### Title

Agreement Between HEDIS Performance Assessments in the VA and Medicare Advantage




### Journal

INQUIRY The Journal of Health Care Organization Provision and Financing, 53(1)

### ISSN

0046-9580



### Authors

Trivedi, Amal N

Wilson, Ira B

Charlton, Mary E

et al.



### Publication Date

2016

### DOI

10.1177/0046958016638804

INQUIRY: The Journal of Health Care Organization, Provision, and Financing
Volume 53: 1–3

DOI: 10.1177/0046958016638804
inq.sagepub.com
SAGE

# Agreement Between HEDIS Performance Assessments in the VA and Medicare Advantage: Is Quality in the Eye of the Beholder?

**Amal N. Trivedi, MD, MPH[1,2], Ira B. Wilson, MD, MSc[1], Mary E. Charlton, PhD[3], and Kenneth W. Kizer, MD, MPH[4]**

**Abstract**

Medicare Advantage (MA) plans and the Veterans Affairs (VA) health care system assess quality of care using standardized Healthcare Effectiveness Data and Information Set (HEDIS) performance measures. Little is known, however, about the relative accuracy of quality indicators for persons receiving care in more than one health care system. Among Veterans dually enrolled in an MA plan, we examined the agreement between MA and VA HEDIS assessments. Our study tested the hypothesis that private health plans underreport quality of care relative to a fully integrated delivery system utilizing a comprehensive electronic health record. Despite assessing the same individuals using identical measure specifications, reported VA performance was significantly better than reported MA performance for all 12 HEDIS measures. The VA's performance advantage ranged from 9.8% (glycosylated hemoglobin [HbA1c] < 7.0% in diabetes) to 54.7% (blood pressure < 140/90 mm Hg in diabetes). The overall agreement between VA and MA HEDIS assessments ranged from 38.5% to 62.6%. Performance rates derived from VA and MA aggregate data were 1.6% to 14.3% higher than those reported by VA alone. This analysis suggests that neither MA plans nor the VA fully capture quality of care information for dually enrolled persons. However, the VA's system-wide electronic health record may allow for more complete capture of quality information across multiple providers and settings.

**Keywords**

quality of care, veterans, managed care, Medicare, dual use

## Introduction

Medicare Advantage (MA) plans and the Veterans Affairs (VA) health care system assess quality of care using, among other things, standardized Healthcare Effectiveness Data and Information Set (HEDIS) performance measures. Performance data are publicly reported and influence health plan and provider payments, so have material consequences. Little is known, however, about the relative accuracy of HEDIS data for persons receiving care in more than one health care system.

Quality of care performance data in the VA often exceeds that reported from private health care settings generally, and MA plans specifically.[1,2] The differences may partially result from dissimilar documentation of care in the data sources used for calculating performance rates. Private plans typically generate performance data using insurance claims or abstracted charts, which may fail to capture the entirety of a patient's care compared with VA's comprehensive electronic health record (EHR).[3-5] Furthermore, the VA by law cannot bill MA plans for services.[6] Therefore, MA plans that rely on claims to measure quality may have limited ability to track care processes that occur in the VA. We examined the agreement between MA and VA quality assessments for a group of dually enrolled Veterans. Our study tested the hypothesis that private health plans underreport quality of care relative to fully integrated delivery systems utilizing a comprehensive EHR.

[1]Providence VA Medical Center, Providence, RI, USA
[2]Brown University, Providence, RI, USA
[3]The University of Iowa, Iowa City, USA
[4]University of California, Davis, USA

Received 1 February 2016; revised February 11 2016; revised manuscript accepted 11 February 2016

**Corresponding Author:**
Amal N. Trivedi, Providence VA Medical Center, 830 Chalkstone Avenue, Providence, RI 02908, USA.
Email: amal_trivedi@brown.edu

