

From The JAMA Network

Advancing High Performance in Veterans Affairs Health Care

David Atkins, MD, MPH; Carolyn M. Clancy, MD

JAMA INTERNAL MEDICINE

Initial Public Reporting of Quality at Veterans Affairs vs Non-Veterans Affairs Hospitals

Eddie Blay Jr, MD; John Oliver DeLancey, MD, MPH; D. Brock Hewitt, MD, MPH; Jeanette W. Chung, PhD; Karl Y. Bilimoria, MD, MS

This analysis used Centers for Medicare & Medicaid Hospital Compare data to compare outcome, patient experience, and behavioral health measures between Veterans Affairs (VA) and non-VA hospitals for July 2012–March 2015. VA hospitals had better outcomes than non-VA hospitals for 6 of 9 patient

safety indicators. There were no significant differences for the other 3 indicators. In addition, VA hospitals had better outcomes for all mortality and readmissions metrics. However, for the patient experience measures, non-VA hospitals scored better than VA hospitals for nursing and physician communication, responsiveness, quietness, pain management, and on whether the patient would recommend the hospital to others. For behavioral health measures, non-VA hospitals did better on 4 of 9 measures, while VA hospitals did better on 1 measure.

JAMA Intern Med. 2017;177(6):882-885. doi:10.1001/jamainternmed.2017.0605

Transparency and accountability are 2 recurring components of efforts to improve the quality and value of US health care. In the June 2017 issue of *JAMA Internal Medicine*, Blay et al¹ compared the performance of US Department of Veterans Affairs (VA) hospitals with non-VA hospitals using Centers for Medicare & Medicaid



Related article at
jamainternalmedicine.com

Services (CMS) Hospital Compare data. VA hospitals (n = 129) were compared with both academic and community hospitals (n = 4010) on a range of clinical outcomes and patient experience measures. VA hospitals performed better than non-VA hospitals for most outcome measures—including lower rates of inpatient safety events such as pressure ulcer, iatrogenic pneumothorax, and central line–associated bloodstream infection—and lower 30-day mortality and readmission rates for acute myocardial infarction (MI), pneumonia, heart failure, and chronic obstructive pulmonary disease. At the same time, VA hospitals scored lower for patient experience and behavioral health. Given the unique mission and heightened visibility of VA as a public-sector institution, these findings raise 2 questions: how does VA ensure the best health care possible for veterans in all aspects of care, and what is the VA doing to address areas that may need further improvement?

The finding that VA hospitals perform better on quality when compared with hospitals in the private sector is not novel. A 2017 review of 69 published studies reported that the VA performed as well as, or better than, private health care systems on most clinical quality measures.² Additionally, the VA has higher screening rates for colon cancer (82% vs a national average within the 60% range),³ has reduced the number of methicillin-resistant staphylococcus infections (infections in the intensive care unit declined 72%, from 1.64 to 0.46/1000 patient-days, 2007-2012),⁴ and achieves lower 30-day mortality than private hospitals for patients older than 65 years hospitalized for acute MI and heart failure.⁵

What factors explain this better performance? One is likely the VA's early investment in electronic health records (EHRs). Since the 1970s, the VA has collected system-wide data from EHRs to advance patient care, facilitate research, and enhance patient-physician communication. More recently, the VA has used EHR data to support per-

formance measures and drive improvement. In fact, what began in the 1990s as a small set of measures to encourage improvement efforts by network leaders, today is a sophisticated matrix of 25 measures and measure sets used to assess each VA facility.

This matrix—known as Strategic Analytics for Improvement and Learning (SAIL)—includes a comprehensive set of clinical performance metrics, including all veteran-relevant metrics reported to CMS and the National Committee for Quality Assurance, as well as assessments of factors thought to enable quality and safety improvement (eg, employee morale, nursing turnover, leadership vacancies, and selected utilization metrics). An overall improvement index is derived from SAIL to determine whether each facility's performance has improved in the prior year. In 2016, 82% of 146 VA facilities demonstrated tangible improvements. The SAIL improvement index is now incorporated into performance plans of facility and network leaders.

