 95% CI 24.31 to 25.02; Readmissions (Pneu): M 19.44/30d, 95% CI 19.19 to 19.69	N: 124,220-269,856 Mortality (AMI): M 13.69/30 d, 95% CI 13.64 to 13.74; Mortality (HF): M 11.87/30d, 95% CI 11.80 to 11.93; Mortality (Pneu): M 12.17/30d, 95% CI 12.08 to 12.26; Readmissions (AMI): M 17.21/30d; 95% CI 17.17 to 17.25; Readmissions (HF): M 23.46/30d; 95% CI 23.39 to 23.53; Readmissions (Pneu): M 18.68/30d; 95%CI 18.63 to 18.73	Mortality (AMI): VA<non-VA,p=0.02; Mortality (HF): VA<non-VA, p=0.008; Mortality (Pneu): VA>non-VA, p=0.045; Readmissions (AMI): VA>non-VA, p<0.001; Readmissions (HF): VA>non-VA, p<0.001; Readmisions (Pneu): VA>non-VA, p<0.001;	Statistics: Hierarchical logistic regression to estimate values; t-tests to compare Other methods of controlling: NR Covariates: Age, patient cardiovascular medical history, comorbid conditions, hospital random effects	Y	
Vanneman, 2020[50] Y (**National**) Retrospective Outpatient specialty, primary, and mental health care Access Patient experience	2016-2017, vs Veterans in VA-paid community care; SHEP vs CAHPS	N=29,095-432,218 (combined VA and non-VA) NR	N=29,095-432,218 (combined VA and non-VA) NR	Access to care (specialty care): -0.0023 (VA vs non-VA; p=ns); Access to care (primary care): -0.0003 (VA vs non-VA; p=ns); Access to care (mental health): -0.001 Patient experience (specialty care):	Statistics: Multivariate regression models Other methods of controlling: NR Covariates: age, sex, race, ethnicity, education level, marital status, rurality, VA enrollment priority, and Nosos health risk score, perceived physical health status, perceived mental health status,	Y	Regression coefficients over entire time period reported

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				0.0005 (VA vs non-VA; p=ns); Patient experience (primary care): -0.0137 (VA vs non-VA; p=ns); Patient experience (mental health): -0.0218 (VA vs non-VA; p=ns);	insurance status, number of days between the outpatient visit and survey return date, and VA facility fixed effects		
Gurewich, 2021[47] Y (**National**) Retrospective Physical therapy, cardiology, optometry, dental care, and orthopedics Access	2014-2018 (FY15-FY18), vs Veterans in VA-paid community care; CDW (both VA and non-VA)	N=420,590 (FY15), 487,014 (FY18) FY15 (wait time in days for urban Veterans): Physical therapy: 30.62 Cardiology: 26.77 Optometry: 42.84 Orthopedic: 35.26 Dental: 27.70; FY18 (wait time in days for urban Veterans): Physical therapy: 26.26 Cardiology: 24.15 Optometry: 34.32 Orthopedic: 27.73 Dental: 24.01;	N=76,706 (FY15), 150,429 (FY18) FY15 (wait time in days for urban Veterans): Physical therapy: 28.94 Cardiology: 28.46 Optometry: 41.85 Orthopedic: 37.35 Dental: 25.99; FY18 (wait time in days for urban Veterans): Physical therapy: 28.84 Cardiology: 27.55 Optometry: 36.90 Orthopedic: 32.87 Dental: 25.90;	VA had greater wait time declines from FY15 to FY18 than non-VA except for cardiology (p<0.001)	Statistics: Linear regression Other methods of controlling: NR Covariates: Rurality, age, sex, race/ethnicity, marital status, FY, Nosos score, priority level, age/sex*FY18 interactions	Y	NA
Davila, 2021[51] Y (**National**) Retrospective Primary and specialty care Access Patient experience	FY16-FY19, vs Veterans in VA-paid community care; SHEP and CDW (both VA and non-VA)	N=1,019,732 FY16 (primary care, access, urban): 3.18; FY16 (specialty care, access, urban): 3.09; FY19 (primary care, access, urban): 3.27; FY19 (specialty care, access, urban): 3.17;	N=63,638 FY16 (primary care, access, urban): 2.91; FY16 (specialty care, access, urban): 3.17; FY19 (primary care, access, urban): 3.12; FY19 (specialty care, access, urban): 3.28;	FY 16 VA vs CC (rural, primary care, access): 0.17; FY 19 VA vs CC (rural, primary care, access): 0.21; FY 16 VA vs CC (rural,	Statistics: Multiple regression models Other methods of controlling: NR Covariates: Age, sex, race, education level, marital status, VA enrollment priority, Nosos risk score, and self-rated	Y	SHEP scores analyzed in raw column, effect sizes reported in comparison column; "Effect sizes [ESs] of 0.10 are often interpreted as indicating 'negligible' differences between groups; ESs of 0.20, 0.50, and 0.80 are considered 'small,'

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		FY16 (primary care, access, rural): 3.24; FY16 (specialty care, access, rural): 3.15; FY19 (primary care, access, rural): 3.31; FY19 (specialty care, access, rural): 3.23 ; FY16 (primary care, provider rating, urban): 8.83; FY16 (specialty care, provider rating, urban): 8.69; FY19 (primary care, provider rating, urban): 8.92; FY19 (specialty care, provider rating, urban): 8.88; FY16 (primary care, provider rating, rural): 8.80; FY16 (specialty care, provider rating, rural): 8.73; FY19 (primary care, provider rating, rural): 8.90; FY19 (specialty care, provider rating, rural): 8.92	FY16 (primary care, access, rural): 3.11; FY16 (specialty care, access, rural): 3.17; FY19 (primary care, access, rural): 3.16; FY19 (specialty care, access, rural): 3.28; FY16 (primary care, provider rating, urban): 7.28; FY16 (specialty care, provider rating, urban): 8.46; FY19 (primary care, provider rating, urban): 8.30; FY19 (specialty care, provider rating, urban): 8.70; FY16 (primary care, provider rating, rural): 8.14; FY16 (specialty care, provider rating, rural): 8.43; FY19 (primary care, provider rating, rural): 8.56; FY19 (specialty care, provider rating, rural): 8.72	specialty care, access): -0.02; FY 19 VA vs CC (rural, specialty care, access): -0.07; FY 16 VA vs CC (rural, primary care, provider rating): 0.35; FY 19 VA vs CC (rural, primary care, provider rating): 0.19; FY 16 VA vs CC (rural, specialty care, provider rating): 0.16; FY 19 VA vs CC (rural, specialty care, provider rating): 0.12	physical and mental health		'medium,' and 'large,' respectively"
Intrator, 2021[30] Y (**National**) Retrospective Nursing homes Clinical quality/safety	2015-2016, vs non-Veterans in non-VA nursing homes; Vets and non-Vets in MDS, VA data (unspecified), and Medicare claims	N=23,839 Rehospitalization: M 22.51, SD 6.17; Emergency department visits: M 8.27, SD 4.56; Successful discharge: M 67.74, SD 11.47	N=1,674,578 Rehospitalization: M 21.10 SD, 5.94; Emergency department visits: M 11.85, SD 5.32; Successful discharge: M 57.04, SD 10.54	Rehospitalization: VA>non-VA, p<0.001; Emergency department visits: VA<non-VA, p<0.001; Successful discharge:	Statistics: 2-sample z test Other methods of controlling: NR Covariates: CMS risk adjust model, including age, marital status, length of stay, medication	Y	NA

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				VA>non-VA, p<0.001	utilization, treatments, comorbidities, and activities of daily living		
LaBedz, 2021[38] Y (**National**) Retrospective COPD Clinical quality/safety	2015-2018, vs all patients in non-VA hospitals; CMS Hospital Compare (VA vs non-VA)	N=126 Readmissions: M 15.3, standard error (SE) 0.17; Mortality: M 6.0, SE 0.11	N=3523 Readmissions: M 19.5 SE, 0.2; Mortality: M 8.5 SE, 0.02	Readmissions: VA<non-VA, M -4.2, 95% CI -4.5 to -3.9; Mortality: VA<non-VA, M -2.6, 95% CI -2.8 to -2.4	Statistics: T-tests, linear regression Other methods of controlling: NR Covariates: Age, comorbid conditions, and indicators of frailty	Y	Supplementary analyses: Increased readmission were associated with lower mortality for non-VA hospitals (p=0.003; "50 fewer deaths per 1000 more readmissions"); no association was found for VA hospitals
Gidwani, 2021[54] Y (**National**) Retrospective Cancer Cost/efficiency	FY10-FY14, vs Veterans in non-VA hospitals; VA administrative data vs Medicare claims	N=10,341 NR	N=18,542 NR	Total costs: VA<Medicare; beta-coeff: M -0.1, 95% CI -0.15 to -0.06; Inpatient costs: VA<Medicare; beta-coeff: M -0.12, 95% CI -0.22 to -0.02; Outpatient costs: VA<Medicare; beta-coeff: M -0.31, 95% CI -0.35 to -0.28; Drug costs: VA>Medicare; beta-coeff: M -0.71, 95% CI 0.64 to 0.78	Statistics: Generalized estimating equations Other methods of controlling: Three-level models Covariates: Age, race, distance from VA facility, rurality, enrollment priority, and type of solid tumor, and conditioning on geographic region	Y	NA
Griffith, 2020[48] Y (**National**) Retrospective	2018-2019, vs Veterans in VA-paid community	N=2,504,355 consultations	N=533,609 consultations Cardiology: M 38.0d, SD 9.2d;	NR	NR	Y	>50% of VA facilities had lower wait times for

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Cardiology, gastroenterology, orthopedics, and urology Access	care; VA CDW (for VA and non-VA)	Cardiology: M 33d, SD 8.7d; Gastroenterology: M 53.9 SD 15.9d; Orthopedics: M 36.2d SD 9.3d; Urology: M 36.1d SD 9.5d; Overall: M 41.1d SD 15.9d	Gastroenterology: M 60.3d SD 16.0d; Orthopedics: M 43.6d SD 12.9d; Urology: M 50.5d SD 14.5d; Overall: M 49.0d SD 15.5d				cardiology, orthopedics, urology, and overall
Gidwani-Marszowski, 2020[43] Y (**National**) Retrospective Cancer Clinical quality/safety	FY10-FY14, vs Veterans in non-VA care; VA and Medicare administrative data	N=9522 444 potentially avoidable hospitalizations	N=17,921 1271 potentially avoidable hospitalizations	Medicare vs VA: adjusted odds ratio 1.55, 95% CI 1.37 to 1.66	Statistics: Generalized estimating equations with a logit link and a binomial family Other methods of controlling: Patients nested within geographic area (hospital referral region) Covariates: Age, number of chemotherapy treatments, receipt of concurrent radiotherapy (defined as radiotherapy within 14 days of the receipt of chemotherapy), and cancer type	Y	Sensitivity analysis covariates: enrollment priority, race, rurality, and distance from a VA facility
Penn, 2019[46] Y (**National**) Retrospective Primary care, dermatology, cardiology,	2014-2017, vs non-Veterans in non-VA community care; VA administrative data vs Merritt Hawkins secret shopper survey	N=NR, 15 metropolitan areas in 2014, 30 metropolitan areas in 2017 NR	N=NR, 15 metropolitan areas in 2014, 30 metropolitan areas in 2017 NR	VA vs non-VA, 2014: Primary care: ns; Dermatology: ns;	Statistics: Linear regression Other methods of controlling: NR Covariates: Metropolitan area, specialty	Y	

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orthopedics Access				Cardiology: ns; Orthopedics: M 9.9d SD 4.7d vs M 23.9d SD 8.1d, p<.001; Overall: ns; VA vs non-VA, 2017: Primary care: M 20.0d SD 10.4d vs M 40.7d SD 35.0d, p=0.005; Dermatology: M 15.6 d SD 12.2d vs M 32.6d SD 16.5d, p<0.001; Cardiology: M 15.3d SD 12.6d vs M 22.8d SD 10.1d, p=0.04; Orthopedics: M 20.9d SD 13.3d vs M 12.4d SD 5.5d, p=0.01; Overall: ns			
Makarov, 2018[53] Y (**National**) Retrospective Cancer Clinical quality/safety Cost/efficiency	2004-2008, vs non-Veterans in non-VA care; CDW vs SEER Medicare	N=27,811 Low-risk men: Guideline-concordant care: 60.6%; Any imaging: 45.9%; High-risk men: Guideline-concordant care: 68.7%; Any imaging: 75.3%	N=56,671 Low-risk men: Guideline-concordant care: 53.1%; Any imaging: 52.5%; High-risk men: Guideline-concordant care: 66.8%; Any imaging: 76.8%	No statistical comparisons reported	Statistics: NR Other methods of controlling: NR Covariates: NR	Y	
Wang, 2019[32] Y (**National**) Retrospective ESRD	2008-2013, vs Veterans in VA-paid community care; VA enrollment, inpatient, outpatient, and purchased care data vs	N=1100; Two-year mortality: 24.5%	N=18,215 Two-year mortality: 41.8%	VA vs Medicare, two-year mortality: hazard ratio	Statistics: Cox proportional hazards model Other methods of controlling: NR	Y	

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Clinical quality/safety	Medicare enrollment, claims, and USRDS data			0.84 95% CI 0.73 to 0.96	Covariates: Age, race/ethnicity, sex, employment status, regional and urban residential status, calendar year of dialysis initiation, baseline eGFR at dialysis initiation, receipt of pre-ESRD nephrology care within or outside the VA in the 2 years before ESRD onset, incident dialysis modality, type of vascular access at time of dialysis initiation, history of renal transplant, cause of ESRD, 29 indicators of diagnosed physical health conditions and mental health comorbidity, body mass index, hospitalization and institutionalization in the year before dialysis initiation, hospice use in the 90 days before dialysis initiation, dialysis in the inpatient setting, insurance coverage, VA copayment exempt status, distance to nearest VA outpatient dialysis unit and VAMC, degree of VA reliance for other		