**Table 1.** Agreement Between HEDIS Performance Assessments in the VA and Medicare Advantage.

| Condition | HEDIS measure | Measure type | n assessed by both VA and MA | Overall rate (VA or MA) (%) | VA rate (%) | MA rate (%) | Difference (VA − MA, %) | Agreement* (%) |
|---|---|---|---|---|---|---|---|---|
| Diabetes | Annual HbA1c Measured | Process | 600 | 99.8 | 98.2 | 59.3 | 38.9 | 57.8 |
| | HbA1c < 7% | Intermediate outcome | 266 | 59.8 | 45.5 | 35.7 | 9.8 | 61.7 |
| | HbA1c < 9% (Control) | Intermediate outcome | 265 | 90.1 | 87.5 | 49.1 | 38.4 | 56.2 |
| | LDL Cholesterol < 100 mm Hg | Intermediate outcome | 258 | 83.7 | 78.3 | 38 | 40.3 | 48.8 |
| | BP < 140/90 mm Hg | Intermediate outcome | 377 | 83.0 | 79.6 | 24.9 | 54.7 | 38.5 |
| | Retinal Exam | Process | 587 | 92.2 | 85.5 | 40.4 | 45.1 | 41.6 |
| | LDL Cholesterol Measured | Process | 591 | 98.3 | 95.6 | 53.1 | 33.5 | 51.9 |
| | Renal Testing | Process | 305 | 98.0 | 94.1 | 64.6 | 29.5 | 62.6 |
| Coronary heart disease | LDL Cholesterol Measured | Process | 253 | 99.6 | 93.7 | 63.6 | 30.1 | 58.1 |
| | LDL Cholesterol < 100 mg/dL | Intermediate outcome | 249 | 83.1 | 77.1 | 28.9 | 48.2 | 39.8 |
| Cancer screening | Women Age 50-69 Screened for Breast Cancer | Process | 289 | 93.1 | 88.2 | 39.8 | 48.4 | 41.9 |
| | Patients Age 50-80 Screened for Colorectal Cancer | Process | 292 | 91.8 | 87.7 | 52.1 | 35.6 | 56.2 |

*Note.* HEDIS = Healthcare Effectiveness Data and Information Set; VA = Veterans Affairs; MA = Medicare Advantage; HbA1c = glycosylated hemoglobin; LDL = low-density lipoprotein; BP = blood pressure.
*McNemar test $P < .01$ for all values in the column.

## Methods

We identified dually enrolled individuals sampled for the same MA HEDIS and VA External Peer Review Program (EPRP) HEDIS comparator indicator in either 2008 or 2009. We compared performance rates reported by MA plans and VA and assessed agreement using McNemar test for marginal homogeneity. The unit of analysis was the patient. We also conducted stratified analyses for individuals having at least 10 MA outpatient encounters in the measurement year.

## Results

The number of individuals sampled for measurement by both systems in the same year ranged from 249 (cholesterol control in coronary heart disease) to 600 (HbA1c testing in diabetes) (Table 1). Reported VA performance was significantly better than reported MA performance for all 12 measures, with VA's performance advantage ranging from 9.8% (glycosylated hemoglobin [HbA1c] < 7.0% in diabetes) to 54.7% (blood pressure < 140/90 mm Hg in diabetes). The overall agreement ranged from 38.5% to 62.6%. Performance rates derived from VA and MA aggregate data were 1.6% to 14.3% higher than those reported by VA alone.

In sensitivity analyses limited to individuals having at least 10 MA outpatient encounters, the VA reported better performance than MA for 11 of the 12 measures (ranging from 9.9% to 35.9%), and overall agreement between VA and MA assessment improved only modestly (ranging from 48.5% to 78.7%) (Table 2).

## Discussion

The VA classified significantly more patients as having met outpatient performance targets than did MA plans despite assessing the same individuals using identical measure specifications. We observed similar degrees of disagreement for both processes of care and intermediate outcomes.

MA plans primarily use claims-based methods to assess process measures; intermediate outcome assessment typically requires additional chart review. Pawlson and colleagues noted that claims underreport quality relative to approaches using both claims and chart review.[5] In addition, plans typically collect quality information from heterogeneous providers in their networks. The VA's system-wide EHR may allow for more complete capture of quality information across multiple providers and settings.[3,7] In addition, the VA often includes clinical reminders for providers to document adherence to clinical performance metrics, even when care occurs in non-VA settings.[8]

Among persons enrolled in both systems, performance rates that integrate information from both VA and MA sources were higher than rates considering information from either system alone. Although we did not validate reported performance rates

**Table 2.** Agreement Between HEDIS Performance Assessments in the VA and Medicare Advantage Among Patients With ≥ 10 Medicare Advantage Outpatient Encounters in the Measurement Year.