A second factor explaining the VA's better performance on certain measures than the private sector relates to coordinated programs and clear organizational goals empowering improvement at the local level. Blay et al¹ found that VA hospitals performed better than non-VA facilities on surgical patient safety indicators. The VA implemented the National Surgical Quality Improvement Program (NSQIP) in the 1980s. NSQIP collects clinical information about preoperative and postoperative surgical outcomes in the VA system. Local clinical leaders can compare risk-adjusted outcomes between facilities, enabling them to launch quality improvement efforts once they identify where they can improve relative to their peers.

A third factor explaining VA's high quality outcomes is an embedded research program. VA research helped develop the evidence behind national programs such as primary care–mental health integration, tele-mental health, and new models to care for women veterans. In an effort to accelerate evidence-based practice in critical clinical areas, in 1998 the VA launched its Quality Enhancement Research Initiative (QUERI), a program that brings together researchers and program leaders to accelerate evidence-based practices in critical clinical areas, including heart disease. The ischemic heart disease QUERI created a national data system for real-time tracking of every procedure performed at VA cardiac catheterization facilities, along with clinical outcomes.

Other QUERI cardiac care initiatives have addressed improving hospitalization in chronic heart failure (CHF) and appropriate medication use post-MI in heart failure. The CHF QUERI helped implement an Institute for Healthcare Improvement initiative that reduced readmissions among patients with heart failure in VA hospitals from 21% in 2010 to 18% in 2014.⁶ A multifactorial intervention involving pharmacists, patient education, and automatic reminders increased the appropriate use of medications such as statins and clopidogrel from 74% to 89% in the year after an acute coronary event.⁷ An additional question implied by Blay et al is why these capabilities and expertise have not been translated into improvements across the board, including in important areas such as behavioral health and patient experience.

One limitation when trying to compare inpatient behavioral health outcomes using Hospital Compare relates to its inability to account for integration of inpatient and outpatient services. Hospital Compare only assesses inpatient care. The VA has integrated primary and mental health care to facilitate the delivery of complex care in outpatient settings such as substance abuse treatment, specialty mental health care, and comprehensive screening for depression, tobacco, and alcohol abuse. Clinicians providing inpatient care at VA hospitals may not pursue alcohol and tobacco screening or continue care plan development because the shared EHR show these clinical problems were addressed in outpatient settings.

A recent study examined the quality of mental health care based on 7 mental-health process measures and found that the VA outperformed private sector care by 30% to 100% on measures such as proportion of patients maintaining treatment with antipsychotics or antidepressants.⁸ The VA plans to place greater emphasis on the inpatient-outpatient care transition for mental health (as well as other conditions). A reinvigorated focus on care transitions and coordination will be particularly important as the VA evolves from a primarily closed integrated system to a high-performing network,⁹ one that relies on community partners, including academic affiliates, to provide care to veterans in selected areas determined by population need and local capabilities.

Lower patient experience scores reported by veterans regarding VA care on the Hospital Consumer Assessment of Health Providers and Systems (HCAHPS) survey are more challenging to ex-

plain. One set of factors may arise from the VA's greater visibility as a public health care system, coupled with its increasing transparency. The VA's performance is frequently and directly compared with the performance of private sector health care, but private sector health care performance is rarely assessed in similar fashion. Another factor may be that the VA's physical plant and capital infrastructure are significantly older and therefore lack many of the private sector's amenities. In addition, patients with more physical or mental health problems generally provide lower scores in surveys of health care experience. Although CMS adjusts HCAHPS scores for patient mix, its statistical model was calibrated without the inclusion of veterans or veterans hospitals and therefore may not adequately adjust for these characteristics, which are unique to the VA.