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					outpatient care, presence of dialysis unit or nephrology services in nearest or most used VAMC, and FY11 occupancy rate of nearest VA outpatient dialysis unit.		
Thorpe, 2018[27] Y (**National**) Retrospective Dementia Clinical quality/safety	2007-2010, Veterans in non-VA care; VA Medical SAS and VA PBM vs Medicare MedPAR, Part D, and MBSF	N=35,647 Medication undersupply with no oversupply: 40%; Medication oversupply with no undersupply: 9%; Simultaneous medication oversupply and undersupply: 4%	N=9922 Medication undersupply with no oversupply: 47%; Medication oversupply with no undersupply: 5%; Simultaneous medication oversupply and undersupply: 3%	Non-VA vs VA, odds ratio: Medication undersupply with no oversupply: 1.13 95% CI 1.03 to 1.25; Medication oversupply with no undersupply: 0.39 95% 0.32 to 0.47; Simultaneous medication oversupply and undersupply: 0.48 95% CI 0.40 to 0.57	Statistics: Multinomial logistic regression Other methods of controlling: NR Covariates: Age, sex, race/ethnicity, VA priority status, Medicaid status, distance to nearest VAMC, Elixhauser Comorbidity Index, use of memantine, number of VA ED and inpatient stays and use of VA home-based primary care in 2009, days alive in 2010, number of unique generic medications in 2010, and VISN indicator	Y	
Vercammen-Grandjean, 2018[39] Y (**National**) Retrospective COPD Clinical quality/safety	2007-2011, vs non-Veterans in non-VA care; CDW vs Medicare inpatient files	N=32,856 Participation in pulmonary rehabilitation after hospital discharge: N=485	N=158,137 Participation in pulmonary rehabilitation after hospital discharge: N=3199	VA vs non-VA; Participation in pulmonary rehabilitation after hospital discharge: 1.5% vs 2%	Statistics: None Other methods of controlling: NR Covariates: NR	Y	No formal statistical comparison between VA and non-VA but sample size is large enough to estimate a significant difference

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Wang, 2018[33]
Y (**National**)
Retrospective
Dialysis patients
Clinical quality/safety
Cost/efficiency
	2006-2013, vs Veterans in VA-paid community care; VA Enrollment, MiniVitals, Patient Treatment, Outpatient Care, Fee Basis files vs Medicare Beneficiary Summary, MedPAR, Outpatient, and Carrier files, and USRDS data	N=1101
		Number of hospital days over 2 years follow-up period from chronic dialysis initiation: M 24.1 SD (37.2)
			N=3085 (VA Purchase Care)
			N=18,267 (Medicare)
			Number of hospital days over 2 years follow-up period from chronic dialysis initiation:
			VA-PC: M 22.4 SD (29.3);
			Medicare: M 21.9 SD (26.0)
				Number of hospital days over 2 years follow-up period from chronic dialysis initiation: VA vs VA-PC,
				incident rate ratio 0.97 95% CI 0.91 to 1.03,p=0.34;
				vs Medicare, incident rate ratio 0.98 95% CI 0.90 to 1.07,p=0.73;
				VA vs VA-PC or Medicare:
				Risk of hospitalization after dialysis: p<0.0001, but authors note differences are not clinically meaningful;
				Days of hospitalization after dialysis: p=0.80
					Statistics: Zero inflated negative binomial regression model
					Other methods of controlling: NR
					Covariates: Sex, urban vs non-urban residence, year of chronic dialysis start date, employment status, factors surrounding dialysis initiation that would influence treatment setting (e.g., pre-ESRD nephrology care within or outside the VA, incident dialysis modality, type of vascular access at time of dialysis initiation, history of prior kidney transplant, cause of ESRD), distance to the nearest VA medical center (VAMC, i.e., the center most frequently used for non-dialysis care, else the nearest VAMC to residence), the extent of VA reliance for other outpatient care, initiated dialysis in the inpatient vs outpatient setting, 29 indica- tors of diagnosed physical
						Y	Outcomes not significantly different between healthcare systems

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					health conditions, BMI, hospitalization and institutionalization in the prior year, hospice use in the past 90 days, whether nearest VAMC had an on-site nephrology services or dialysis unit, and the 2011 fiscal year occupancy rate for nearest VAMC facility		
Augustine, 2018[15] Y (**Regional**) Retrospective Kidney transplants Access Clinical quality/safety Access	2004-2016, non-Veterans in non-VA care; SRTR (VA and non-VA data)	N=3663 Median distance to transplant center: 282 miles	N=297,794 Median distance to transplant center: 22 miles	All kidney transplants: VA vs non-VA: adjusted hazard ratio (AHR) 0.72, 95% CI 0.68 to 0.76; VA vs Medicare: AHR 0.85, 95% CI 0.81 to 0.90; VA vs Medicaid: AHR 1.00, 95% CI 0.94 to 1.06; Deceased donor kidney transplant: VA vs non-VA: AHR 0.85, 95% CI 0.80 to 0.90; VA vs Medicare: AHR 0.91, 95% CI 0.85 to 0.96;	Statistics: Cox models Other methods of controlling: Matching VA to local non-VA facility Covariates: Age group, race, gender, diagnosis group, time on dialysis at listing, candidate status at listing, panel reactive antibody, BMI group, education, malignancy, peripheral vascular disease, region, year of listing, log distance to center and community risk score	N	Note: * = p<0.05; RoB criteria not met: unbalanced samples

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				VA vs Medicaid: AHR 1.01, 95% CI 0.95 to 1.08; Live donor kidney transplant: VA vs non-VA: AHR 0.51, 95% CI 0.46 to 0.57; VA vs Medicare: AHR 0.77, 95% CI 0.69 to 0.86; VA vs Medicaid: AHR 1.00, 95% CI 0.89 to 1.12; Patient death: VA vs non-VA: AHR 0.89, 95% CI 0.82 to 0.97; VA vs Medicare: AHR 0.77, 95% CI 0.71 to 0.84; VA vs Medicaid: AHR 0.76, 95% CI 0.70 to 0.83; Delisting from kidney transplant list due to "health deterioration" or "other": VA vs non-VA: AHR 1.38, 95% CI 1.26 to 1.51; VA vs Medicare: AHR, 1.1 95% CI 1.001 to 1.2;			

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				VA vs Medicaid: AHR 1.04, 95% CI 0.95 to 1.05			
Anhang Price, 2018[37] Y (**National**) Retrospective Inpatient and outpatient care Clinical quality/safety Patient experience	2014, vs non-Veterans in non-VA care; CMS Hospital Compare (VA), VA Inpatient Evaluation Center, and VA Office of Performance Measurement vs CMS Hospital Compare (non-VA)	N=135 facilities In-hospital deaths per 1000 surgical discharges with serious treatable complications (inpatient): 100.6; Postoperative pulmonary embolism or deep vein thrombosis rate (inpatient): 3.3; Acute myocardial infarction 30-day readmission rate (inpatient): 18.6; Heart failure 30-day mortality rate (inpatient): 11; Evaluation of left ventricular systolic (LVS) function (inpatient): 99.8; Prophylactic antibiotic received within 1 h prior to surgical incision (inpatient): 96.3; Communication with doctors (inpatient): 77.1; Care transition (inpatient): 53.7; Overall rating of hospital (inpatient): 67.1; Diabetes: Eye examination: 95.9%; Tobacco use: advising smokers and tobacco users to quit (outpatient): 90.0%;	N=402 facilities In-hospital deaths per 1000 surgical discharges with serious treatable complications (inpatient): 118.8; Postoperative pulmonary embolism or deep vein thrombosis rate (inpatient): 4.6; Acute myocardial infarction 30-day readmission rate (inpatient): 17.8; Heart failure 30-day mortality rate (inpatient): 11.8; Evaluation of left ventricular systolic (LVS) function (inpatient): 98.5; Prophylactic antibiotic received within 1 h prior to surgical incision (inpatient): 98.5; Communication with doctors (inpatient): 80.3; Care transition (inpatient): 43.3; Overall rating of hospital (inpatient): 70.3; Diabetes: Eye examination: 84.6% Tobacco use: advising smokers and tobacco users to quit (outpatient): 68.5%; Hypertension: Controlling high blood pressure (diagnosis of hypertension, 18–85	All VA and non-VA differences significant ($p<0.05$); last 3 comparisons: VA vs Medicare HMO	Statistics: T-tests Other methods of controlling: Matching VA to local non-VA facility Covariates: Bed size (< 100 beds, 100–199 beds, and 200+ beds), Census division (East North Central, East South Central, Mid-Atlantic, Mountain, New England, Other, Pacific, South Atlantic, West North Central, and West South Central), location (urban, rural), and teaching status (teaching facility, nonteaching facility)	Y	

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		Hypertension: Controlling high blood pressure (diagnosis of hypertension, 18–85 years and < 140/90 mmHg): 76.1%	years and < 140/90 mmHg): 65.5%				
Kurella Tamura, 2018[34] Y (**National**) Retrospective Pre-ESRD nephrology care Clinical quality/safety	2008-2011, vs Veterans in non-VA care; VA administrative data vs Medicare Claims, USRDS (both)	N=2966 Dialysis treatment within 2 years of incident kidney failure in pre-ESRD patients: 50.9%	N=2966 Dialysis treatment within 2 years of incident kidney failure in pre-ESRD patients: 79.2%	Medicare vs VA Dialysis treatment within 2 years of incident kidney failure in pre-ESRD patients: relative risk 1.56 95%, CI 1.50 to 1.62; Mortality after receiving dialysis care for pre-ESRD patients: -8%, 95% CI -5% to -11%;	Statistics: Poisson regression; marginal standardization Other methods of controlling: Propensity score matching Covariates: Age, sex, race, marital status, VA co-pay, distance to nearest VA with nephrology services, Charlson Comorbidity Index, and rate of eGFR decline prior to incident kidney failure	Y	
Barnett, 2018[25] Y (**National**) Retrospective Elective coronary revascularization patients (PCI & CABG) Clinical quality/safety Access Cost/efficiency	2008-2011, vs Veterans in VA-paid community care; VA and non-VA: ArcGIS, VA Vital Status File, VA Managerial Cost Accounting System	N=15,340 Total cost (procedure + readmission + travel), PCI: M $15,683.00 SD ($16,493.00); Total cost (procedure + readmission + travel), CABG: M $63,144.00 SD ($46,018.00); Actual distance traveled, PCI: M 90.8 Actual distance traveled, CABG: M 123.2	N=3715 Total cost (procedure + readmission + travel), PCI: M $22,025.00 SD ($30,701.00); Total cost (procedure + readmission + travel), CABG: M $55,526.00 SD ($74,797.00); Actual distance traveled, PCI: M 60.1 Actual distance traveled, CABG: M 81.5	30-day mortality, PCI: VA>non-VA, relative risk (RR) 2.40 95% CI 1.57 to 3.66, p<0.001; 30-day mortality, CABG: VA=non-VA, RR 0.89 95% CI 0.45 to 1.77, p=0.74; 30-day readmissions, PCI: VA=non-VA, RR 0.96	Statistics: Generalized estimating equations Other methods of controlling: Propensity weighting Covariates: age, sex, race/ethnicity, recent myocardial infarction, prior PCI, prior CABG surgery, cerebrovascular disease, peripheral vascular disease, congestive heart failure, type 1 and type 2 diabetes, body mass index,	Y	

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				95% CI 0.79 to 1.16, p=0.68; 30-day readmissions, CABG: VA=non-VA, RR 1.16 95% CI 0.89 to 1.50, p=0.28; Total cost (procedure + readmission + travel), PCI: VA<non-VA, p<0.001; Total cost (procedure + readmission + travel), CABG: VA>non-VA, p<0.001; Actual distance traveled, PCI: VA>non-VA, p<0.001; Actual distance traveled, CABG: VA>non-VA, p=0.002	renal function, dialysis, chronic obstructive pulmonary disease, atrial fibrillation, and the number of vessels revascularized		
Heidenrich, 2017[20] Y (**National**) Retrospective Hospital care Patient experience	2014; vs non-Veterans in non-VA care; Yelp (both)	N=39 facilities Patient ratings (weighted for number of reviews): M 3.70 SD 0.74	N=39 facilities Patient ratings (weighted for number of reviews): M 3.19 SD 0.54	VA vs non-VA: Difference in ratings, weighted by review count: p=0.0025 Covariate adjusted rating difference 0.65, 95% CI 0.18 to 1.12	Statistics: Multivariate regression Other methods of controlling: Local affiliate matching Covariates: Bed size, membership in COTH, presence of an accredited graduate medical education program,	N	RoB criteria not met: analysis of Yelp reviews of only 39 of 131 VA facilities due to lack of data

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					and certification by TJC		
Blay, 2017[36] Y (**National**) Retrospective Hospital care Clinical quality/safety Patient experience	2012-2015, vs non-Veterans in non-VA care; Both VA and non-VA: Hospital Compare, AHA Annual Survey	N=129 facilities Pressure ulcers: M 0.28, 95% CI 0.21 to 0.27; Death among surgical inpatients with serious treatable conditions: M 105.82, 95% CI 96.7 to 114.92; Iatrogenic pneumothorax: M 0.27, 95% CI 0.22 to 0.32; 30-day mortality, AMI: 9.27, 95% CI 9.0 to 9.46; 30-day readmissions, AMI: M 15.59 95% CI, 15.45 to 15.74; Doctor communication: top box 76.70%, 95% CI 76.01 to 77.39%; Cleanliness: top box 73.41% 95% CI 71.95 to 74.87%; Care transition: top box 53.62%, 95% CI 51.79% to 54.46%; Quietness: 55.80% , 95% CI 54.24% to 57.37%; Recommendation of hospital to others: top box, 67.92% 95% CI 66.56 to 69.28%;	N=4010 facilities Pressure ulcers: M 0.44, 95% CI 0.44 to 0.46; Death among surgical inpatients with serious treatable conditions: M 136.34, 95% CI 135.42 to 137.26; Iatrogenic pneumothorax: M 0.41, 95% CI 0.40 to 0.41; 30-day mortality, AMI: M 14.1, 95% CI 14.04 to 14.15; 30-day readmissions, AMI: M 16.89, 95% CI 16.84 to 16.94; Doctor communication: top box 82.14%, 95% CI 81.95 to 82.32%; Cleanliness: 74.14%, 95% CI 73.86% to 74.41%; Care transition: top box 52.71%, 95% CI 52.47% to 52.96%; Quietness: top box 62.93 %, 95% CI 62.59% to 63.26%; Recommendation of hospital to others: top box 71.66%, 95% CI 71.33% to 71.99%	VA<non-VA for all clinical quality/safety outcomes, p<0.03; Non-VA>VA for all patient experience outcomes (p<0.005) except cleanliness and care transition	Statistics: T-tests Other methods of controlling: Outcomes were rates per 1000 discharges; Bonferroni correction Covariates: NR	Y	
Mody, 2017[21] N (**NA**) Prospective survey	2014-2015; vs non-Veterans in non-VA care; Original surveys (both VA and non-VA data)	N=47 facilities	N=306 facilities	Policy for appropriate indications for catheter use:	Statistics: Multivariable logistic regression models	N	RoB criteria not met: data from only half of states

