

VA HEALTH ECONOMICS BULLETIN

A VA Health Services Research & Development Resource Center

Volume 16, Issue 2
May, 2016



Inside

[Correcting Outliers in Pharmacy Data](#)

[Understanding Professional Costs in VA Fee Basis Data](#)

[New VA/CMS Data Available from VIREC](#)

[HERC is now on Twitter](#)

[Upcoming HERC Cyber Seminar](#)

The VA Health Economics Bulletin is a quarterly publication of the Health Economics Resource Center (HERC) to bring VA researchers updates on datasets and data sources.

For more information on VA datasets, visit the HERC web pages for [Guidebooks](#) and [Technical Reports](#).

For economics-related questions, please view our [Methods](#) web pages.

For economics advice, please call the HERC consulting service at (650) 617-2630 or email us at here@va.gov.

Correcting Outliers in Pharmacy Data

The U. S. Department of Veterans Affairs uses the Managerial Cost Accounting Office (MCA) for fiscal management and to determine the cost of patient care. National Data Extracts (NDEs) have been created to facilitate access to workload and cost information. These extracts report costs of inpatient and outpatient encounters, reflecting actual resource use within the VA. These data contain rare outlier observations with cost inconsistent with the care provided.

HERC has developed SAS code to flag and adjust outlier observations in the Managerial Cost Accounting Pharmacy National Data Extract (the MCA PHA NDE). The PHA file contains prescription-level records which include detailed cost information on each prescription filled, both inpatient and outpatient.

In order to identify costs that are likely to be truly erroneous, rather than legitimately expensive medications, strict criteria are applied to define outliers. The product cost of the medication and the dispensing cost are considered separately.

In consultation with MCA and after review of cost distributions by VA Class, product cost outliers are defined as costs greater than 120% of the maximum price of all drugs in the VA drug class, as shown in the drug price list from Pharmacy Benefits Management Services. This criterion is designed to select only gross outliers. Since dispensing costs are typically low and do not vary much across VA drug class, the outlier cut-off for dispensing costs is set at a fixed \$100. (Note that median dispensing costs by VA drug class range from \$3.56 to \$9.95 in FY15.) Absolute values are used in order to identify both positive and negative outliers. Out of 243 million records in the FY15 PHA file, 33,410 product costs (0.014%) and 158,635 dispensing costs (0.065%) are classified as outliers by these criteria.

[\(continued on page 2\)](#)



Dedicated to improving
the quality of health
economics research

Understanding Professional Costs in VA Fee Basis Data

Studies of the cost of hospital stays provided by the VA community care program (formerly called fee basis or purchased care) will need to be sure to evaluate all data files to obtain complete information on the professional component, the cost of physician providers.

In a study of the VA choice to make-or-buy cardiac revascularization services, HERC researchers found that claims for the professional component of hospital stays were not only in the fee basis ancillary file (the expected place), they also appeared in the file of claims for outpatient services. These claims were submitted for professional services rendered between admission and discharge dates of the inpatient stays under study.

Payments for the professional component were about 20% of the payment to the hospital for the stay, an amount that is quite consistent with studies of Medicare payments. For nearly one-third of the cases, however, no claims for the professional component could be found within dates of the hospital stay. This is also consistent with studies of Medicare claims, which have had difficulty matching professional claims under Medicare part B to the hospital claims under Medicare part A. One reason that it is difficult to match the professional component to inpatient stays is the surgeons are often compensated via a global payment that includes pre-operative and post-operative care, as well the procedure itself.

Interested researchers can learn about adjusting for professional fees when conducting a cost analysis using hospital discharge data in the 2015 paper “Professional Fee Ratios for US Hospital Discharge Data” by Peterson, et al.

“Professional Fee Ratios for US Hospital Discharge Data,” by Peterson C, Likang X, Florence C, Grosse S, and Annet J, can be found in the October 2015 issue of Medical Care (volume 53, issue 10, pages 840-849). A summary of Dr. Peterson’s paper can be found in the [February 2016 HERC Bulletin](#).

New VA/CMS Data available from VIREC

The VA Information Resource Center (VIREC) released additional years of data through the VA/CMS (Centers for Medicare and Medicaid Services) Data for Research Project.

New data include 2011 Medicaid Data and 2013-2014 HEDIS Patient Level Data. The Healthcare Effectiveness Data and Information Set (HEDIS) is a tool that researchers can use to evaluate services for patients receiving care through Medicare Advantage. For more information on VA/CMS data, visit the [VIREC website](#).

