# **VA HEALTH ECONOMICS BULLETIN**

A VA Health Services Research & Development Resource Center

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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 <u>Guidebooks</u> and <u>Technical Reports</u>.

For economics-related questions, please view our <u>Methods</u> web pages.

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



Dedicated to improving the quality of health economics research

# HERC's FY 14 Cost Data Now Available

HERC creates cost estimates for all VA inpatient and outpatient encounters. To do this, HERC combines VA department-level costs, utilization data, and non-VA relative value units. The Fiscal Year 2014 Outpatient Average Cost data and Person-Level Cost data are now available through the <u>VHA Data</u> <u>Portal</u>. Navigate to *Data Sources > HERC Average Cost* data. Note: This link directs you to an internal VA website that is not available to the public.

The HERC Outpatient Average Cost data contains the hypothetical Medicare reimbursement average for a VA visit. The reimbursement average is based on that visit's Current Procedure and Terminology (CPT) Codes. Estimates are adjusted to tally to actual national VA expenditures for that type of care.

HERC's Inpatient Average Cost data, which represents the national average cost of a hospital stay given its Diagnosis Related Group, overall length of stay, and days in intensive care, is available through VINCI.

The Person-Level Cost datasets contain total annual costs for VA care received by each individual who used the VA health care system. It includes the costs from the inpatient and outpatient datasets, and the pharmacy cost from the VA Managerial Cost Accounting System. Researchers can understand the annual costs of individual patients without needing to extract and summarize stay and visit level information from numerous VA databases.

HERC cost data is available for Fiscal Year 1998 and beyond.



# **CDW ICD Domain Updated for ICD-10**

The CDW ICD Domain has been updated to accommodate the use of ICD-10. Starting October 1, 2015, all VAs will be required to use ICD-10 instead of ICD-9 for all diagnosis or reason for visit codes. Researchers will be able to access many of the new views, including several Dimension and Purchased Care views, beginning September 11, 2015. Researchers can find more information on the changes to the ICD Domain in the release document available on the <u>CDW metadata site</u> (intranet only).

# HSR&D/QUERI National Conference Highlights

VA researchers from across the country met in Philadelphia, PA for the VA Health Services Research and Development Service (HSR&D) and Quality Enhancement Research Initiative (QUERI) National Conference. Below are highlights of presentations by HERC investigators at the conference.

#### **Paper Sessions**

#### **Reconciliation of Different Estimates of the Impact of Nurse Staffing on Patient Outcomes**

Greater tenure in a nursing unit leads to better patient outcomes, according to a study of the effect of nurse staffing by Ciaran Phibbs, PhD. Dr. Phibbs and team found that poor outcomes are associated with the use of contract nurses. These relations were much more clearly established in a study at the level of the hospital unit. Conflicting evidence from previous studies reflect problems of aggregation bias; i.e. the effect of analyzing data in too large a reporting unit.

#### <u>Overuse of Lumbar Spine Magnetic Resonance</u> <u>Imaging: A National Analysis</u>

Inappropriate use of MRI for low-back pain has been a focus f efforts to reduce health care costs. Risha Gidwani, DrPH, reported that 31% of VA orders for MRI of the lumbar spine are inappropriate, and that 11% of ordering providers account for half of the unneeded scans. Based on these findings, any provider-facing interventions to reduce overuse should be targeted rather than aimed at all providers who order lumbar spine MRI.

#### National Clinical Dataset Characterizes Changes in Veteran Tobacco Use

Veterans with psychiatric illness and substance use disorders who use tobacco are the less likely to quit than other Veterans who use tobacco, and if they quit, they are more likely to relapse, Paul Barnett, PhD, reported. Dr. Barnett and team analyzed information on smoking status from the VA Corporate Data Warehouse. Through this work, they found that CDW health factors data contain longitudinal information on tobacco use status and can be used for follow-up in tobacco cessation quality improvement and research studies.

#### **<u>PTSD and Antepartum Complications: Increased</u> <u>Risk of Gestational Diabetes and Preeclampsia</u>**

Veterans with active PTSD are more likely to have a pregnancy with gestational diabetes and preeclampsia, Ciaran Phibbs, PhD reported. Analyzing national VA and Non-VA (Fee) data, Dr. Phibbs and team also found that pregnancies affected by active PTSD were more likely to have a prolonged ( > 4 day) delivery hospitalization and repeat hospitalizations. Pregnancies affected by active PTSD should be considered high-risk.

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### HSR&D/QUERI National Conference Highlights (continued from page 2)

### Workshop

#### Managing high cost, multimorbid patients

Moderator: Todd Wagner Participants: Christine Pal Chee, Donna Zulman, Evelyn Chang, Matt Maciejewski, Steve Asch

The top 5% most expensive patients typically account for over half of all costs in a given year. This is true across health care systems and over time. The "Managing high cost, multimorbid patients" workshop highlighted operational and research efforts designed to improve the identification and management of high cost, multimorbid patients.

Managing high cost patients assumes that these patients would remain high cost in the future. Christine Pal Chee, PhD presented results from observational research examining the natural history of high cost VA patients over seven years.

Results from programs designed to manage high cost patients are mixed, in part because many programs have been evaluated using pre-post designs. Donna Zulman, MD described a single site random ized clinical trial of a new patient care team designed to manage care for high cost patients. Evelyn Chang, MD then updated the audience on the design of an ongoing evaluation of a VA multisite intensive care management demonstration project.