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Nursing home care Clinical quality/safety		Policy for appropriate indications for catheter use: 63.8%; Policy for urinary catheter maintenance: 78.7%; Urinary catheters removed within 24–48 hrs. of admission unless there are appropriate: 74.5%; Catheter-associated urinary tract infection surveillance performed: 93.6%	Policy for appropriate indications for catheter use: 81.4%; Policy for urinary catheter maintenance: 92.8%; Urinary catheters removed within 24–48 hrs. of admission unless there are appropriate: 93.8%; Catheter-associated urinary tract infection surveillance performed: 65.7%	VA<non-VA, p=0.004; Policy for urinary catheter maintenance: VA<non-VA, p=0.001; Urinary catheters removed within 24–48 hrs. of admission unless there are appropriate: VA<non-VA, p<0.001; Catheter-associated urinary tract infection surveillance performed: VA>non-VA, p<0.001	Other methods of controlling: All nursing homes participating in AHRQ HAI/CAUTI patient safety collaborative Covariates: Number of residents in facility, short-term sub-acute rehabilitation offered, presence of an HAI committee, infection prevention training, and infection preventionist with 3 or more years of experience		
Shields, 2017[23] Y (**National**) Retrospective Psychiatric care Clinical quality/safety	2014, vs non-Veterans in non-VA care; HBIPS	N=105 facilities NR	N=141 facilities (for-profit), 180 (non-VA government) NR	For-profit vs VA: Admissions screening for inpatient psychiatric care: 37.2%, p<0.001; Restraint hours per 1000 patient hours: -77.9%, p=0.004; Seclusion hours per 1000 patient hours: -61.6%, p=0.01;	Statistics: T-tests Other methods of controlling: NR Covariates: NR	N	RoB criteria not met: no adjustment for patient characteristics

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				Creating a continuing care plan at discharge: 41.7%, p<0.001; Transmitting a continuing care plan at discharge: 40.4%, p<0.001; Non-VA government vs VA: Appropriate justification of antipsychotics at discharge: 33.9%, p<0.001			
Burke, 2016[16] Y (**National**) Retrospective Headache and neuropathy Clinical quality/safety	2004-2011, vs non-Veterans in non-VA care; CDW vs MedPAR/HRS	N=256,608 Imaging for nontraumatic headache: 22.1%; Imaging for nontraumatic headache excluding cancer, hemiplegic migraine, giant cell arteritis, epilepsy, cerebrovascular disease including TIA, head or neck trauma, altered mental status, personal history of stroke/TIA or cancer, multiple sclerosis, or dementia: 15.3%; Imaging for migraine excluding cancer, hemiplegic migraine,	N=2005 Imaging for nontraumatic headache: 49.0%; Imaging for nontraumatic headache excluding cancer, hemiplegic migraine, giant cell arteritis, epilepsy, cerebrovascular disease including TIA, head or neck trauma, altered mental status, personal history of stroke/TIA or cancer, multiple sclerosis, or dementia: 27.1%; Imaging for migraine excluding cancer, hemiplegic migraine, giant cell arteritis, epilepsy, cerebrovascular disease including TIA, head or neck trauma, altered mental	VA<non-VA for all outcomes, p<0.001; except for imaging for migraine, p=0.027	Statistics: T-tests Other methods of controlling: NR Covariates: NR	N	RoB criteria not met: unbalanced samples

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		giant cell arteritis, epilepsy, cerebrovascular disease including TIA, head or neck trauma, altered mental status, personal history of stroke/TIA or cancer, multiple sclerosis, or dementia: 7.1%; Neuroimaging any component of neuroaxis: 9%; Neuroimaging any component of neuroaxis excluding cancer, hemiplegic migraine, giant cell arteritis, epilepsy, cerebrovascular disease including TIA, head or neck trauma, altered mental status, personal history of stroke/TIA or cancer, multiple sclerosis, or dementia: 6.1%	status, personal history of stroke/TIA or cancer, multiple sclerosis, or dementia: 15.6%; Neuroimaging any component of neuroaxis: 23.7%; Neuroimaging any component of neuroaxis excluding cancer, hemiplegic migraine, giant cell arteritis, epilepsy, cerebrovascular disease including TIA, head or neck trauma, altered mental status, personal history of stroke/TIA or cancer, multiple sclerosis, or dementia: 15%				
Lee, 2017[17] Y (**National**) Retrospective Headache and neuropathy Access	2010-2011, vs non-Veterans in non-VA care; Both VA and non-VA: Health Tracking Household Survey	N=203 Self-reported delay in care in last 12 months: M 28.68%, 95% CI 20.18% to 39.0%	N=10,719 Self-reported delay in care in last 12 months: Commercial: M 17.3, 95% CI 16.18% to 18.49%; Medicare: M 17.97 %, 95% CI 13.88% to 22.87%; Medicaid/other: M 15.26%, 95% CI 12.55% to 18.43%	Self-reported delay in care in last 12 months: VA vs commercial: adjusted odds ratio 1.76, 95% CI 1.11 to 2.80, p<0.05	Statistics: Multivariate logistic regression Other methods of controlling: NR Covariates: Perceived general health status, perceived health care satisfaction, age, gender, education, annual family income, race, and region	N	RoB criteria not met: unbalanced samples

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Axon, 2016[22] Y (**Regional**) Retrospective Heart failure Clinical quality/safety	2007-2011, vs Veterans in non-VA care; CDW vs Medicare inpatient, outpatient, and carrier files	N=2242 Emergency department visits: All cause: M 72.6 SD (79.0); HF-related: M 6.2 SD (22.8); Hospitalizations: All cause: M 31.5 SD (56.7); HF-related: M 6.5 SD (27.1); 30-day readmissions: All cause: M 30.6 SD (54.6); HF-related: M 6.4 SD (27.0)	N=8825 Emergency department visits: All cause: M 45.0 SD (67.5); HF-related: M 3.6 SD (12.6); Hospitalizations: All cause: M 26.0 SD (34.5); HF-related: M 2.8 SD (12.4); 30-day readmissions: All cause: M 23.2 SD (32.4); HF-related: M 2.2 SD (10.2)	Non-VA vs VA Emergency department visits: All cause: adjusted odds ratio (AOR) 0.62, 95% CI 0.60 to 0.64; HF-related: AOR 0.60, 95% CI 0.55 to 0.66; Hospitalizations: All cause: AOR 0.98, 95% CI 0.95 to 1.02; HF-related: AOR 0.61, 95% CI 0.55 to 0.68; 30-day readmissions: All cause: AOR 0.87, 95% CI 0.83 to 0.90; HF-related: AOR 0.51, 95% CI 0.46 to 0.57	Statistics: Zero-inflated negative binomial models Other methods of controlling: NR Covariates: Age, race, gender, year of visit, dual use category, year of visit, and comorbidities that were found to be significant using a stepwise selection procedure	N	P-values not reported; RoB criteria not met: data only from South Carolina
Jia, 2016[31] Y (**National**) Retrospective Nursing home care Clinical quality/safety	2006-2009, vs Veterans in VA-paid community care; VA MDS 2.0 vs CMS MDS 2.0	N=12,660 Rehabilitation therapy: 75.5%; Restorative nursing care: 33.% %	N=5612 Rehabilitation therapy: 76.4%; Restorative nursing care: 30.6%	VA vs non-VA: Rehabilitation therapy: adjusted odds ratio (AOR) 1.16, 95% CI 1.01 to 1.32, p=0.033; Restorative nursing care: AOR 2.28, 95% CI 2.02 to 2.57, p<0.0001	Statistics: 2-part log-linear model Other methods of controlling: NR Covariates: Gender, education, depression score, ADL score, cognition score, comorbidity index score, number of assessments, facility region, facility rurality, facility	Y	

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					hospital status, facility beds, facility resident-to-bed ratio		
Watkins, 2016[40] Y (**National**) Retrospective Schizophrenia, bipolar disorder, posttraumatic stress disorder, major depression, and substance use disorders Clinical quality/safety	FY07-FY08, vs non-Veterans in non-VA care; VA inpatient, laboratory and pharmacy files vs Thomson-Reuters MarketScan Commercial Claims and Encounter Database	N=836,519 Medication laboratory tests: 77.4%; Any laboratory screening tests: 86.9%; Antipsychotics, 12-week supply: 50.0%; Maintenance antipsychotics: 37.4%; Maintenance mood stabilizers: 31.3%; Antidepressants, 12-week supply: 49.0%; Maintenance antidepressants: 31.3%	N=545,484 Medication laboratory tests: 5.8%; Any laboratory screening tests: 49.7%; Antipsychotics, 12-week supply: 22.8%;; Maintenance antipsychotics: 23.1% Maintenance mood stabilizers: 20.3%;; Antidepressants, 12-week supply: 20.2% Maintenance antidepressants: 13.1%	VA>non-VA for all outcomes, p<0.001	Statistics: NR Other methods of controlling: NR Covariates: Age, gender	Y	
Jones, 2015[13] N (**NA**) Retrospective analysis of RCT Advanced chronic systolic heart failure Clinical quality/safety	1999, vs non-Veterans in non-VA care; BEST data (VA and non-VA)	N=898 NR	N=1216	VA vs non-VA: All-cause mortality among patients with advanced chronic systolic HF: adjusted odds ratio (AOR) 0.94, 95% CI 0.80 to 1.10, p=0.448; Cardiovascular mortality among patients with advanced chronic systolic HF: AOR 0.92, 95% CI 0.74 to 1.10, p=0.359; HF mortality among patients with advanced chronic systolic	Statistics: Cox proportional hazard models Other methods of controlling: NR Covariates: Age, race, body mass index, smoking, HF duration, coronary artery disease, diabetes mellitus, hypertension, atrial fibrillation, peripheral vascular disease, chronic kidney disease, randomization to bucindolol, use of angiotensin-converting enzyme inhibitors or angiotensin-receptor blockers,	N	RoB criteria not met: clinical trial sample

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				HF: AOR 0.76, 95% CI 0.57 to 1.02, p=0.064; Sudden cardiac death among patients with advanced chronic systolic HF: AOR 1.05, 95% CI 0.83 to 1.03, p=0.664; Mortality due to AMI among patients with advanced chronic systolic HF: AOR 3.12, 95% CI 1.19 to 8.19, p=0.021; All-cause hospitalization among patients with advanced chronic systolic HF: AOR 0.99 95%, CI 0.88 to 1.10; p=0.868; HF hospitalization among patients with advanced chronic systolic HF: AOR 0.88, 95% CI 0.76 to 1.02, p=0.092	digoxin, and diuretics, NYHA class symptoms, LVEF and right ventricular EF (RVEF), cardiothoracic ratio, pulmonary edema, heart rate, systolic and diastolic blood pressure, hemoglobin, serum creatinine, and serum cholesterol		
Chan, 2022[42] Y (**National**) Retrospective Emergency department care	2001-2018, vs Veterans in non-VA care; CDW and VBA death records vs Medicare claims and SSA death records	N=231,611 30-day mortality after ambulance ride: 9.32 deaths per 100 patients, 95% CI 9.15 to 9.50	N=1,238,546 30-day mortality after ambulance ride: 11.67 deaths per 100 patients, 95% CI 11.58 to 11.76	VA vs non-VA 30-day mortality after ambulance ride: difference -2.35 deaths per 100	Statistics: Ordinary least squares regression Other methods of controlling: NR Covariates: Zip code of residence,	Y	

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Clinical quality/safety				patients, 95% CI -2.16 to -2.54	demographic characteristics (age in two year bands, race or ethnic origin, and sex), six binary variables indicating receipt of VA or non-VA primary care, emergency care, and inpatient care in the 12 months before the ride, and previous medical diagnoses, specified as 31 indicators for Elixhauser comorbidities recorded in the 12 months before the ride, origin of the ride (residence; residential, domiciliary, or custodial facility; skilled nursing facility; or scene of accident or acute event), time (day of the week, month-year interactions), life support capabilities, classified according to categories for basic and advanced life support specified in the Healthcare Common Procedure Coding System codes, and primary diagnosis made during the ride, coded according to ICD-9		

