

# VA HEALTH ECONOMICS BULLETIN

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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 page for Guidebooks and Technical Reports at <http://www.herc.research.va.gov/publications>.

For economics-related questions, please view our *Frequently Asked Questions (FAQs)* web page at <http://www.herc.research.va.gov/resources/faq.asp>.

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



Dedicated to improving the quality of health economics research

## Health Services Decision Analysis Resources

*Recommendations for best practices in decision modeling were presented at an April 17<sup>th</sup> HERC cyber seminar by Karen Kuntz, ScD, co-chair of the ISPOR-SMDM task force. Dr. Kuntz is a Professor at the University of Minnesota's*

School of Public Health and is a nationally-recognized expert in simulation modeling.

Decision analysis is a quantitative method used for making choices in the face of uncertainty. Health services decision modeling evaluates the relative value of various health-care strategies in the face of uncertainty regarding their effects (treatment outcomes, costs-of-care, and health-related quality of life). It can be applied to a multitude of health-

care questions, including medical treatment decisions, disease management programs, testing strategies, etc. Types of decision analysis include cost-benefit analysis, cost-effectiveness analysis, and cost-utility analysis.

Dr. Kuntz presented an overview of the decision modeling best practices papers written by the ISPOR-SMDM task force on the following topics: conceptualizing models; implementing state-transition approaches, discrete event

simulations, or dynamic transmission models; dealing with uncertainty; and validating and reporting models transparently. The papers represented general consensus regarding best practices amongst leading decision modelers from academia and industry.

However, there remain areas of decision modeling in which consensus has yet to be reached. One such area is evaluating the structural assumptions of a

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## Assessment of Alternative Hepatitis C Treatment Strategies

The Health Economics Resource Center (HERC) helped the VA Health Services Research & Development (HSR&D) service respond to questions about the use of alternative treatments for Hepatitis C. The study examined VA data to evaluate the uptake, use, and costs of alternative Hepatitis C treatments.

The use of a new genotype test (IL-28B) will assist in predicting which patients will best respond to two new directly acting anti-viral medications (boceprevir and telaprevir). These medications were approved by the FDA in May 2011. Investigators

found that between July 2011 and June 2012, nearly 3,000 veterans started using the new direct acting anti-viral medications and approximately 2,000 veterans had the new genotype test.

The study also projected the impact of these new technologies on Veterans Health Administration costs and veteran health (as quality adjusted life years, decompensated cirrhosis, hepatocellular carcinoma, and liver transplant) over the next 5 years.

Co-authors of the project include investigators from the VA HSR&D Quality Enhancement

Research Initiative's (QUERI) Evidence-based Synthesis Program and Jeremy Goldhaber-Fiebert of Stanford University. The full report, *Assessment of Alternative Genotype 1 Hepatitis C*, is available through the Evidence-based Synthesis Program at <http://www.hsrd.research.va.gov/publications/esp/hcv.cfm>.

A more thorough cost-effectiveness analysis of Hepatitis C treatments was recently approved by VA HSR&D and will be lead by Dr. Doug Owens of the Center for Health Care Evaluation (CHCE) at the VA Palo Alto.

## National Patient Care Database Transition to CDW Delayed

The National Patient Care Dataset (NPCD) will be retired on October 1, 2014, one year later than expected. NPCD is the source from which the outpatient and inpatient Medical SAS datasets are built. VA National Data Systems is working to create and validate replacement files based at the Corporate Data Warehouse (CDW).

These new reference files will replace the outpatient and inpatient Medical SAS datasets. Existing Medical SAS datasets will continue to be available to researchers and are currently available on the Austin Information Technology Center (AITC) mainframe.

For more information on the NPCD transition to CDW, see the VIREC webpage "Data Transition to the Corporate Data Warehouse" at <http://www.virec.research.va.gov/Data-Transition/Overview.htm>.

### Health Services Decision Analysis Resources (continued)

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model. Another challenge is clearly communicating decision models to a non-technical audience. More information can be found in Dr. Kuntz's presentation, which is available via archived cyber seminar at <http://www.hsrd.research.va.gov/cyberseminars/catalog-archive.cfm>. HERC has created a directory of decision analysis resources that includes

links to the joint International Society for Pharmacoeconomics and Outcomes Research (ISPOR) – Society for Medical Decision Making (SMDM) guidelines, as well as several print resources and VA cyber seminars about health services decision modeling. For more information, see FAQ A11 on the HERC website under *Resources > FAQ* or [http://www.herc.research.va.gov/resources/faq\\_a11.asp](http://www.herc.research.va.gov/resources/faq_a11.asp).

