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VA HEALTH ECONOMICS BULLETIN

Validating DSS Data

HERC Finds Out How Accurate They Are

The Decision Support System national extracts have valuable new data on the cost of VA hospital stays and outpatient visits, but data flaws require that they be used with care, according to recent studies from the Health Economics Resource Center. Wei Yu and Paul Barnett presented their findings to the 2002 DSS users meeting.

Yu compared DSS data to corresponding VA utilization files. He also studied how DSS estimates of VA hospital costs compared to Medicare data. Barnett evaluated DSS cost estimates for hospital stays for heart attack. More than 150 participants from VA medical centers throughout the U.S. heard the presentations, which were given by teleconference.

"The DSS extracts include all of the hospital stays found in the VA discharge files," Yu told the conference, "but many outpatient visits were missing." Yu made the comparison to validate DSS data, and because clinical and demographic variables not found in the DSS extracts must be retrieved from the corresponding VA utilization files.

He reported that the DSS national extract did not have many of the visits recorded in the national VA outpatient utilization file, the SAS extracts of the National Patient Care Database. "About 5% of the visits are missing," said Yu, adding, "There was no clear pattern. Missing visits involved all types of care, at nearly every medical center in the country."

There was near-perfect correspondence between hospital stays reported in the DSS extracts and the VA inpatient discharge files. However, DSS had different information on the number of days spent in different wards, since DSS uses different rules to record the date that patients transfer between wards.

Yu's second presentation compared VA hospital costs reported in DSS to the average cost of Medicare hospitals. Raw data for his analysis were extracted using the VA web site developed by Kathy Frisbee and Harriet Warren of the VISN Support Services Center (<http://klfmenu.med.va.gov/>). Yu showed that differences in capital costs, wage rates, and overhead explained much of the difference between VA and Medicare hospital costs.

When these adjustments were made, VA had higher costs, but operating efficiency could

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Special Event:

Workshop on "VA Databases for
Health Services Research"

Academy for Health Services
Research and Health Policy
Seminars in Health Services
Research Methods Using Federal and
State Databases
Washington, DC
November 4 - 6, 2002
www.academyhealth.org
(202) 292-6700

Special DSS Issue:

HERC Validates DSS Data

HERC Releases Guide to DSS Extracts

New Name for KLF Web Site

New DSS Cost File Released

Clinical Extracts to be Released

Cost of Chronic Disease in VA

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Validating the DSS Data

not be compared without further adjustment for severity of illness and consideration of outcomes, Yu told the conference.

Barnett described an evaluation of DSS cost estimates of 1999 VA hospital stays for acute myocardial infarction. "Some sites do not estimate the cost of cardiac catheterization," said Barnett. "We found that this can have a big impact on cost estimates."

VA medical centers that provide cardiac catheterization were identified, and their

DSS site managers surveyed. About half of the sites did not estimate cardiac catheterization costs. These sites reported significantly lower costs than sites that assigned catheterization costs to the patients who had procedures. Costs of stays involving angioplasty were estimated to be 25% lower at VA hospitals that did not estimate catheterization cost.

"These hospitals did not really have lower costs," Barnett told the conference, "they just assigned the costs to the wrong

patients." Sites with good data practices had DSS cost estimates that followed the pattern observed in comparable Medicare-funded stays. These analyses controlled for length of stay, procedures performed, patient comorbidities, and the geographic variation in wage rates.

All three presentations are available from HERC.

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HERC Staff Update

HERC is growing and welcomes the addition of new staff!

Aina Stunz, BA, joined HERC as the project director for a VA-commissioned study to evaluate the cost of VA research administration. She has over 20 years of diverse experience in business administration, and has held consultant and CEO positions. Since joining HERC in March, she has worked with economist Todd Wagner to propose methods for allocating research funds for administrative support.

Magdalena Berger, MPH, is a recent graduate of Tulane University. Since joining HERC as a Research Associate in April, she has worked with economist Paul Barnett to determine the cost of Positron Emission Tomography (PET).

Matthew Yeh, BA, BS, graduated from Stanford University this year with degrees in psychology and symbolic systems. Since joining HERC as a Research Assistant/Programmer in May, he has worked with economist Todd Wagner to update VA average cost data.

For more information on HERC staff, visit the HERC staff web site at: www.herc.research.med.va.gov/About_Staff.htm.

Join the Family of Health Economics Researchers!

In recent years, the study of health economics has experienced rapid growth. This was evident at the 2002 HSR&D Annual meeting in Washington, DC, where an increasing number of papers and presentations focused on the economic aspects of health sciences research.

To help build a community of health economists, HERC maintains a list of health economics experts listing their geographic locations and areas of expertise at www.herc.research.med.va.gov/findexpert.asp. This searchable database is often utilized by health policy researchers wanting to hire an economist or a field-specific policy expert for their study. HERC economists often refer to this list when planning studies or when asked to recommend an economist to researchers developing a funding proposal.

If you are interested in being listed as a Health Economist on our expert list, please contact us today at herc@med.va.gov.