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Florez, 2021[14] N (**NA**) Retrospective analysis of RCT Type 2 diabetes Clinical quality/safety	NR, vs non-Veterans in non-VA care; GRADE data (both VA and non-VA)	N=1216 HbA1c < 7% (<53 mmol/mol) among patients with a history of CVD: 18.1% BP < 140/90 mmHg among patients with a history of CVD: 80.2%; Treated for HTN among patients with a history of CVD: 93.7%; LDLc < 70 mg/dL (1.8 mmol/L) among patients with a history of CVD: 50.0%; LDLc < 100 mg/dL (2.6 mmol/L) among patients with a history of CVD: 81.1%; Statin use among patients with a history of CVD: 87.4%; Aspirin use among patients with a history of CVD: 81.9%; HbA1c < 7% (<53 mmol/mol) among patients with a history of CVD: 15.1%; BP < 140/90 mmHg among patients with no history of CVD: 73.6%; Treated for HTN among patients with no history of CVD: 74.9%; LDLc < 70 mg/dL (1.8 mmol/L) among patients with no history of CVD: 34.9%; LDLc < 100 mg/dL (2.6 mmol/L) among patients	N=3831 HbA1c < 7% (<53 mmol/mol) among patients with a history of CVD: 10.9% BP < 140/90 mmHg among patients with a history of CVD: 70.1%; Treated for HTN among patients with a history of CVD: 93.0%; LDLc < 70 mg/dL (1.8 mmol/L) among patients with a history of CVD: 36.9%; LDLc < 100 mg/dL (2.6 mmol/L) among patients with a history of CVD: 74.4%; Statin use among patients with a history of CVD: 84.1%; Aspirin use among patients with a history of CVD: 76.6%; HbA1c < 7% (<53 mmol/mol) among patients with a history of CVD: 14.2%; BP < 140/90 mmHg among patients with no history of CVD: 76.0%; Treated for HTN among patients with no history of CVD: 65.4%; LDLc < 70 mg/dL (1.8 mmol/L) among patients with no history of CVD: 24.2%; LDLc < 100 mg/dL (2.6 mmol/L) among patients	VA>non-VA, adjusted analyses BP < 140/90 mmHg among patients with a history of CVD: p=0.035 Treated for HTN among patients with no history of CVD: p=0.006 LDLc < 70 mg/dL (1.8 mmol/L) among patients with no history of CVD: p=0.045 Aspirin use among patients with no history of CVD: p=0.028 HbA1c < 7% (<53 mmol/mol) among patients with no history of CVD: p=0.003	Statistics: Pearson's chi- squared test with Yates' continuity correction Other methods of controlling: NR Covariates: Age, sex, race, and ethnicity	N	RoB criteria not met: clinical trial sample

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		with a history of CVD: 68.2%; Statin use among patients with no history of CVD: Aspirin use among patients with no history of CVD: 70.8%; HbA1c < 7% (<53 mmol/mol) among patients with no history of CVD: 46.6%	with a history of CVD: 62.9% ; Statin use among patients with no history of CVD: Aspirin use among patients with no history of CVD: 59.5%; HbA1c < 7% (<53 mmol/mol) among patients with no history of CVD: 40.2%				
Feyman, 2022[49] Y (**National**) Retrospective Primary, specialty, and mental health care Access	2018-2021, vs Veterans in VA-paid community care; CDW (VA and non-VA)	N=4,016,156 Average wait times: Primary care: 29.0 (SD 5.5) days; Mental health care: 33.6 (SD 4.6) days; All other specialties: 35.4 (SD 2.7) days	N=3,042,060 Average wait times: Primary care: 38.9 (SD 8.2) days; Mental health care: 43.9 (SD 9.0) days; All other specialties: 41.9 (SD 5.9) days	Average wait times: Primary care: VA<non-VA in 15 of 18 VISNs; Mental health: VA<non-VA in 16 of 18 VISNs; All other specialties: VA<non-VA in 17 of 18 VISNs	Statistics: Ordinary least squares regressions; 2-sided t-tests Other methods of controlling: NR Covariates: Specialty mix (distribution of stop codes), VISN	Y	
Cashion, 2021[35] Y (**National**) Retrospective Post-kidney transplant care Quality/safety	2008-2016, vs Veterans in non-VA care; CDW vs Medicare data	N=752 5-year mortality: 11%	N=2092 5-year mortality: 20%	VA vs non-VA 5-year mortality: adjusted hazard ratio 2.2, 95% CI [1.5, 3.1]	Stats: Multivariable Cox regression Other methods of controlling: NR Covariates: Age at transplantation, sex, race, clinical comorbidities, transplant surgery site (within VA versus outside VA via Medicare), year of transplant, prior kidney transplantation, pretransplant	Y	

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					dialysis, duration of prior dialysis, and type of transplant (living versus deceased donor)		
Presley, 2022[24] Y (**National**) Retrospective Nonsmall lung cancer Clinical quality/safety	2006-2012, vs non-Veterans in non-VA care; Veterans Central Cancer Registry (VACCR) vs Surveillance, Epidemiology, and End Results (SEER) and Medicare claims	N=18,054 Change in aggressive care at end of life between 2006 and 2012: -15.0% (46.0% to 31.0%)	N=13,277 Change in aggressive care at end of life between 2006 and 2012: -3.8% (41.9% to 38.0%)	Change in aggressive care at end of life between 2006 and 2012: VA>non-VA, p<0.001; % change in hospice admissions in Medicare hospital referral region on aggressive care at matched VA facility: AOR 0.13, 95% CI 0.08 to 0.23	Statistics: Chi-square tests Other methods of controlling: NR Covariates: Age, sex, race, comorbidities	N	No adjustment for demographic covariates in main analysis; composition of multicomponent aggressive care measure unclear
Pickering, 2022[55] Y (**National**) Retrospective Low-value prostate-specific antigen (PSA) testing Cost/efficiency	FY2017-FY2018, vs Veterans in non-VA care; CDW, Area Resource File, and VHA Service Support Center vs Beneficiary Summary File, Medicare Provider Analysis and Review, Inpatient, Skilled Nursing Facility, Outpatient, Home Health Agency, Hospice, Durable Medical Equipment, and Carrier files	N=36,469 Total downstream or "cascade" services related to low-value PSA testing: 53.9 services/100 Veterans; Cost of cascade services related to low-value PSA testing: $45.1/Veteran	N=17,981 Total downstream or "cascade" services related to low-value PSA testing: 45.3 services/100 Veterans; Cost of cascade services related to low-value PSA testing: $35.0/Veteran	Non-VA vs VA Adjusted difference in downstream or "cascade" services related to low-value PSA testing: 9.9 services/100 Veterans, 95% CI 9.7 to 10.1; Adjusted cost of cascade services related to low-value PSA testing: $11.9/Veteran,	Statistics: Negative binomial models; weighted linear regression Other methods of controlling: Stabilized inverse probability of treatment weights Covariates: Age, race and ethnicity, VA priority group, driving distance to the nearest VA facility, number of Elixhauser conditions, individual Elixhauser conditions, academic affiliation,	Y	

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				95% CI $7.6 to $16.2	facility size, census region, rurality, and complexity level at the VA medical center-level		
Fortney, 2022[18] N (**NA**) Prospective survey In-person- and tele-mental health care Access Cost/efficiency Patient experience Clinical quality/safety	2019-2020, vs Veterans in VA-paid community care; CDW and telephone survey	N=303 Number of barriers to care: M 0.9, SD 1.3; Number of encounters: M 5.9, SD 7.3; Patient centeredness: M 4.3, SD 0.6; Change in PHQ-8 (depression symptoms): M -1.2, SD -4.9; Change in PCL-5 (post-traumatic stress disorder symptoms): M -3.4, SD -12.5	N=242 Number of barriers to care: M 1.3, SD 1.6; Number of encounters: M 6.2, SD 6.8; Patient centeredness: M 4.2, SD 0.7; Change in PHQ-8 (depression symptoms): M -2.2, SD -5.3; Change in PCL-5 (post-traumatic stress disorder symptoms): M -6.0, SD -12.6	Number of access-related barriers to care: VA<non-VA: p<0.001; Number of encounters: VA=non-VA; p=0.276; Patient centeredness: VA=non-VA; p=0.243; Change in PHQ-8 (depression symptoms): VA>non-VA; p=0.011; Change in PCL-5 (post-traumatic stress disorder symptoms): VA=non-VA; p=0.148	<u>Statistics:</u> Multivariate statistical analyses; chi-square and t-tests <u>Other methods of controlling:</u> NR <u>Covariates:</u> Provisional diagnosis, suicidality, rurality, and prior VA mental health use	N	Small sample size
Scheuner, 2022[44] Y (**National**) Retrospective Genetic counseling Clinical quality/safety	2010-2017, vs Veterans in VA-paid community care; CDW	N=6775 Genetic referrals completed (% of total referrals): 5073 (74.9%)	N=3423 Genetic referrals completed (% of total referrals): 1961 (57.3%)	Non-VA vs VA: Completed genetic consultations: OR 0.43, 95% CI 0.28 to 0.65; Follow-up cancer surveillance and risk-reducing	<u>Statistics:</u> Multivariate regression models <u>Other methods of controlling:</u> NR <u>Covariates:</u> Genetic referral models: care model x age, x race or ethnicity, and x gender interactions; Risk-reducing	Y	

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				procedures among those who completed a genetic consultation: OR 0.64, 95% CI 0.52 to 0.78	surveillance/ procedures models: care model x consultation status interactions, and cardiovascular disease		
Petros, 2022[19] Y (**Local**) Retrospective Colorectal cancer Clinical quality/safety Access	2015-2018, vs Veterans in VA-paid, community care; Chart review	N=235 Adenomas detection (adenoma detection rate): 147 (62.6%); Compliance with surveillance guidelines: 93.3%; Time to colonoscopy: M 83.8 days, 95% CI 45.2 to 122.4 days	N=235 Adenomas detection (adenoma detection rate): 86 (36.7%); Compliance with surveillance guidelines: 74.9%; Time to colonoscopy: M 58.4 days, 95% CI 24.7 to 92.1 days	Non-VA vs VA: Adenoma detection rate: OR 0.39, 95% CI 0.25 to 0.63; Compliance with surveillance guidelines: OR 0.21, 95% CI 0.09 to 0.45; Time to colonoscopy: non-VA<VA, p<0.0001	Statistics: Multivariate logistic regression Other methods of controlling: NR Covariates: (Adenoma model) Diabetes mellitus, preparation quality adequate, and cecal intubation; (Guideline model) adenoma detected, performed by non-gastroenterologist, screening indication, surveillance indication, and adequate bowel preparation	N	Small sample size; only one facility sample; no demographic controls in statistical models
Weeda, 2023[29] Y (**National**) Retrospective Acute myocardial infarction Clinical quality/safety	2013-2018, vs Veterans in non-VA care; CDW vs CMS data (inpatient, outpatient, and pharmacy claims from parts A, B, and D)	N=16,247 Any medication class omitted: 67.8% All medication classes omitted: 9.5% ACEI/ARB omission: 45.5% Beta-blocker omission: 23.7% Statin omission: 22.6% High-intensity statin omission: 41.2% P2Y12 inhibitor omission: 38.3%	N=102,209 Any medication class omitted: 82.8% All medication classes omitted: 29.8% ACEI/ARB omission: 62.8% Beta-blocker omission: 47.4% Statin omission: 45.5% High-intensity statin omission: 72.1% P2Y12 inhibitor omission: 59.8%	Non-VA vs. VA: Any medication class omitted: OR 3.04 (95% CI 2.88, 3.20) All medication classes omitted: OR 4.21 (95% CI 3.95, 4.49)	Statistics: Generalized linear models with a logit link Other methods of controlling: Models were built in a sequential manner using all available covariates after checking for multicollinearity. Model fit was assessed through residual analysis.	Y	

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					Covariates: Demographic variables, service-related disability percentage, primary care utilization rates, pre-MI secondary prevention medication use, smoking status, and all comorbidities		
Gaffney, 2022[56] Y (**National**) Retrospective Influenza vaccination Equity	2019-2020, vs Veterans in non-VA care & non-Veterans in non-VA care; National Health Interview Survey	N=2821 Influenza vaccination rate: 63.0%	N=46,456 Non-VA Veterans, Influenza vaccination rate: 59.1% Non-VA, non-Veterans, Influenza vaccination rate: 46.5%	Influenza vaccination rates: Non-Veterans vs. VA: Black (vs. white): -6.9% (95% CI -15.2% to 1.4%) Hispanic (vs. white): -18.4% (95% CI -29.9% to -7.0%) Other race (vs. white): 5.4% (95% CI -7.6% to 18.3%) Middle-income vs. low-income: -6.7% (95% CI -13.2% to -0.1%) High-income vs. low-income: -8.5% (95% CI -15.6% to -1.4%) Veterans in non-VA care vs. VA:	Statistics: Logistic regressions; predicted probabilites Other methods of controlling: NR Covariates: Race/ethnicity, veteran/VA indicator, an interaction term for veteran/VA indicator, age, sex, self-reported health status, family income; family income and race covariates were used in separate models	N	Self-reported vaccination status

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				Black (vs. white): -5.6% (95% CI -22.1% to 10.9%) Hispanic (vs. white): -3.7% (95% CI -14.9% to 7.6%) Other race (vs. white): -8.5 (95% CI -26.2% to 9.2%) Middle-income vs. low-income: -4.4% (95% CI -12.9% to 4.0%) High-income vs. low-income: -8.0% (95% CI -16.7% to 0.9%)			
Ramanathan, 2023[45] Y (**National**) Retrospective Antibiotic prophylaxis for dental procedures Clinical quality/safety	2015-2017, vs non-Veterans in non-VA care; CDW vs Marketscan data	N=18,292 Guideline concordant antibiotic prescribing: 30.9%	N=42,832 Guideline concordant antibiotic prescribing: 33.5%	VA vs non-VA: Guideline concordant antibiotic prescribing: OR 1.21 (95% CI 1.16 to 1.25) Guideline concordant antibiotic prescribing without prosthetic joint: OR 0.99 (95% CI 0.96 to 1.01) Guideline concordant antibiotic prescribing with	Statistics: Multivariable log binomial regression analyses or Poisson regressions Other methods of controlling: Backward selection, Akaike Information Criterion (AIC) for covariate selection Covariates: Age, sex, prosthetic joint, region, urban/rural, Charlson score, dental service category	N	Use of Marketscan claims data