HERC is now on Twitter

Follow us at @herc_va for updates on cyberseminars, VA datasets, and the latest health economics research.

Correcting Outliers in Pharmacy Data (continued from page 1)

Both product and dispensing outlier costs are adjusted by replacing the outlier value with the median cost for the VA drug class (and retaining the sign of the original cost). Although this code is designed to adjust the prescription-level records in the MCA PHA dataset, with some additional coding to restrict to outpatient fills and summarize by dispensing date, the prescription-level adjustments can also be used to adjust the daily pharmacy cost records in the MCA Outpatient NDEs.

This work was conducted as part of a project funded by the Geriatric & Extended Care Data & Analysis Center (GECDAC). Researchers interested in obtaining this code should contact HERC at herc@va.gov.

HERC

The Health Economics Resource Center produces pioneering, rigorous health economics and related research that improves health care within and beyond VA.

Our research activities include innovation and excellence in:

- Performing cost and cost-effectiveness analyses
- Studying the efficiency of health care
- Evaluating health programs and interventions
- Planning, managing, and analyzing randomized clinical trials
- Health care decision modeling
- Assessing health-related quality of life
- Health economics and health services research

We are committed to:

- Integrity
- High quality of work
- Productivity
- Transparency
- Mutual trust and respect
- Teamwork
- Investment in people through learning and mentoring
- A flexible, supportive, and enjoyable work environment



Health Economics Resource Center
VA Palo Alto Health Care System
795 Willow Road (152 MPD)
Menlo Park, CA 94025

Phone: (650) 617-2630
Fax: (650) 617-2639
Email: herc@va.gov

Visit us online at:
<http://www.herc.research.va.gov>

Follow us on Twitter:
@herc_va

Editors:
Samantha Murrell
Paul Barnett

HERC Cyber Seminars

Each hourly session begins at 11:00am Pacific (2:00pm Eastern), unless otherwise noted.

Register: <http://www.hsrc.research.va.gov/Cyberseminars>

Schedule & archives: <http://www.herc.research.va.gov/include/page.asp?id=courses-seminars>

Cyber Seminars

The Health Economics Cyber Seminars feature presentations on a variety of health economics and health services topics.

May 18, 2016

External Determinants of Veterans VA Healthcare Utilization

Amresh Hanchate, PhD,
Health Economist, Center for Healthcare Organization and Implementation Research. Boston VA Healthcare System Associate Professor, Boston University School of Medicine

New research indicates that models of projected VA healthcare utilization should include external factors that influence VA use. In the May 18 HERC cyber seminar, Austin Frakt PhD and Amresh Hanchate PhD present their work estimating the change in VA healthcare utilization associated with area-level changes in Medicaid eligibility, unemployment rate, housing price index, non-VA provider availability and proportion covered by employer-sponsored health insurance. They found that most external factors were associated with significant change in utilization. In recent years, Medicaid policy, employer-sponsored coverage, and housing price index had the largest influence. Between 2013 and 2014, Medicaid expansion was associated with a sizable reduction in VA healthcare utilization, predominantly in the states that expanded Medicaid. This change was largely neutralized, however, by a reduction in employer-sponsored coverage, leading to an increase in VA utilization.

Interested in presenting in the HERC Health Economics Cyber Seminar Series? Contact HERC Economist Jean Yoon (Jean.Yoon@va.gov) for more information.

HERC Staff

Director

Todd Wagner, PhD

Associate Director

Christine Pal Chee, PhD

Health Economists

Paul Barnett, PhD
Risha Gidwani, DrPH
Josephine Jacobs, PhD
Ciaran Phibbs, PhD
Jean Yoon, PhD
Wei Yu, PhD

Administrative Officer

Yoko Ogawa, BS

Associate Staff

Lakshmi Ananth, MS
Shuo Chen, PhD
Adam Chow, BA
Elizabeth Gehlert, MPH
Sharon Dally, MS
Angela Fan, MPH
Nicole Flores, BA
Juliette Hong, MS
Howard Jiang, MS
Vilija Joyce, MS
Jeanie Lo, MPH
Samantha Murrell, MPH
Angel Park, MS, MPH
Susan Schmitt, PhD
Winifred Scott, MPH
Pon Su, MS