## DSS Costs for the Southern Nevada Health Care System

Inpatients at the Southern Nevada Health Care System (VISN 22, Station 593) are treated at the local Air Force hospital, which bills VA for the total care. Beginning in FY12, all inpatient costs for this facility were exempted from the Decision Support System (DSS) Account Level Budgeter (ALB).

However, some costs may still appear in the DSS Treating Specialty (TRT) and Inpatient Discharge (DISCH) national data extracts in FY12 and FY13 (Quarters 1 & 2). For example, the FY12 treating specialty national data extract shows a total cost of \$82,000 with no labor. DSS has instructed us to ignore these costs.

Because of these discrepancies, DSS will not include station 593 in the FY13 Quarters 3 and 4 treating specialty and discharge national data extracts. For more information, please contact HERC via email at [herc@va.gov](mailto:herc@va.gov) or via phone at (650) 617-2630.

## Budget Impact Analysis

One way to estimate the financial consequences of adopting a new intervention from a payer's perspective is a budget impact analysis (BIA). BIA is an economic assessment to identify the effect of the intervention on short-term costs. It is commonly performed in addition to a cost-effectiveness analysis.

While cost-effectiveness analyses can determine whether an intervention provides good value relative to an existing intervention, it makes no assessment of whether either intervention is af-

fordable given existing budget constraints.

A budget impact analysis provides information as to the financial resources required to implement an intervention, as well as any short-term downstream costs of that intervention, and thereby advises decision-makers on how to properly allocate resources.

BIA includes the direct costs of resources for implementing an intervention, such as supplies, equipment, and staff. Unlike cost-effectiveness analyses, BIA generally

excludes overhead costs, which are a fixed short-term cost but can account for a substantial part of long-term operational costs.

For more information on budget impact analysis, see FAQ A10 on the HERC website under *Resources > FAQ* ([http://www.herc.research.va.gov/resources/faq\\_a10.asp](http://www.herc.research.va.gov/resources/faq_a10.asp)) and the BIA Cyber Seminar under *Training > Economic Cyber Seminars in the QUERI Program* ([http://www.herc.research.va.gov/training/training\\_queri.asp](http://www.herc.research.va.gov/training/training_queri.asp)).

## HERC Staff Update

Risha Gidwani joined the VA in April 2013 as a health economist with HERC and an investigator in the Center for Healthcare Evaluation. Her work has focused on cost-effectiveness analyses and comparative effectiveness research for alternate treatment strategies, and measuring quality-of-care.

Prior to joining HERC, she worked as the Lead Health Economist at Abt Bio-Pharma Solutions (later United Bio-Source Corporation) in Massachusetts and then led the research and evaluation enterprise for Neurosciences at Stanford

University Medical Center. Her work has been submitted to regulatory agencies and payers in the U.S. and abroad for coverage and reimbursement decisions.

Risha has also contributed substantially to the national conversations regarding quality measures and risk-adjustment for measuring patient outcomes through her service for the National Quality Forum and the University Healthsystem Consortium. Risha received her Doctor of Public Health (DrPH) degree from the UCLA department of Health Services.

## 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

## HERC Cyber Course and Seminars

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

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

Schedule & archives: <http://www.herc.research.va.gov/training/>

### Cyber Seminars

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

**May 22, 2013**

#### **Are Misinterpreted, Hospital-level Relationships Between Process Performance Measures and Outcomes Undermining Evidence-based Patient Care?**

*John Finney, Ph.D.*

Investigator, Center for Health Care Evaluation (CHCE), VA Palo Alto Health Care System

**June 19, 2013**

#### **Risk Adjustment for Cost Analyses: The Comparative Effectiveness of Two Systems**

*Todd Wagner, Ph.D.*

**July 17, 2013**

#### **TBA**

*Bill O'Brien, M.S.*

Analyst, Center for Organization, Leadership & Management Research (COLMR), VA Boston Health Care System

### Econometrics with Observational Data

This course provides participants with sufficient background in econometrics to choose techniques suited to both their data and to their economic model. There will be a strong emphasis on applied work, illustrating the use of statistical software applied to VA data.

**October 2, 2013**

#### **Econometrics Course: Introduction & Identification**

*Todd Wagner, Ph.D.*

**October 9, 2013**

#### **Research Design**

*Christine Pal Chee, Ph.D.*

**October 23, 2013**

#### **Propensity Scores**

*Todd Wagner, Ph.D.*

*Please check the cyber seminar website for the entire course schedule.*



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