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				prosthetic joint: OR 1.73 (95% CI 1.59 to 1.88) Guideline concordant antibiotic dosing based on antibiotic duration: OR 1.11 (95% CI 1.07 to 1.15)			
Ohl, 2023[41] Y (**National**) Retrospective Deaths and readmissions during the COVID-19 pandemic Clinical quality/safety	2020-2021, vs. Veterans in VA-paid and non-VA-paid community care; CDW, VHA Program Integrity Tool, CMS enrollment and claims, AHA survey, CDC Agency for Toxic Substances and Disease Registry Social Vulnerability Index	N=17,035 30-day mortality: 3021 (17.7%) 30-day readmissions: 2006/14,357 (14.0%)	N=47,821 30-day mortality: 12,951 (27.1%) 30-day readmissions: 4898/38,576 (12.7%)	Non-VA vs. VA: 30-day mortality: OR 1.37 (95% CI 1.21 to 1.55) 30-day readmissions: OR 0.89 (95% CI 0.86 to 0.92) Non-VA CC vs. VA: 30-day mortality: OR 1.44 (95% CI 1.26 to 1.64) 30-day readmissions: OR 0.91 (95% CI 0.81 to 1.01)	Statistics: Logistic regressions Other methods of controlling: Inverse probability of treatment weights, propensity scores Covariates: Patient age, race and ethnicity, sex, rural residence, Social Vulnerability Index, date of admission, distance to nearest VHA hospital, distance to nearest community hospital, comorbidities, acuity	Y	
Yoon, 2023[28] Y (**National**) Retrospective Hospital discharges for acute myocardial infarction, gastrointestinal hemorrhage, heart failure, pneumonia, stroke	2012-2017, vs. Veterans in non-VA care VA Managerial Cost Accounting files State-wide all-payer discharge data in 11 states	N=96450 30-day mortality (65 and over only): AMI: 9.8% GI bleed: 4.1% HF: 6.0% Pneumonia: 7.2% Stroke: 7.0%	N=418273 30-day mortality (65 and over only): AMI: 12.0% GI bleed: 5.8% HF: 10.4% Pneumonia: 9.7% Stroke: 16.5%	VA compared to nonVA care in adjusted models for 30-day mortality (65 and over): AMI:0.012 GI bleed: 0.004 HF: **-0.017** Pneumonia: -0.004	Statistics: Inverse probability weighted regression adjustment Other methods of controlling: N/A Covariates: age, sex, race, ethnicity, marital status, priority for VA care, comorbidity score,	Y	Outcomes also reported for age <65

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				Stroke**:-0.053** **Bold** = p<0.05	comorbidity for SUD or PTSD, geographic region, and post-CHOICE act period		
Wachterman, 2024[52] N (**National**) Retrospective End-of-life care	2021-2022, vs. Veterans in VA-paid community care VA Bereaved Family Survey to measures the quality of end-of-life care, stratified by VA CLC or CA-contracted community nursing homes	N=1012 Overall rating of EOL care as 9/10: 84.8%	N=226 Overall rating of EOL care as 9/10: 71.2%	Adjusted odds ratio of overall better care at VA CLC = 2.35, 95% CI 1.68-3.29	Statistics: Logistic regression using "top box" (9/10) as outcome Other methods of controlling: N/A Covariates: Age, sex, race/ethnicity, next-of-kin relationship and education, length of hospice stay	N	Based on family response to survey, which only 41% (for VA) and 21% (for community nursing homes) were completed
Wadhwa, 2024[57] Y (**Local**) Retrospective Prostate cancer outcomes in California	2000-2018, vs. non-Veterans VA Central Cancer Registry California Cancer Registry	N=1881 44.3% Black	N=47580 17.2% Black	10-year all-cause survival was worse in Black patients treated in the community (p<0.01), whereas there was no evidence of racial disparities in the VA cohort	Statistics: Kaplan-Meier analysis for all-cause survival, logistic regression, and Cox proportional hazards models Other methods of controlling: N/A Covariates: Age at diagnosis, ethnicity, year of diagnosis, socioeconomic status, stage at diagnosis, census-tract-level population density	Y	

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Bagshaw, 20241 Y Retrospective Inpatient quality, Patient experience (CMS Star Ratings)	2023, vs non-Veterans in non-VA care	N=136 hospitals N=112 hospitals in matched analysis	N=4,518 hospitals N=112 hospitals in matched analysis	VA hospitals were more likely to receive 4 or 5 star ratings and less likely to receive 2 star ratings than non-VA hospitals VA hospitals were better Non-VA hospitals in mortality and patient experience and worse in readmission and timely and effective care; the two groups were similar on safety of care Matched analysis similar to primary analysis	Statistics: t-tests other methods of controlling: matching	Y	
Axon, 2024[3] Y Retrospective Readmissions Emergency visits	2016-2021 vs Veterans getting VA-paid care in the community; and vs non-Veterans getting non-VA care VA Corporate Data Warehouse; CMS Medicare Parts A.B.C, D.	N=932,493 Veterans receiving VA care	N=929,780 Veterans receiving community care N=372,566 patients in Medicare	After MISSION Act implementation Veterans care had 37% greater risk of 7-day readmission and 19% greater risk of 30-day readmission; but 5.5% greater risk of ED visit compared to Veterans	Statistics: multivariable regression with regression discontinuity	Y	[Not sure what they adjusted for.]

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				receiving VA care			
Eid, 2024[4] Y Retrospective Patient Satisfaction Clinical Quality	2018 Vs. non-Veterans in non-VA care HCAHPS SAIL Patient Safety Indicator - 90 composite score	N=133 hospitals	N=1116 academic non-VA hospitals	VA hospitals had higher "would you recommend" ratings than non-VA hospitals (88.3 vs. 87.7; p=0.04) and lower (better) PSI-90 scores (0.88 vs. 1.03 p=0.0002)	Statistics: multi-variable linear regression with interaction term PSI-90 is risk-adjusted	Y	
O'Hanlon, 2024[5] N Retrospective Pain, physical health	2018-2020 vs Veterans with VA-paid care in the community Patient surveys	N=219 veterans getting VA acupuncture or chiropractic care	N=160 Veterans getting care in the community	No differences in adjusted 6-month outcomes between acupuncture or VA or community practitioners	Statistics: multi-variable linear regressions Control variables: Age, sex, race/ethnicity, marital status, VA co-pay, educational attainment, region urbanicity, distance to nearest VA	N	
Yoon, 2024[2] Y (National) Retrospective Diabetes Diabetes and general health Quality of care	2020-2022 VA Corporate Data Warehouse	N=652648 HgbA1c: 90% Microalbumin test: 67% No significant differences in ACSC hospitalization	N=3650	Adjusted difference in probability for receiving care relative to VA-delivered care: HgbA1c= -0.17 Eye exam = -0.04 Microalbumin test = -0.19 Acute hospitalization = 0.0.6	Inverse probability weighted regression adjustment, adjusting for age, rurality, race, Charlson comorbidity score, marital status, service connected status, baseline HgbA1c.	Y	

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				Influenza shot = 0.1 $1741 higher mean total costs of care. No significant differences in ACSC hospitalization			

SURGICAL CARE

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George, 2021[67] Y (**National**) Retrospective Noncardiac surgery	2015-2018, vs other non-VA VASQIP vs NSQIP	N: 736477 30-day mortality: 8008 (1.1%) 30-day complications: 125816 (17.1%) Failure to rescue: 5918 (4.7%)	N: 3174274 (NSQIP) 30-day mortality: 2602 (0.8%) 30-day complications: 299984 (9.5%) Failure to rescue: 19936 (6.7%)	VA vs NSQIP 30-day mortality: RR(adj)=0.59 (95% CI: 0.47-0.75), p<0.001 Failure to rescue (with complications): RR=0.55 (95% CI: 0.44-0.68) (reference group: gen pop)	Stats: Multivariate log binomial regression Other methods of controlling: Serial modeling with subgroup analysis for 30-day mortality Covariates: age, sex, race/ethnicity, emergency/elective, postoperative complication	Y	Also performed sensitivity analyses with frailty and urgency (not abstracted)
George, 2024[68] Y (**National**) Retrospective Noncardiac surgery in women	2016-2019, vs other non-VA VASQIP vs NSQIP	N: 36478 procedures 30-day mortality: 0.1% 30- day complications: 3.4% Failure to Rescue: 0.1%	N: 1727062 procedures 30-day mortality: 0.3% 30-day complications: 3.7% Failure to Rescue: 0.2%	VA vs NSQIP 30-day mortality: RR(adj)=0.41 (95% CI: 0.23-0.76), p<0.001 Failure to rescue (with complications): RR=0.41 (95% CI: 0.18-0.92)	Stats: Multivariate poisson regression Other methods of controlling: Coarsened matching to balance groups Covariates: frailty, race/ethnicity, operative stress score, elective/urgent	Y	Also performed sensitivity analyses on surgery type and frailty
Simmonds, 2024[66] Y (**National**) Retrospective Colectomy	2015-2019, vs other non-VA VASQIP vs NSQIP	N: 11115 procedures 30-day mortality: 1.4% Any complication: 18% Return to OR: 7.1% Surgical site infection: 3.4% Wound dehiscence: 1.6% Post-operative pneumonia: 1.4% Pulm embolism: 0.7% Cardiac arrest: 0.7% Sepsis: 3.0%	N: 235097 procedures 30-day mortality: 1.2% Any complication: 22% Return to OR: 4.6% Surgical site infection: 3.6% Wound dehiscence: 0.9% Post-operative pneumonia: 1.9% Pulm embolism: 0.5% Cardiac arrest: 0.4% Sepsis: 0.7%	VA vs NSQIP after excluding emergency cases 1.2% vs 1.4% p-=0.145 Any complication: 17.7% vs 22%, p<0.001	Stats: multivariate logistic regression Covariates: age, sex, body mass index, functional status, emergency designation, ASA class, steroid usage, preoperative sepsis, smoking status, and presence of several chronic conditions	Y	Sensitivity analysis on open vs. laparascopic cases showed more variability in open cases Data extracted for cohort that excluded emergency cases

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Buys, 2024[62] Y Retrospective Orthopedic joint surgery	2018-2021, vs VA-paid community care Corporate data warehouse and medical records	N: 239 Median of 30 opioid tablets prescribed on discharge	N: 323 Median of 40 opioid tablets prescribed on discharge	Adjusted odds of receiving fewer opioid tablets in the first 90 days 0.45, p<0.001	<u>Stats: binomial regression model</u> <u>Covariates:</u> age, sex, BMI, rural residence, number of days in hospital before surgery, surgery type, any mental health diagnosis, any substance use disorder	Y	
Yoon, 2023[28] Y Retrospective CABG	2012-2017 VA Managerial Cost Accounting files State-wide all-payer discharge data in 11 states	N:2548 30-day mortality(>65 years of age) 2.1% LOS (>65 years of age) 11.7 days Cost (>65 years of age) $76,200	N:15981 30-day mortality(>65 years of age) 2.2% LOS (>65 years of age) 9.6 days Cost (>65 years of age) $53,100	Average treatment outcome (>65 years of age) 30-d mortality 0.009 p=0.17 30-d readmission (>65 years of age) -0.045, p<0.001	<u>Stats:</u> inverse probability weighted regression adjustment <u>Covariates:</u> age, sex, race, ethnicity, marital status, priority for VA care, comorbidity score, comorbidity for SUD or PTSD, geographic region, and post-CHOICE act period	Y	Outcomes also reported for age <65
Heiden, 2021[74] Y (**National**) Retrospective Lung resection	2006-2016 (vs other non-VA: NCDB) VA CDW vs NCDB	N: 6792 Length of stay: 8.12 days (SD 6.59) 30-day readmissions: 523 (7.70%) 30-day mortality: **128** (1.9%) 90-day mortality: **250** (3.7%) Median overall survival: **71.4 months**	N: 6792 (NCDB) Length of stay: **7.08 days** (SD 7.54) 30-day readmissions: 470 (7.02%) 30-day mortality: 188 (2.8%) 90-day mortality: 331 (5.0) Median overall survival: 65.2 months	<u>Unadjusted/matched cohort:</u> Length of stay: p<0.001 30-day readmissions: p=0.132 Median overall survival: p<0.001 30-day mortality: p<0.001 90-day mortality: p<0.001 Median overall survival, VA vs NCDB: p=0.0006	<u>Stats:</u> Kaplan-Meier with log-rank tests <u>Other methods of controlling:</u> **propensity score matching** <u>Covariates:</u> age, sex, race, income, educational level, Charlson/Deyo score, distance to hospital, tumor size, year of diagnosis	Y	

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Blay, 2017[36] Y (**National**) Retrospective Hospital PSI	2012-2015, vs other non-VA Hospital Compare	N: 129 hospitals Death among surg inpatients w/ treatable conditions: **105.82** per 1000 discharges Postoperative sepsis: 7.52 per 1000 discharges Postoperative wound dehiscence: 2.17 per 1000 discharges VTE: 3.94 per 1000 discharges	N: 4010 hospitals Death: 136.34 per 1000 discharges Postoperative sepsis: 10.22 per 1000 discharges Postoperative wound dehiscence: 2.32 per 1000 discharges VTE: 5.08 per 1000 discharges	Death: VA 95% CI 96.7-114.92; non-VA 95% CI 135.42-137.26 (P<0.05 with Bonferroni correction) Postoperative sepsis: VA 95% CI 6.10-8.95; non-VA 95% CI 10.12-10.32 (P<0.05 with Bonferroni correction) Postoperative wound dehiscence: VA 95% CI 1.64-2.71; non-VA 95% CI 2.30-2.33 VTE: VA 95% CI 3.42-4.45; non-VA 95% CI 5.00-5.15	Stats: t tests with and without Bonferroni correction for multiple comparisons to evaluate pairwise comparisons between VA and non-VA hospitals for risk-adjusted rates of outcome measures Other methods of controlling: N/A Covariates: N/A	Y	Hospital level data. Subgroups of only medical reasons for death and readmissions were not collected
Eid, 2020[72] N (**National**) Retrospective Surgery PSI/ satisfaction	2018, vs other non-VA Hospital Compare	N: 34 hospitals DVT/PE: 3.56 per 1000 patients Wound dehiscence: **0.29** per 1000 patients Postoperative mortality: **95** per 1000 patients Surgical-specific patient safety indicator: 18.0 per 1000 patients Compiled patient satisfaction star ratings: 2.96 Recommended hospital rating 2.7	N: 319 hospitals DVT/PE: 4.05 per 1000 patients Wound dehiscence:0.83 per 1000 patients Postoperative mortality: 167 per 1000 patients Surgical-specific patient safety indicator: 51.4 per 1000 patients Patient satisfaction star ratings: 2.97 recommended hospital rating 3.13	DVT/PE: p=**0.18** Wound dehiscence: p<0.01 Postoperative mortality: p<0.001 Surgical-specific patient safety indicator: p<0.001 Patient satisfaction star ratings: p=0.9 Recommended hospital rating: p= 0.007	Stats: paired-sample t-test Other methods of controlling: N/A Covariates: N/A	N (relative to Blay fewer hospital and fewer years	
Harris, 2021[75] Y (**National**)	VA: 2017-2019 vs Veteran in non-VA ("VA-purchased")	N: 24,407 Any complication: 712 (2.9%)	N: 18,964 Any complication: 611 (3.2%)	adjusted odds ratios (reference group: CC):	Stats: mixed-effects logistic regression (random effects for	Y	Full sample (not the 30-30 volume based sample) used to data abstract.