Engaging multi-morbid high cost patients in health promotion activities has been particularly challenging, but managing obesity is a priority in VA's efforts to contain costs. Matt Maciejewski, PhD presented findings from a retrospective cohort study that examined VA health expenditures before, during, and after MOVE! participation. Dr. Maciejewski is an economist at the Durham HSR&D program, and is the former Chair of the HERC Steering Committee.

Those who have access to the VA internal network (Intranet) can see slides from these and other presentations at <a href="http://www.hsrd.research.va.gov/nm2015presentations/">http://www.hsrd.research.va.gov/</a> <a href="http://www.hsrd.research.va.gov/nm2015presentations/">http://www.hsrd.research.va.gov/</a>

Posters

Paul Barnett, PhD - Cost-effectiveness of integrating tobacco cessation into PTSD treatment

Jean Yoon, PhD - Changes in Utilization and Costs after PACT Implementation through Evidence-Based Quality Improvement, Use of VA and Medicaid Services for Dual Enrollee

Todd Wagner, PhD - Risk Adjustment Tools for Learning Health Systems: the development of the Nosos risk score

Megan Vanneman, PhD - Use of VA Outpatient Services for Veterans with Behavioral Health Conditions after Enrolling in Medicaid

Christine Pal Chee, PhD - The Persistence of High Costs among Veterans Using the VA

# How HERC Can Help You

HERC is dedicated to assessing the costeffectiveness of VA programs, conducting highquality health economics research, and providing services to help researchers incorporate health economics into their work. Below is a summary of the services HERC offers.

HERC provides free opportunities for researchers to learn about economic research. HERC conducts two cyber courses on health economics and coordinates monthly economic cyberseminars. Visit the <u>Courses and Seminars</u> webpage to learn more.

If VA researchers have specific questions, they can contact HERC's consulting service. To speak with an economist, please email <u>herc@va.gov</u> with your

contact information and details of your request.

HERC provides resources to assist researchers using VA data. HERC creates <u>cost datasets</u>, which include estimates for the cost of all VA encounters, develops <u>guidebooks</u> for VA data, and issues <u>technical reports</u> analyzing economic data.

HERC investigators also conduct health economics research and cost-effectiveness studies. The goal of HERC research is to determine the cost of VA care, assess the budget impact of new technologies, and evaluate the efficiency of VA programs.

Please visit the <u>website</u> or email <u>herc@va.gov</u> to learn more about how HERC can assist you.

# **Upcoming Cyberseminars**

HSR&D organizes a series of free cyberseminars for VA researchers. Through these cyberseminars, participants can learn about cutting-edge research and gain insight on using VA data. Below are descriptions of two September seminars featuring HERC researchers. Visit the <u>VA HSR&D Cyberseminars</u> page to register.

#### Working with the CDW Health Factors Domain

Paul Barnett, PhD and Rebecca Brown, MD September 15, 2015 at 9:00am PT (12:00pm ET)

Health services studies using information on health status in the Corporate Data Warehouse is the subject of a September 15 VIReC Database & Methods cyberseminar led by Rebecca Brown, MD and Paul Barnett, PhD. During the session, Dr. Brown, a physician and geriatrics researcher from the San Francisco VA, will present information on using the CDW health factors data as a source of information on Activities of Daily Life. HERC economist Paul Barnett will present on the use of this same data source to find Veterans' tobacco use status. The presenters will describe their work to extract and validate data, offering insights about working with CDW Health Factors Data, and presenting potential applications to Health Services studies.

#### **OEF/OIF** Army Reservists' post-deployment mental health screens and linkage to the VHA Alex Sox-Harris, PhD and Megan Vanneman, PhD September 16, 2015 at 11:00am PT (2:00pm ET)

In this HERC cyberseminar, Alex Sox-Harris, PhD, and Megan Vanneman, PhD, present research on the association between positive mental health screening scores and enrollment and utilization of care in the Veterans Health Administration (VHA). Following deployment, military service members complete the Post-Deployment Health Reassessment (PDHRA), which includes screens for alcohol misuse, depression, and posttraumatic stress disorder (PTSD). They predict linkage to VHA after completing the PDHRA, and for those who linked to VHA within six months, they examine mental health screen scores and subsequent diagnosis and treatment rates in VHA.

# 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 costeffectiveness analyses
- Studying the efficiency of health care
- Evaluating health programs and ٠ interventions
- Planning, managing, and ana-• lyzing 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 ٠
- Transparency •
- Mutual trust and respect
- Teamwork ٠
- Investment in people through • learning and mentoring
- A flexible, supportive, and • enjoyable work environment



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# **HERC Cyber Seminars**

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

Register: Schedule & archives:

http://www.hsrd.research.va.gov/Cvberseminars 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.

#### September 16, 2015 OEF/OIF Army Reservists' postdeployment mental health screens and linkage to the Veterans Health Administration

Alex Sox-Harris, PhD Center for Innovation to Implementation (Ci2i) VA Palo Alto Health Care System

Megan Vanneman, PhD Center for Innovation to Implementation (Ci2i) VA Palo Alto Health Care System

Target audience: Health Services Researchers, mental health providers, policy makers

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

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