

# Comparison of Quality of Care in VA and Non-VA Settings: A Systematic Review

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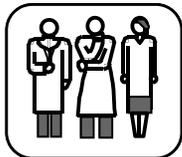


# Background

Largest integrated delivery system in the United States

Launched organizational transformation in mid-1990's

Both favorable and unfavorable reports of VA quality



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# Objective

Synthesize the totality of evidence comparing VA and non-VA quality of care for surgical, non-surgical, and other medical conditions.



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# Methods: Search Strategy

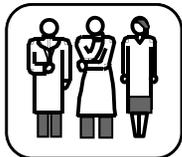
- VA Central Office bibliography of articles addressing possible VA and non-VA comparisons
- Medline search for similar articles
- MeSH search terms included: hospitals, veterans, standards, statistics and numerical data, and utilization



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# Methods: Inclusion

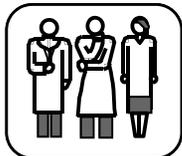
- Dual screen of all articles by two trained physicians
- Inclusion criteria:
  - Comparison of quality of care using data after January 1990
  - Assessed structure, process, or outcomes of care
- Included articles were categorized, given a quality assessment, and narratively summarized



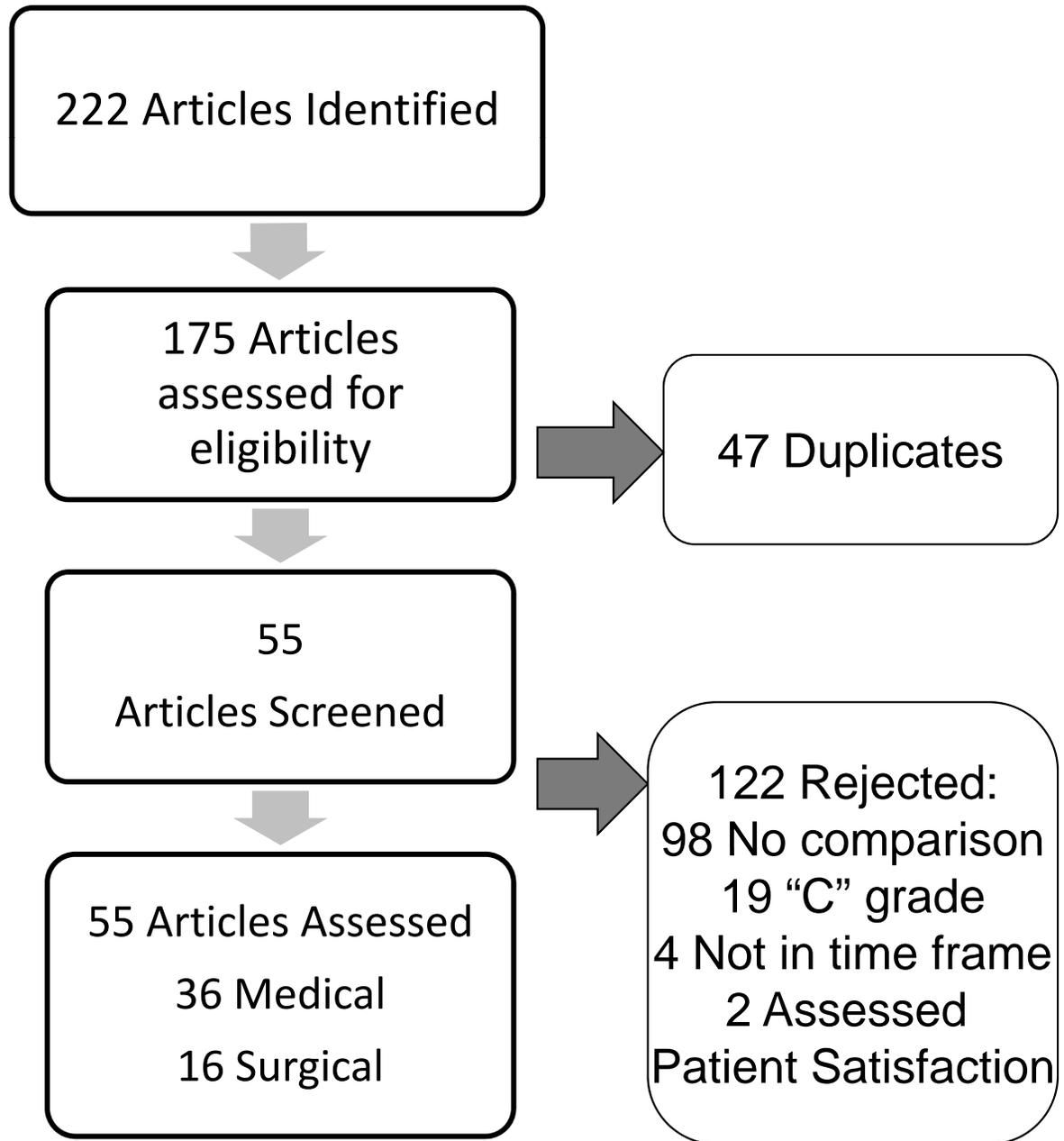
# Methods: Quality Assessment Criteria

- Comparable quality measures
- Contemporaneous time frames
- Representative/national populations
- Well-established clinical outcomes or validated process measure
- Broad number of indicators
- Adequate sample size/power
- Global assessment

*Graded each study (A,B,C) on each domain*



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# Results by Sub-Topic

<b>Medical</b>	<b>36</b>
General	9
Cardiovascular	8
Hospital/Nursing Home Care	9
Diabetes	3
Mental Health Care	4
Other	3

<b>Surgical</b>	<b>17</b>
General	4
Oncology	3
Solid Organ Transplantation	3
Vascular	3
Cardiac Surgery	1
Endocrine	2



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# Results: General Medical (9)

Primary prevention, multiple conditions, broad health outcomes

All 9 general studies found better adherence to care processes or better health outcomes in the VA



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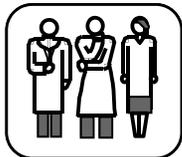