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retrospective cohort Elective TKA	CDW/ Medicare vs CDW/ Medicare	MI: 45(0.2%) Joint/wound infection: 236 (1.0%) Pneumonia: 129 (0.5%) PE: 193 (0.8%)	MI: 92 (0.5%) Joint/wound infection: 128 (0.7%) Pneumonia: 140 (0.7%) PE: 109 (0.6%)	Any complication: 0.45 (95% CI: 0.38, 0.54) MI: 0.21 (p<0.001, CIs not reported) Joint/wound infection: 0.69 (p<0.001) Pneumonia 0.34 (p<0.001) PE 0.73 (p<0.01) (reference group: CC)	patients, setting, and VA facility) Covariates: age, sex, race, marital status, rurality, priority level (service connected disability/income level), Nosos risk score		*Reason for map being "mixed". National level data show VA better but 5 individual VA facilities (supplement S7) had worse complications*
Rosen A, 2021[76] Y (**National**) Retrospective Cataract surgery	2014-2015, VA vs vets in non-VA ("CC") CDW	N: 44546 30-day complication for complex surgeries in all eyes: 164 (1.61%) 30-day complication for routine surgeries in all eyes: 313 (0.65%) 90-day complication for complex surgeries in all eyes: 228 (2.24%) 90-day complication for routine surgeries in all eyes: 476 (0.99%)	N: 17203 30-day complication for complex surgeries in all eyes: 58 (1.52%) 30-day complication for routine surgeries in all eyes: 131 (0.59%) 90-day complication for complex surgeries in all eyes: 81 (2.13%) 90-day complication for routine surgeries in all eyes: 195 (0.89%)	30-day complication for complex surgeries in all eyes: RR(unadj)=0.94 (95% CI: 0.70, 1.27); AR=-0.09 (95% CI: -0.56, 0.38) 30-day complication for routine surgeries in all eyes: RR(unadj)=0.91 (95% CI: 0.74, 1.16); AR=-0.06 (95% CI: -0.19, 0.07) 90-day complication for complex surgeries in all eyes: RR(unadj)=0.95 (95% CI: 0.74, 1.22); AR=-0.12 (95% CI: -0.66,	Stats: Firth's penalized maximum likelihood logistic regression Other methods of controlling: N/A Covariates: community care status, complex surgery, eye risk group, complex surgery*CC, complex surgery*high-risk eye, CC*high-risk eye, complex surgery*CC*high-risk eye, demographic variables (i.e., rural status, race, number of preoperative ocular conditions)	Y	Did not abstract low- and high- risk eyes subgroups

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				0.43) 90-day complication for routine surgeries in all eyes: RR(unadj)=0.89 (95% CI: 0.75, 1.05); AR=-0.11 (95% CI: -0.26, 0.05) (Reference group: VA) 90-day complication (CC vs VA): OR(adj)=0.918 (95% CI: 0.765-1.097), p=0.349			
Rosen, 2021[58] Y (**National)** Retrospective TKA	2016-2019, VA vs vets in non-VA ("CC") CDW and Medicare data	N: 25,384 All-cause readmission rate: 4.3% TKA-related readmission rate: 1.3%	N: 19,990 All-cause readmission rate: 4.6% TKA-related readmission rate: 1.2%	adjusted odds ratio (reference: CC) all-cause readmissions: OR=0.35 (95% CI: 0.30-0.40) TKA-related readmissions: OR=0.30 (95% CI: 0.23-0.38)	Stats: mixed effects logistic regression (fixed effects for setting, random effects for VA facility and setting) Covariates: gender, age, race, marital status, rurality, Medicaid insurance, priority level, Nosos risk score	Y	Used the data that included Medicare data (did not use analysis that removed medicare) did not abstract individual facility level OR (finding: 1 VA facility had sig higher odds of all-cause readmits than paired CC; 3 VA facilities had sig higher odds TKA-related readmit vs paired CC)--*thus mixed findings*
Williams, 2020[63] Y (**National**) Retrospective Lung resection	2001-2009, vs other non-VA VA CDW vs SEER-Medicare	N: 7895 Black vs White overall 5-year survival: no raw event data Black vs White lung cancer-specific 5-year survival: no raw event data Overall treatment type: *None:* 1930 (24.5%)	N: 8744 (Seer-Medicare) Black vs White overall 5-year survival: no raw event data Black vs White lung cancer-specific 5-year survival: no raw event data Overall treatment type:	Black vs White overall 5-year survival: VA cohort HR(adj)=1.08 (95% CI: 1.00-1.16), P=0.041; SM cohort HR(adj)=1.17 (95% CI: 1.06-	Stats: multinomial logistic regression for odds of treatment type; univariate Kaplan-Meier for survival, White/Black groups compared by log-rank test. Other methods of controlling: N/A	Y	Findings confirmed by multivariate (less difference between Black and White in VA compared with non-VA)

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		Surgery only: 3648 (46.2%) *RT only:* 1446 (18.3%) *Chemo only:* 181 (2.3%) *>1 treatment:* 690 (8.7%)	*None:* 1412 (16.2%) *Surgery only:* 4454 (50.9%) *RT only:* 978 (11.2%) *Chemo only:* 171 (2.0%) *>1 treatment:* 1729 (19.8%)	1.30), P<0.0001 Black vs White lung cancer-specific 5-year survival: VA cohort HR(adj)=1.06 (95% CI: 0.96-1.17), P=0.26; SM cohort HR(adj)=1.21 (95% CI: 1.07-1.37), P<0.0001 Unadjusted overall treatment type: p<0.01 for VA and SM Blacks vs White surgery only treatment group: VA cohort OR(adj)=0.73 (95% CI: 0.62-0.86); SM cohort OR(adj)=0.57 (95% CI: 0.47-0.70)	Covariates: age at diagnosis, marital status, Charlson comorbidity score, histology stage, year of diagnosis		
Kesseli, 2020[64] Y (**National)** Retrospective Kidney transplant	2001-2016, SRTR (vs other non-VA)	N: 1508 transplants report observed number / expected number (O:E ratio) 1-year graft survival: 78/97.8 (0.79) 1-month mortality: 3/11.3 (0.26) 1-year mortality: 33/53.6 (0.57) N: 617 transplants 3-year graft loss: O:E = 0.88 (95% CI 0.69–1.09)	N: 227,680 transplants 1-year graft survival: 14,185/14,149 (1.00) 1-month mortality: 1348/1340 (1.01) 1-year mortality: 6190/6174 (1.00) N: 74,478 transplants 3-year graft survival: O:E = 1.00 (95% CI: 0.98–1.02)	1-year graft survival: O:E= 0.79 (95% CI 0.63–0.98) vs 1.00 (0.98–1.02), P = 0.15 1-month mortality: O:E = 0.27 (0.05–0.65) VA vs 1.00 (0.95–1.06) non-VA, P = 0.03 1-year mortality: O:E = 0.62 (0.42–0.84) VA vs 1.00 (0.98–1.03) non-	Stats: observed vs expected ratios. Expected probabilities calculated from Scientific Registry of Transplant Recipients using Cox proportional hazard model from national data (includes 33 patient, donor, and transplant characteristics)	Y	Abstracted data for VA and non-VA sites (did not include VA-affiliate sites) given all data reported in paper, reporting as **equal/mixed** (abstracted data shows mostly VA better)

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				VA, P = 0.03 3-year graft survivial: p=0.46			
Barnett, 2018[25] Y (**National**) Retrospective CABG	2014 - 2017, Veterans in VA vs Veterans not in VA ("CC") ?data source: ?CDW vs CC claims	N: 4866 Actual distance traveled: 123.2 miles 30-day mortality: 1.50% (77 deaths) 30-day readmission: 7.12% (346 readmissions) Total cost (no unadjusted data)	N: 952 Actual distance traveled: 81.5 miles 30-day mortality: 1.26% (12 deaths) 30-day readmission: 8.25% (79 readmissions) Total cost (no unadjusted data)	Actual **travel distance**: p=0.02 Unadjusted 30d mortality: p=0.57 Adjusted 30d mortality: 1.51% for VA vs 1.33% for CC (p=0.74); RR (adj)=0.89 (95% CI: 0.45-1.77) Adjusted 30-day readmission: 7.00% for VA vs 8.13% for CC (p=0.28); RR (adj)=1.16 (95% CI: 0.89-1.50) Mean adjusted total cost: $65264 (SD: $47978) for VA vs $56749 (SD: $77283) for CC (p<0.01) [adjusted: CC is reference]	Stats: log binomial models for mortality and readmission, log gamma models for costs Other methods of controlling: **propensity weighting** to control for differences in case mix between VA and CC patients Covariates (in propensity adjustment): age, sex, race/ethnicity, recent myocardial infarction, prior PCI, prior CABG surgery, cerebrovascular disease, peripheral vascular disease, congestive heart failure, Type 1 diabetes, Type 2 diabetes, body mass index, renal function, dialysis, chronic obstructive pulmonary disease, atrial fibrillation, number of vessels revascularized	Y	Did not abstract PCI data Travel data: reported only actual distance traveled Costs: total cost (Table 3), which is different from mean-adjusted index cost Mortality: reporting figure 1 adjusted at patient (not hospital) level factors
Frisch, 2020[59] Y (N**ational**) Retrospective Elective THA	2014 (vs other non-VA) CDW vs NSQIP	N: 10460 Length of stay 4 days or greater: 4805 (47%) 30-day complications: 908 (9%) PE: 74 (0.7%)	N: 58820 (NSQIP) Length of stay 4 days or greater: 9815 (17%) 30-day complications: 1608 (3%) PE: 308 (0.5%)	OR(adj) for LOS >3d (VA vs non-VA) =4.46 (95% CI: 4.21-4.72) OR(adj) for 30-d complications (VA	Stats: multivariate logistic regression Other methods of controlling: N/A Covariates: sex, age, race, BMI, diabetes	Y	Reported OR(adj) for length of stay greater than 3 days rather than 4 days because missing latter analysis

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		MI: 39 (0.4%) DVT: 152 (1.5%) Pneumonia: 82 (0.8%) Post-operative infection: 220 (2%) 30-day readmissions: 1773 (17%)	MI: 121 (0.2%) DVT: 414 (0.7%) Pneumonia: 10 (<0.1%) Post-operative infection: 619 (1%) 30-day readmissions: 1955 (3%)	vs non-VA) =2.58 (95% CI: 2.31-2.89) OR(adj) for 30-day readmissions (VA vs non-VA)=4.94 (95% CI: 4.51-5.41) Unadjusted length of stay 4 days or greater: p<0.001 Unadjusted 30-day complications: p<0.001 Unadjusted 30-day readmissions: p<0.001 Unadjusted PE: p=0.019 Unadjusted MI: p=0.001 Unadjusted DVT: p<0.001 Unadjusted pneumonia: p<0.001 Unadjusted post-operative infection: p<0.001 (Reference for adjusted measurements: non-VA)	mellitus, chronic obstructive pulmonary disease, chronic kidney disease, metastatic cancer, hypertension, congestive heart failure		
Hutt, 2015[61] N (**National**) Retrospective Hip fracture repair	2003-2005 VA vs other non-VA VA NSQIP vs Medicare	N: 947 Avg days from admission to surgery: 5.64 (SD 43.25) Survival at 30-days: 89.65% Survival at 1yr: 63.04%	N: 947 (Medicare) Avg days from admission to surgery: 1.78 (SD 2.35) Survival at 30-days: 92.93% Survival at 1yr: 70.43%	Unadjusted/matched cohort: Avg days from admission to surgery: p=.0063 Survival at 30-days: p=0.0106 Survival at 1 year:	Stats: Multivariate logistic regression Other methods of controlling: **Propensity matching** Covariates: propensity matching:	Y	Large dot because N=947 per group in the propensity matched sample, used VASQIP and Medicare data)

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				p=0.0006 30-day survival odds (Medicare vs VA) OR :1.701 (95% CI: 1.184-2.445) (p<0.001) 1 year survival odds (Medicare vs VA) OR :1.504 (95% CI: 1.208-1.872) (p<0.001)	age, sex, race, prehospital location, type of surgery, comorbidities, region, year of surgery, primary diagnosis; odds of survival using matched cohort: year of surgery, number of hospital days before/after surgery, chronic conditions		
Griffith, 2020[48] Y (**National**) Retrospective Ortho/Urology wait times	2013-2019 vs 2018-2019 (vs Vets in non-VA)	N: 506945 (orthopedics), 353029 (urology) Mean wait time for orthopedics: 36.2 days (SD 9.3) Mean wait time for urology: 36.1 days (SD 9.5)	N: 139827 (orthopedics), 37089 (urology) Mean **wait time** for orthopedics: 43.6 days (SD 12.9) Mean wait time for urology: 50.5 days (SD 14.5)	orthopedics (r=0.50) urology (r=0.30)	Stats: mean appointment wait times; Weighted Pearson correlation coefficients between VHA and CC wait times Other methods of controlling: N/A Covariates: N/A	Y	
Billig, 2021[70] N (**National**) Retrospective Carpal tunnel	2010-2015 (vs Veteran in non-VA) CDW data	N: 23330 Median Referral PCP to CTR days: 176 days IQR: 94-470)	N: 5912 (mixed care) Median Referral PCP to CTR days: 378 days (IQR: 136-1136)	Median Referral **PCP to CTR days** (VA vs mixed care): HR(unadj)=0.63 (95% CI: 0.61-0.64); HR(adj)=0.63 (95% CI: 0.61-0.65)	Stats: Multivariable cox proportional hazard models; kaplan meier with log-rank comparisons Other methods of controlling: Controlling for other services received in community Covariates: age, sex, race, CCI, diabetes, VA priority group, PCP facility type, PCP and surgical specialist located within same facility, proportion of patients referred for any community care for a	N (mixed care group was not uniform)	Note: comparison group is people with some portion of their diagnostic workup, nonsurgical or surgical care being in community, compared to entire workup/ treatment in VA. Likely some bias with some VA surgeries occurring in the mixed comparison group, thus small circle.