| Condition | HEDIS measure | Measure type | n assessed by both VA and MA | Overall rate (VA or MA) (%) | VA rate (%) | MA rate (%) | Difference (VA-MA, %) | Agreement* (%) |
|---|---|---|---|---|---|---|---|---|
| Diabetes | Annual HbA1c Measured* | Process | 218 | 99.5 | 95.9 | 78.9 | 17.0 | 75.7 |
| | HbA1c < 7%* | Intermediate Outcome | 101 | 59.4 | 45.5 | 35.6 | 9.9 | 62.4 |
| | HbA1c < 9% (Control)* | Intermediate Outcome | 100 | 84.2 | 78.0 | 49.0 | 29.0 | 59.0 |
| | LDL Cholesterol < 100 mg/dL* | Intermediate Outcome | 98 | 79.6 | 77.6 | 45.9 | 31.7 | 64.3 |
| | BP < 140/90 mm Hg* | Intermediate Outcome | 133 | 81.9 | 78.2 | 33.1 | 45.1 | 47.4 |
| | Retinal Exam* | Process | 214 | 90.6 | 81.8 | 50.9 | 30.9 | 51.4 |
| | LDL Cholesterol Measured* | Process | 215 | 98.1 | 93.0 | 72.1 | 20.9 | 68.8 |
| | Renal Testing* | Process | 121 | 100.0 | 93.4 | 78.5 | 14.9 | 71.9 |
| Coronary heart disease | LDL Cholesterol Measured* | Process | 105 | 99.1 | 90.5 | 72.4 | 18.1 | 64.8 |
| | LDL Cholesterol < 100 mg/dL* | Intermediate Outcome | 103 | 79.6 | 71.8 | 35.9 | 35.9 | 48.5 |
| Cancer screening | Women Age 50-69 Screened for Breast Cancer* | Process | 96 | 94.8 | 88.5 | 54.2 | 34.3 | 53.1 |
| | Patients Age 50-80 Screened for Colorectal Cancer* | Process | 109 | 92.7 | 87.2 | 61.5 | 25.7 | 63.3 |

*Note.* HEDIS = Healthcare Effectiveness Data and Information Set; VA = Veterans Affairs; MA = Medicare Advantage; HbA1c = glycosylated hemoglobin; LDL = low-density lipoprotein; BP = blood pressure.
*McNemar test $P < .01$ for all values in the column.

from either system, our findings suggest that neither MA plans nor the VA fully capture quality of care information for dually enrolled persons. However, the VA may be positioned to report substantially better clinical performance because its documentation is more complete. Further studies should compare the accuracy of publicly reported quality data from insurers and integrated delivery systems, particularly for individuals enrolled in multiple health systems.

## Author's Note

The contents of this article do not represent the views of the U.S. Department of Veterans Affairs or the United States Government.

## Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

## Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This study was funded by the VA Health Services Research & Development (HSR&D) Service. The funding agency had no role in the design and conduct of the study; the collection, management, analysis, and interpretation of the data; the preparation, review, or approval of the manuscript; or the decision to submit the manuscript for publication.

## References

1. Trivedi AN, Grebla RC. Quality and equity of care in the Veterans Affairs health-care system and in Medicare Advantage health plans. *Med Care*. 2011;49:560-568.
2. Trivedi AN, Matula S, Miake-Lye I, Glassman PA, Shekelle P, Asch S. Comparison of the quality of medical care in Veterans Affairs and non-Veterans Affairs settings. *Med Care*. 2011;49:76-88.
3. Goulet JL, Erdos J, Kancir S, et al. Measuring performance directly using the Veterans Health Administration electronic medical record: a comparison with external peer review. *Med Care*. 2007;45:73-79.
4. Keating NL, Landrum MB, Landon BE, Ayanian JZ, Borbas C, Guadagnoli E. Measuring the quality of diabetes care using administrative data: is there bias? *Health Serv Res*. 2003;38:1529-1546.
5. Pawlson LG, Scholle SH, Powers A. Comparison of administrative-only versus administrative plus chart review data for reporting HEDIS hybrid measures. *Am J Manag Care*. 2007;13:553-558.
6. Trivedi AN, Grebla RC, Jiang L, Yoon J, Mor V, Kizer KW. Duplicate federal payments for dual enrollees in Medicare Advantage plans and the Veterans Affairs health care system. *JAMA*. 2012;308:67-72.
7. Cooper AL, Jiang L, Yoon J, et al. Dual-system use and intermediate health outcomes among veterans enrolled in Medicare Advantage plans. *Health Serv Res*. 2015;50(6):1868-1890.
8. Oliver A. The Veterans Health Administration: an American success story? *Milbank Q*. 2007;85:5-35.