Nonetheless, the VA recognizes the need to improve this care dimension and is beginning to adopt industry best practices such as setting customer service standards, implementing tools for real-time customer feedback, and hiring facility staff (often veterans themselves) who will be dedicated to improving the health care experience throughout the journey of care by identifying and disseminating effective practices.

An essential new lever for continuous improvement at VA is transparency. The VA recently launched a website¹⁰ that allows veterans to compare their local VA facility's performance on Hospital Compare metrics to private-sector facilities in the same market area. Veterans can also use the site to obtain information on wait times and patient-reported experience for both primary and specialty care. Such openness, however, is not without trade-offs. Even as the VA has reduced excessive or unsafe use of opioids, its efforts often have uncovered problems that in turn triggered negative news stories. Nevertheless, the benefits of such transparency outweigh the risks. Such a policy serves to assure the majority of veterans that they are receiving the best care possible and exemplifies the department's commitment to acknowledging and acting upon opportunities for improvement.

With more than 150 medical centers and over 1700 sites of care serving 6.2 million US veterans annually, the VA always will have room to improve. The goal is not one of outperforming the care available in the community but of providing timely access to comprehensive, high-quality care regardless of where a veteran lives or receives care.

ARTICLE INFORMATION

Author Affiliations: Health Services Research and Development, Office of Research and Development, Department of Veterans Affairs, Washington, DC (Atkins); Veterans Health Administration, Department of Veterans Affairs, Washington, DC (Clancy).

Corresponding Author: Carolyn M. Clancy, MD, Veterans Health Administration, Department of Veterans Affairs, 810 Vermont Ave NW, Washington, DC 20420 (carolyn.clancy@va.gov).

Conflict of Interest Disclosures: The authors have completed and submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest and none were reported.

REFERENCES

- Blay E Jr, DeLancey JO, Hewitt DB, Chung JW, Bilmoria KY. Initial public reporting of quality at Veterans Affairs vs non-Veterans Affairs hospitals. *JAMA Intern Med.* 2017;177(6):882-885.
- O'Hanlon C, Huang C, Sloss E, et al. Comparing VA and non-VA quality of care: a systematic review. *J Gen Intern Med.* 2017;32(1):105-121.
- VA lauded by National Colorectal Cancer Roundtable for screening rates. US Dept of Veterans Affairs, Office of Public and Intergovernmental Affairs. <https://www.va.gov/opa/pressrel/pressrelease.cfm?id=2835>. November 2016. Accessed May 24, 2017.
- VA sharply reduces drug-resistant staph infections in hospitalized veterans. US Dept of Veterans Affairs, Office of Public and Intergovernmental Affairs. <https://www.va.gov/opa/pressrel/pressrelease.cfm?id=2642>. October 2014. Accessed May 24, 2017.
- Nuti SV, Qin L, Rumsfeld JS, et al. Association of admission to Veterans Affairs hospitals vs non-Veterans Affairs hospitals with mortality and readmission rates among older men hospitalized with acute myocardial infarction, heart failure, or pneumonia. *JAMA.* 2016;315(6):582-592.
- US Department of Veterans Affairs. QUERI—Quality Enhancement Research Initiative webpage. Impacts of the Disease-Focused QUERI Centers. <https://www.queri.research.va.gov/impacts.cfm>. Accessed October 6, 2017.
- Ho PM, Lambert-Kerzner A, Carey EP, et al. Multifaceted intervention to improve medication adherence and secondary prevention measures after acute coronary syndrome hospital discharge. *JAMA Intern Med.* 2014;174(2):186-193.
- Watkins KE, Smith B, Akincigil A, et al. The quality of medication treatment for mental disorders in the Department of Veterans Affairs and in private-sector plans. *Psychiatr Serv.* 2016;67(4):391-396.
- Shulkin DJ. Beyond the VA crisis—becoming a high-performance network. *N Engl J Med.* 2016;374(11):1003-1005.
- Access and Quality in VA Healthcare. <http://www.accesstocare.va.gov>. Accessed July 3, 2017.