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					CTS-related service at the facility level		
Pettey, 2021[71] Y (**National**) retrospective Cataract	FY2015 (vs vets in non-VA "CC")	N: 58050 cataract procedures Median driving miles to closest VA facility: 28.1 (SD 39.2) Median driving miles to actual VA facility: 31.2 (SD 110.9)	N: 25825 cataract procedures Median **driving miles** to closest CC facility: 8.7 (SD 21.7) Median driving miles to actual CC facility: 19.7 (SD 296.0)	N/A	Stats: drive distances generated with Geographic Information System (GIS) Other methods of controlling: N/A Covariates: N/A	Y	Reported national findings (there were additional state/regional data) and excluded heatmap data Considered mixed results because closest driving miles for CC was lower than that for VA but VA better in portion of comparisons (26% of CC surgeries took place further than the closest VA, for instance)
Augustine, 2018[15] Y (**National**) Retrospective Kidney transplant	2004-2016, SRTR (vs other non-VA)	N: 2905 patients (no raw mortality, delisting event data) median distance transplant center (25%, 75%): 347.0 (196.9, 701.8)	N: 3751 (private) N: 3109 (Medicare) (no raw event data) median distance transplant center, private (25%, 75%): 42.5 (12.9, 101.1) median distance transplant center, Medicare (25%, 75%): 55.6 (16.4, 102.6)	VA vs private all transplants: HR(adj) **0.72** (95% CI: 0.65-0.79) VA vs private Mortality: HR(adj) 1.00 (95% CI: 0.83-1.20) VA vs private delisting: HR(adj**) 1.23** (95% CI: 1.003-1.50) VA vs Medicare Mortality: HR(adj) 0.81 (95% CI: 0.68-0.96) VA vs Medicare delisting: HR(adj) 0.82; 95% CI, 0.68 to 0.99) unadjusted median **distance**: p<0.001	Stats: multivariable cox regression Control: matched VA with local non-VA centers in same DSA Covariates: age group, race, sex, diagnosis group, time on dialysis at listing, candidate status at listing, panel reactive antibody (PRA), body mass index group, education, malignancy, peripheral vascular disease, year of listing, region, log distance from candidate residence to listing center (distance in miles transformed on a log-10 scale), and community risk score	Y	Only reporting matched subset (another unmatched outcome set) Supplements were reviewed for raw event data - not included

Author **Year** **Large Database** (Y/N) **Study Design** **Health Condition** **Outcome Domains**	**Years of Source Data** **Comparison Group** **Data Source(s)**	**VA Care:** **N** **Outcomes (Raw Values)**	**Non-VA Care:** **N (Population)** **Outcomes (Raw Value)**	**Comparison Statistics** **Adjusted Model Findings**	**Statistical Method** **Other Methods of Controlling** **Covariates in Model**	**Bias Criteria Met?**	**Comments & Reason If Bias Criteria Not Met**
Wu, 2018[69] Y (**National**) Retrospective Cataract	2002-2012 (vs other non-VA) VHA claims data vs medicare data	N: 1,917,254 patients Surgery within 1 y of cataract dx: 120,196 (6.3%) Surgery within 5 y of cataract diagnosis: 240,884 (12.6%)	N: 1,156,211 patients (Medicare) Surgery within 1 y of cataract dx: 213,589 (18.5%) Surgery within 5 y of cataract diagnosis: 414,586 (35.9%)	Surgery within 1 y of cataract dx: p<0.001; OR(adj): 3.39 (95% CI: 3.36-3.41) **Surgery** within 5 y of cataract dx: p<0.001; OR(adj): 3.89 (95% CI: 3.87-3.91) (Reference group: VHA)	Stats: multivariable logistic regression Other methods of controlling: N/A Covariates: age group, sex, race/ethnicity, region of US residence, Charlson Comorbidity Index score, systemic comorbidities, ocular comorbidities	Y	
Wagner, 2021[73] Y (**National**) Retrospective TKA and cataract	2017-2018 (vs vets in non-VA, "VA purchased") CDW	N: 6179 for inpatient TKAs and 65799 outpatient cataracts Average total cost of inpatient TKAs: $28969 (SD $10778) Average total cost of outpatient cataract surgeries: $4301 (SD $2835)	N: 6337 for inpatient TKA and 5959 for outpatient cataracts Average total cost of inpatient TKAs: $13339 (SD $23698) Average total cost of outpatient cataract surgeries: $1585 (SD $629)	TKA: OLS regression coef=14869.2 (SE: 299.9), p<0.001 Cataract: OLS regression coef=2680.0 (SE: 15.8), p<0.001 (Reference group: VA-purchased)	Stats: ordinary least squares Other methods of controlling: adjusted standard errors for clustering within person to account for the fact that people can have more than 1 cataract or TKA Covariates: age, gender, Nosos risk score, location of care (only for TKA analysis)	Y	Only reported inpatient TKA and outpatient cataract data
Mull, 2022[65] Y (**National)** Retrospective Hernia repair	2018-2019 vs Veterans getting hernia repair through community care CDW	N: 7991 Unadjusted postoperative complications VA 4.0%, community care = 6.6%	N: 771 Unadjusted postoperative complication rate community care = 6%	Adjusted complication rate: no statistically significant difference	Stats: unadjusted – 2 sided t-tests, adjusted – 2-stage multivariable models Covariates: comorbidity, demographics, surgical complexity, historical referral rate	Y	
Tripathi, 2024[6] N Hearing loss Hearing	2008-2019 patients at one VA vs. non-veterans care getting non-VA care	N= 83 1-year CNC score=48.5% 1-year AzBio score=62.9%	N=83 1-year CNC score=52.4% 1-year AzBio score=66.4%	No significant difference between groups	T-tests Matched analysis using age, sex baseline CNC score	N	

RISK OF BIAS ASSESSMENTS

NON-SURGICAL CARE

Trial Name or Author Year	Time Frames	Sample (VA and Non-VA)	How Did the Specifications for the Outcome Assessments Compare in VA and Non-VA Samples?	Statistical Methods
Nuti, 2016[26]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Vanneman, 2020[50]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Gurewich, 2021[47]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Davila, 2021[51]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Intrator, 2021[30]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
LaBedz, 2021[38]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Gidwani, 2021[54]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Griffith, 2020[48]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Gidwani-Marszowski, 2020[43]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Penn, 2019[46]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)

Trial Name or Author Year	Time Frames	Sample (VA and Non-VA)	How Did the Specifications for the Outcome Assessments Compare in VA and Non-VA Samples?	Statistical Methods
Makarov, 2018[53]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Wang, 2019[32]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Thorpe, 2018[27]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Vercammen-Grandjean, 2018[39]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Wang, 2018[33]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Augustine, 2018[15]	Contemporaneous time frames	All between A and C	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Anhang Price, 2018[37]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Kurella Tamura, 2018[34]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Barnett, 2018[25]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Heidenreich, 2017[20]	Contemporaneous time frames	All between A and C	Identical	All between A and C
Blay, 2017[36]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Mody, 2017[21]	Contemporaneous time frames	All between A and C	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)

Trial Name or Author Year	Time Frames	Sample (VA and Non-VA)	How Did the Specifications for the Outcome Assessments Compare in VA and Non-VA Samples?	Statistical Methods
Shields, 2017[23]	Contemporaneous time frames	All between A and C	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Burke, 2016[16]	Contemporaneous time frames	Small, limited, unequal or non-representative samples	Identical	Insufficient sample size and/or methods questionable to address hypothesis(ses)
Lee, 2017[17]	Contemporaneous time frames	All between A and C	Identical	All between A and C
Axon, 2016[22]	Contemporaneous time frames	All between A and C	Identical	All between A and C
Jia, 2016[31]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Watkins, 2016[40]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Jones, 2015[13]	Contemporaneous time frames	All between A and C	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Chan, 2022[42]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Florez, 2021[14]	Contemporaneous time frames	All between A and C	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Feyman, 2022[49]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Cashion, 2021[35]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Presley, 2022[24]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	All between A and C
Pickering, 2022[55]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)

Trial Name or Author Year	Time Frames	Sample (VA and Non-VA)	How Did the Specifications for the Outcome Assessments Compare in VA and Non-VA Samples?	Statistical Methods
Fortney, 2022[18]	Contemporaneous time frames	All between A and C	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Scheuner, 2022[44]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Petros, 2022[19]	Contemporaneous time frames	All between A and C	Identical	All between A and C
Ramanathan, 2023[45]	Contemporaneous time frames	All between A and C	Identical	All between A and C
Gaffney, 2022[56]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	All between A and C
Weeda, 2023[29]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Ohl, 2023[41]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Yoon, 2023[28]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Sufficiently similar for valid comparisons	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Wachterman, 2023[52]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	All between A and C
Wadhwa, 2024[57]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Sufficiently similar for valid comparisons	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Bagshaw, 2024[1]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Axon, 2024[3]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Eid, 2024[4]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)

Trial Name or Author Year	Time Frames	Sample (VA and Non-VA)	How Did the Specifications for the Outcome Assessments Compare in VA and Non-VA Samples?	Statistical Methods
O'Hanlon, 2024[5]	Contemporaneous time frames	All between A and C	Identical	All between A and C
Yoon, 2024[2]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)

SURGICAL CARE

Trial Name or Author Year	Time Frames	Sample (VA and Non-VA)	How Did the Specifications for the Outcome Assessments Compare in VA and Non-VA Samples?	Statistical Methods
Buys 2024	Contemporaneous time frames	Small, limited, unequal or non-representative samples	Sufficiently similar for valid comparisons	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Simmonds 2023	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Yoon 2023	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Sufficiently similar for valid comparisons	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Harris, 2021[75]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Pettey, 2021[71]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Rosen, 2021[58]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Wagner, 2021[73]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Sufficiently similar for valid comparison	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Heiden, 2021[74]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Sufficiently similar for valid comparison	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Billig, 2021[70]	Contemporaneous time frames	Small, limited, unequal or non-representative samples	Identical	All between A and C
Griffith, 2020[48]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Kesseli, 2020[64]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)

Trial Name or Author Year	Time Frames	Sample (VA and Non-VA)	How Did the Specifications for the Outcome Assessments Compare in VA and Non-VA Samples?	Statistical Methods
Rosen, 2020[76]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Eid, 2020[72]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Frisch, 2020[59]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Williams, 2020[63]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Augustine, 2018[15]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Wu, 2018[69]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Barnett, 2018[25]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Sufficiently similar for valid comparison	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Blay, 2017[36]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Hutt, 2015[61]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Sufficiently similar for valid comparison	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
George, 2021[67]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Sufficiently similar for valid comparison	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
George 2024	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Sufficiently similar for valid comparisons	Sufficient sample size and/or methods appropriate to address hypothesis(ses)
Mull, 2022[65]	Contemporaneous time frames	Representative or national samples (both VA and non-VA)	Identical	Sufficient sample size and/or methods appropriate to address hypothesis(ses)

Trial Name or Author Year	Time Frames	Sample (VA and Non-VA)	How Did the Specifications for the Outcome Assessments Compare in VA and Non-VA Samples?	Statistical Methods
Tripathi, 2024[6]	Not clear if contemporaneous	All between A and C	Identical	All between A and C

PEER REVIEW COMMENTS AND RESPONSES

Comment #	Reviewer #	Comment	Author Response
Are the objectives, scope, and methods for this review clearly described?			
1	1	Yes	Thank you.
2	2	Yes	Thank you.
3	3	Yes	Thank you.
4	4	Yes	Thank you.
5	5	Yes	Thank you.
6	7	Yes	Thank you.
7	8	Yes	Thank you.
8	10	Yes	Thank you.
Is there any indication of bias in our synthesis of the evidence?			
9	1	No	Thank you.
10	2	No	Thank you.
11	3	No	Thank you.
12	4	No	Thank you.
13	5	No	Thank you.
14	7	No	Thank you.
15	8	No	Thank you.
16	10	No	Thank you.
Are there any published or unpublished studies that we may have overlooked?			
17	1	No	Thank you.
18	2	No	Thank you.
19	3	No	Thank you.
20	4	No	Thank you.
21	5	Yes - Recent JAMA Open Network paper on wait times in VA and Community Care by Feyman et al.	This has been added to the report and map.
22	7	No	Thank you.