# Selected General Medical Studies

- VA patients more likely to receive recommended processes (67% vs. 51%) compared to community-based sample (Asch et al., 2003)
- VA outperformed traditional Medicare for 12 of 13 quality indicators in 2000 (Jha et al., 2002)



# Results: Cardiovascular (8)

- 5 mortality studies found no survival difference between VA and Medicare FFS
- 3 studies found better evidence-based drug therapy in VA; 1 found lower use of clinically-appropriate angiography



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# Selected Cardiovascular Studies

- VA patients with MI less likely to receive angiography when clinically needed (Petersen et al, 2003)
  - 44% in VA vs. 51.% in Medicare
- VA patient more likely to receive beta-blockers (50% vs. 42%), ACE-inhibitors (45% vs. 33%), and aspirin (77% vs. 69%) at discharge.



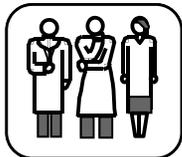
# Results: Hospital/ Nursing Home (9)

- 4 found similar risk-adjusted mortality rates in VA and private sector hospitals
- Similar racial disparities in hospital mortality compared to Medicare



# Results: Diabetes (3)

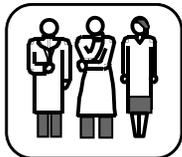
- All 3 studies found better adherence to recommended care processes in the VA
- Only one study of intermediate outcomes



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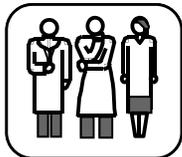
# Selected Diabetes Study

- The VA outperformed commercial managed care plans on 7 measures of care processes (Kerr et al. 2004)
- 92% of Veterans had A1c < 9.5% and 86% had LDL < 130 mg/dL.
- The corresponding rates were 80% and 72% in commercial managed care plans



# Results: Mental Health (4)

- 4 studies of the process of care in schizophrenia and depression found mixed results



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# Key Findings: Medical

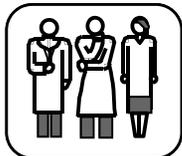
- Of 14 studies of care processes, 13 favored VA
- Of 12 studies of mortality, 3 favored VA, 2 favored non-VA, and 7 found no difference between VA and private sector



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# Conclusions: Medical

- Studies of care processes almost always demonstrated that the VA performed better than non-VA comparison groups.
- Studies that assessed risk-adjusted mortality generally found similar rates for patients in VA and non-VA settings.