Comment #	Reviewer #	Comment	Author Response
23	8	No	Thank you.
24	10	No	Thank you.
Additional suggestions or comments can be provided below.			
25	1	Overall this is an excellent review of the literature comparing VA to non VA care. The authors have divided the available studies into surgical and non surgical care, and divided the outcomes according to standard health services research categories. I was particularly glad to see that more studies are now available outside of quality and safety. The summary figure is very useful and will no doubt be very informative to policy makers.	Thank you for your comment.
26	1	The search methods were quite thorough and I have little doubt that they have found all the relevant published literature. The inclusion criteria are very reasonable. I have some curiosity about whether the few excluded lower quality (fatal flaw) studies tended in the same direction of equal or better VA care overall, but in the end I think it is probably better that the authors did not spend time in sensitivity analyses in that direction.	We have now added information about these fatal flaw studies.
27	1	Most of my suggestions revolve around interpretation. I would give more valence to more recent studies as the both the VA and non VA system are evolving over time. The last paragraph of the discussion covers the difference between the pre2015 and post2015 studies. I would have liked a bit more detail those differences.	We have now called out in each text section those studies specifically about the CHOICE/MISSION act comparisons, which are most of the more recent studies, and the comparison of greatest policy interest.
28	1	Similarly there were innovative recent studies that probably deserve more highlighting. Observational studies are of course always subject to bias, and the authors do a great job of assessing how robust the individual studies are. However the recent Chan study on mortality was	Unfortunately the Chan study was the only one if its kind. We have beefed up and discussed in more detail that the #1 limitation to all studies is the possibility of unmeasured confounding. I don't think we can do better than that.

Comment #	Reviewer #	Comment	Author Response
		particularly interesting in that it used a novel instrumental variable and was directed at a particularly important outcome - mortality. There were only a handful of other mortality studies in either surgical or nonsurgical care, and by the description provided all of narrower scope or poorer quality. I would have like to see a paragraph or at least a statement on how this key outcome compared.	
29	1	Finally it is important to note that almost all the studies covered only a single or small subset of conditions. Thus the overall conclusion about VA care could be limited to those conditions and that might be noted.	This has been added to the Limitations.
30	2	Well conducted review. Limitation of what's available is noteworthy. Looking at the surgical topics, the specialty areas are focused on specific operations/diseases eg. lung resection for NSC; or kidney transplant. These clearly are important, but are probably not the common bread/butter operations that all the VA surgical care address.	This has been added to the Limitations.
31	3	An obvious limitation is that the data do not provide insights on social challenges of veteran patients that are exacerbated by receiving care in a VHA facility that can influence hospital length of stay following surgery (e.g. availability of family/friend to take home when meeting discharge criteria).	This has been added to the Limitations.
32	4	Page 14, lines 20-21. One of the main impetus for carrying out this evidence synthesis was to evaluate the quality of care Veterans receive in the community following passage of the Choice (2014) and MISSION (2018) Acts. And the authors were tasked with categorizing studies based on whether Veterans received care at a VA facility as opposed to a community facility through the Choice and MISSION Acts. However, a lot of the studies included in this summary had	We have now separated out in the map and the text the studies that are about non-VA care received as part of the CHOICE or MISSION Act. Given that we identified some studies that compared VA care to VA-paid community care that preceded the CHOICE Act, we grouped all of these into a category now called “compared to Veterans getting VA-paid community care”

Comment #	Reviewer #	Comment	Author Response
		analyzed data that pre-dated the Choice and MISSION Acts. It would be nice to have some delineation or header in the manuscript for studies that specifically analyzed data after passage of the Choice legislation starting in 2014/2015.	
33	4	Page 15, line 24: Was 'Timing' defined by publication date or when data was collected. As mentioned above, it appears that a lot of data included in this evidence synthesis was collected prior to 2015.	Timing was publication date as this update was intended to pick up the evidence where the last systematic review stopped.
34	4	Page 21, line 60. I was wondering why cardiovascular revascularization procedures were included in KQ#1 group as opposed to KQ#2. It might make more sense to group all interventional procedures in the surgical group.	We agree that this is one potential classification system, but elected to keep the organization consistent with the prior 2012 review, which classified studies into surgery vs non-surgery (medical).
35	4	Page 24, line 45: There is a typo; delete "for".	This has been fixed, thank you.
36	4	Page 27, line 46: I am curious why the authors included "Hospital Patient Safety Indicators and Outpatient Quality of Care" studies under the Patient Experience heading. It seems out of place.	This paragraph about these two studies was inadvertently placed in Patient Experience. It has now been moved to where it belongs in Quality and Safety.
37	5	In general, this is a succinct, clearly written report. The organization is clear , the methods seem appropriate and the conclusions generally sound. I have inserted a number of comments directly in the report but have 4 general observations/suggestions:	Thank you for your comments.
38	5	1. The report describes two general types of studies: comparisons restricted to Veterans getting care in VA or non-VA setting, and comparisons of VA outcomes to general population outcomes. In fact there are further differences. In the first category, there are studies comparing enrolled veterans who get care in VA	We have now split out the studies of comparison to CHOICE/MISSION Act care.

Comment #	Reviewer #	Comment	Author Response
		or VA-paid care provided outside VA through Community Care/choice/contracted care. There are also studies comparing outcomes of dually eligible veterans who get care in VA vs in Medicare. Among the second group of studies, there are studies where comparison population are all insured (Medicare, Medicaid or HMO comparisons) and others where the population comparisons are non-VA hospital patients who include a mix of insured and uninsured.	
39	5	2. The report gives insufficient attention to the challenges in comparing quality and outcomes based on available data and how various sources of bias will vary based on the populations being compared and the outcomes used. I would have preferred more comment on the adequacy of efforts to control for clinical factors – if this was part of the evaluation of methods in the bias assessment it should be stated more clearly. The ability to adequately control for clinical and sociodemographic factors that affect clinical outcomes like mortality and readmission will vary substantially if some of the records are Medicare or private health systems. The cleanest comparisons are those that use Veteran populations and compare care in VA to that bought outside VA for the same patients, since both populations are insured, have comparable data, and are using the VA. For studies comparing enrolled Veterans getting VA care vs Medicare, there are selection factors that lead to greater VA or greater Medicare use that can bias outcomes. For some outcomes, claims level data may be adequate but for others such as CHF and MI, severity may vary by the source of care. Perhaps this is less than an issue than I worry, but some discussion should be included about what we know about the severity of illness and comorbidity of Veterans who get care in VA and those who get care in Medicare, or of Veterans	The issue of comparability has been added to the Limitations.

Comment #	Reviewer #	Comment	Author Response
		vs. general Medicare population. Similarly, comparing VA hospital outcomes to private hospitals will be affected by the comorbidity of patient populations and sociodemographics. Readmissions may be driven by patients who are uninsured with poor social supports.	
40	5	3. Table D on the medical care studies is confusing and spars in the data. Table E is much better organized and it would be preferable that Table D be reformatted in that manner. At a minimum, better description of the PICOTs elements for each study should be included at the beginning before listing all the individual outcome comparisons.	This has been reformatted.
41	5	4. The conclusions should spend a little more time in discussing the potential uses of this data and which comparisons might be most useful. First, comparisons are useful in identifying possible quality issues where VA performance should be improved. Looking at specific outcomes is important. Second, comparisons of VA vs Community Care are critical to shaping decisions about the expansion of that program and determining whether sending Veterans out for care in an effort to improve timeliness or convenience comes as a cost in terms of clinical outcomes. Third, some comparisons are useful at judging the potential advantages of the VA's national system of integrated care vs. care delivery in less organized settings – eg delivery of preventive care and control of chronic disease.	This has been added to the Discussion.
42	5	5. Recommendations for research are underdeveloped.	This has been fixed.
43	5	Page 16, Line 11: What about studies ability to adjust for differences in patient population -- eg underlying health status? If you didnt include this perhaps state why.	Adjusting for differences in patient population was one of the factors considered in "appropriate statistical methods". We have added this to the text.

Comment #	Reviewer #	Comment	Author Response
44	5	Literature Flow: Is it meant to be "...Clinical Care in VA..."	This has been fixed.
45	5	Literature Flow: Same error here: ...Quality of clinical CARE...	This has been fixed.
46	5	Page 22, Line 46: Did this study adjust for HF severity?	This study was not able to adjust for HF severity, only for the presence or absence of multiple comorbidities. We added this information to the text, and noted in the Limitations that the inability to control for things like this is a problem.
47	5	Page 23, Line 11: The nursing home populations are very different in VA and non-VA settings, especially by gender, age and presence of dementia. The ability to adjust for these differences will depend on the outcome being assessed.	We have added to the text the variables that were used in adjustments.
48	5	Page 23, Line 31: What risk factors were adjusted for?	We have added to the text the variables that were used in adjustments.
49	5	Page 23, Line 51: This sentence is potentially confusing -- I assume that is is a hazard ratio from a time-dependent model, but the point that it implies lower rates of transplant may be lost. I would clarify with a parenthetical phrase (lower rate of transplant)	We added this parenthetical phrase.
50	5	Page 26, Line 40: Better?	We changed ‘higher’ to ‘better’.
51	5	Page 26, Line 56: Is timing to transplant affected by the organ allocation system that VA does not control?	We do not know the answer to this question and the article itself does not provide information about this.
52	5	Page 28, Line 4: Risk adjusted readmission?	Yes these are risk-adjusted and we have added that to the text.
53	5	Page 36, Line 35: Length of stay in VA can be driven by problems with nursing home placements. While this is a relevant indication of a problem it is different than if it were due to other factors.	This is acknowledged but nevertheless, the data are what they are and are compatible with the experience of VA clinicians on the inpatient service: length of stay is much longer in VA due to disposition challenges.
54	5	Page 36, Line 60: I think more needs to be said about the ability of individual studies to account	This has been added to the Limitations.

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		for differences in study populations, differences in who seeks community care, etc. These differences paly out differently depending on study design and outcome. A study of CHF mortality that cant adjust for severity of CHF is prone to error. Can we say anything about the underlying comorbidity of VA vs, medicare patients?	
55	7	None	
56	8	This report is flawless from a standpoint of rigor and analysis. It is, however, a bit dense for busy policymakers. The bubble charts (a nice innovation) help but take a bit of time to absorb. I suggest 2 minor enhancements:	Thank you for your comment.
57	8	1. Include a "Pull Out Box" that quickly states what this new report adds. (I note that BMJ, Annals, MMWR have recently instituted these so check them out if you want to see what I'm talking about)	We think the “Key Findings” box at the beginning of the Executive Summary does this.
58	8	2. To make the bubble charts easier to use, start with a set of instructions first (right now, the key is a footnote to the chart) that orient the user. (This may take a bit of trial and error and perhaps a willing "test audience")	This set of instructions is contained in the text.
59	10	This evidence synthesis report updates prior comparisons of the quality of VA and non-VA care to include those published between 2015 to 2021. The comparisons were grouped under the broad category of non-surgical and surgical care - again in line with previously published evaluations. The search strategy appeared comprehensive and the studies were graded in a rigorous manner. I think this was a well-done synthesis.	Thank you for your comment.
60	10	Main suggestions: 1) One of the key conclusions is as follows: "In the domain of quality and safety, the great majority of studies found that VA care is as good as, or better than, care in the	We considered adding this….but ultimately elected not to do so, because it may make casual readers assume

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		community." While this is a reasonable summary, I view "better than" to be fundamentally distinct from "as good as". I would consider whether this distinction should be made in the abstract/executive summary. Ie, XXX studies demonstrated the VA was better than, YYY sudies showed the VA was as good as , and ZZZ studies showed the VA delivered worse ..." This grouping would align better with the evidence maps that bucketed studies into the following groupings: "VA care is better", "VA and community have equal or mixed results", and "community care is better".	that we – the authors – are giving equal weight to each study, which we aren't doing.
61	10	2) Although there was a lot of appropriate description of the validity of the studies and grading the quality of the research among a number of dimensions. I wonder if the research team included the importance of the outcome or quality measure in its assessment. In otherwords, some measures - like mortality and patient ratings of care - have strong face validity as important indicators of quality. For others - like length of stay and costs, it is not clear whether these actually represent quality measures (vs undefined metrics of resource utilization), whether lower is necessarily better, or whether they are appropriately risk-adjusted - particularly for critical factors like social support, function, or availability of stable housing.	This is a great question and one we discussed extensively. The problem is that if we, the research team, picks "importance" it is necessarily a subjective assessment. While at the extremes this may not be controversial—the example given of mortality compared to length of stay—other distinctions might be more controversial: for example, which is more important? Wait times for a urology appointment versus length-of-stay following joint replacement surgery? Because we did not think we could draw a bright and defensible line between important and less important outcomes, we elected to put them all in without an "importance" qualfier. But we did add to the Limitations that some outcomes will be more important than others and that this may vary by stakeholder.
62	10	3) There were five studies excluded because of 'fatal flaws". Would consider adding a brief description of the fatal flaw to exhibit B - similar to what was done in Exhibit C to describe why each studies did not meet inclusion criteria.	This was probably a bad use of jargon on our part. We have re-named them for what they are: unrepresentative samples, most single provider or single site studies.
63	10	4) It is unclear why studies of travel distance were included in this review. Longer travel distances for Veterans receiving some kinds of care (ie transplant) compared to non-Veterans may relate to decisions about whether VA	Travel distance was included in the review because it was in CHOICE as a criterion. We have added to the Limitations that travel distance may be of differing importance to different stakeholders.

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		patients are more likely to live in rural locations and the fact that the VA serves a subset of military veterans in ~130 centers whereas community care by definition includes the entire US population and all clinical facilities.	
64	10	5) In grading the quality of the evidence, did the authors consider the appropriateness of the risk-adjustment models? Many of the studies that examine mortality and readmission rely on claims-based approaches and compare outcome in the VA with that in Medicare. Given the incentives for private providers to overcode comorbidities, this kind of approach may penalize the VA since Medicare or private-sector patients would be labeled as being sicker. If some comparisons include a more comprehensive (and less "gameable") set of risk-adjustment variables, perhaps they should be called out as being stronger.	This is a great comment and something we tried to assess but have added to the limitations that for some it is impossible (like the upcoding in FFS medicine).