# Results: General Surgical (4)

Findings were heterogeneous

Postoperative morbidity was similar or reduced in VA, except for one study in which a subset of male patients had higher adjusted rates of morbidity after bariatric surgery

Studies by Fink and Henderson: different types of surgeries in VA and non-VA settings, with less common and more complex surgeries in VA



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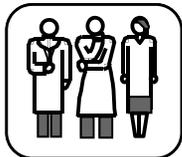
# Results: Oncology (3)

- 2 pancreatic cancer
- 1 breast cancer
- 1 pancreatic cancer study found a significant increase in risk-adjusted postoperative morbidity and mortality rates in VA
- Other 2 studies found no significant differences



# Results: Solid Organ Transplantation (3)

- No significant differences in patient survival between populations
- End-stage renal disease patients in VA settings were less likely to be listed for a kidney transplant, and less likely to receive one when listed, when compared to privately insured patients



# Results: Vascular (3)

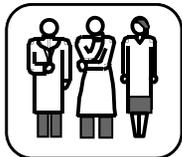
- VA had improved or comparable postoperative morbidity
- Risk-adjusted mortality rates were comparable across populations in all 3 studies



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# Results: Cardiac Surgery (2)

- Only one in SM publication, Rosenthal
- After adjustments, VA patients had higher odds of death



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# Results: Endocrine (2)

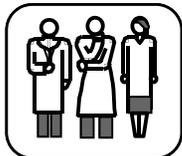
- No significant differences in postoperative morbidity or adverse events rates



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# Key Findings: Surgical

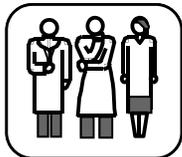
- 10 of 16 articles from the Patient Safety in Surgery Study: Oct 2001- Sept 2004



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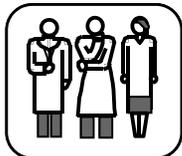
# Conclusions: Surgical

- Types of surgeries tend to be different in VA v. non-VA
- Outcomes were generally similar, with some exceptions
- Majority of studies have data more than 5 years old



# Limitations

- Breadth vs. depth
- Few assessments of geographic or facility variations
- Lack of detailed clinical data for risk-adjustment
- Need for outcomes other than mortality
- Little recent data



# Implications

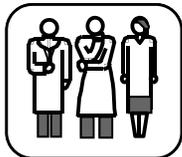
- Future VA non-VA comparisons should assess a broader set of outcome measures, national samples, recent data, and use more robust risk-adjustment methods.
- Future surgical studies could address comparisons of processes of care to provide information to enhance the quality of care across settings



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# Links and Resources

- Report  
<http://www.hsrd.research.va.gov/publications/esp/quality.cfm>
- VA Evidence Synthesis Program  
<http://www.hsrd.research.va.gov/publications/esp/>
- Trivedi AN, Matula S, Miake-Lye I, Glassman P, Shekelle P, Asch SM. **Systematic Review: Comparison of the quality of medical care in VA and non VA Settings.** *Medical Care* 2011;49(1):76-88
- Matula SR, Trivedi AN, Miake-Lye I, Glassman PA, Shekelle P, Asch S. **Comparisons of quality of surgical care between the US Department of Veterans Affairs and the private sector.** *J Am Coll Surg* 2010 Dec;211(6):823-32.



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# Synthesis Team

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# Affiliations

- VA Greater Los Angeles
  - Evidence Synthesis Program & Southern California/RAND Evidence-based Practice Center
  - Center for Surgical Outcomes and Quality
- VA Health Services Research & Development Service
- Center on Systems, Outcomes and Quality in Chronic Disease & Rehabilitation (SOQCR), Providence VA Medical Center
- Alpert Medical School of Brown University, Providence, RI
- David Geffen School of Medicine at UCLA, Los Angeles, CA
- Robert Wood Johnson Clinical Scholars Program, UCLA
- University of California San Francisco



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