Cost of Chronic Disease in the VA:

HERC Presents Paper at the 2002 Health Services Research and Development Annual Conference

VA spent \$14.3 billion, or 96% of its total health care budget, caring for patients with chronic diseases, according to a presentation at the 2002 Annual Conference of the Health Services Research and Development Service held in Washington, D.C.

Research Associate Arliene Ravelo described the HERC study of the cost of chronic diseases to the conference's plenary session. She profiled patients with chronic medical conditions and the costs they incurred in the VA Health Care System in the 1999 fiscal year. Patients with chronic diseases were identified in VA utilization data. Costs came from the HERC Average Cost Database and the prescription drug costs from the DSS extract.

Ravelo reported that 2.4 million users of the VA health care system

(72% of the total) had one of the 29 common chronic conditions studied by HERC. Patients with the 10 most common chronic conditions accounted for 85% of total VA medical costs. These 10 most common conditions were arthritis, lower back pain, hypertension, benign prostatic hyperplasia, diabetes, depression, ischemic heart disease, substance abuse, psychotic conditions, and chronic obstructive pulmonary disease.

For more information on the chronic disease study, including a spreadsheet of the 29 common chronic conditions and their associated costs, check the on-line article, "HERC Presents Papers/Workshops at HSR&D Annual Conference" at: www.herc.research.med.va.gov/New.htm.

The chronic disease study is the

first research based on the HERC average cost data set, an encounter-level cost database of VA health care costs. The HERC average cost data set was created by combining VA cost and utilization data with non-VA measures of relative value. It is useful for many types of research, but analysts should read the documentation and beware of its limitations.

To learn more about this dataset, visit:

www.herc.research.med.va.gov/ACM.htm.

As of June 2002, 41 VA researchers had signed up with HERC to use this data set; more studies based on these data are expected in the near future.

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HERC Releases Guide to DSS Extracts

HERC recently released its research guide on the national patient-level cost files extracted from the Decision Support System (DSS). The extracts contain DSS data on the cost of VA hospital stays, outpatient visits, and prescription fills. DSS is a clinical and financial data system used to estimate cost and track processes of care in the VA health care system.

The HERC guidebook describes the contents of the extracts and provides instructions on using them.

Unlike a typical data dictionary or technical manual, this guidebook provides task-oriented directions for using the DSS database. It focuses on four major topics:

- Accessing the extract files
- Cost data included in the files
- Records, variables, and facilities that are included in the extracts
- How to link the individual records from the extracts to clinical information in VA utilization data bases.

The guidebook documents all extract files from the 1998 through 2000 federal fiscal years. Users are cautioned that the earlier files contain errors. The guidebook may be downloaded from the HERC web site:

www.herc.research.med.va.gov/Pubs.htm.

New National File of Department Costs Released by DSS

A new national file, with the DSS data on the cost of each department at every VA medical center, has been made available at the national VA data center in Austin, Texas. Data are available for 2000 and 2001 fiscal years.

The file is an extract of facility level cost data. It includes budgeted and actual costs, as well as hours of staff time worked. Data may be analyzed by the different accounts used by DSS. These include Account Level Budget Cost Centers (ALBCC), Department Cost Manager (DCM) departments, DSS production units and budget object codes. The file is

named the ALBCC national extract. It is generated monthly and is cumulative for the fiscal year. Workload information is not included in the extract.

A variety of pre-formatted reports can be generated from these data using the AUDSH/VSSC web site (see the article on the KLF web site in this bulletin). Reports include summaries of hours of labor and dollars of cost by DSS production unit, ALB cost center, or budget object code. The production unit report provides budgeted costs, actual costs and the variance between the two. By clicking on an underlined link in the table, the

report can be limited to specific DCM departments. In this same way, the ALB cost center report can be limited to certain budget object codes, and the budget object code report can be limited to certain production units.

Analysts may also access the ALBCC database directly and use the SAS programming language to generate custom analyses. The file for fiscal year 2001 is named RMTPRD.MED.DSS.SAS.FY01.ALBCC. HERC is planning a research guide to the ALBCC national extract.

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New Clinical Extracts Expected from DSS

The DSS team at Bedford is developing new DSS national extracts of drug prescriptions and selected laboratory test results. Additional files with information on laboratory tests and radiology are being planned.

The pharmacy extract will contain one record for each dispensed prescription. The database will provide the name, quantity, and cost of each prescription filled by VA. The laboratory results extract will include the results of 50 different laboratory tests.

The radiology and laboratory test extracts will report the test or procedure that was done. All four extracts will report both inpatient and outpatient services. Patients will be iden-

tified by their encrypted social security number, date of birth, and gender. Inpatient services will be identified by admission and discharge dates, as well as ward (bed section). For outpatient care, date of visit and clinic stop code will be included. The extracts will also include primary provider, ordering provider, date, time, and location of the service provided, and facility name.

The release dates are not known, however the pharmacy and lab test extracts are expected sometime in 2002. The lab results and radiology extracts are expected sometime next year.

New Name for KLF Web Site

Economic Data Easily Accessed via VA Private Intranet

Researchers who have access to the VA Private Intranet network can use a web-browser interface to generate reports on cost, patients, and services provided in the veterans' health care system. Knowledge of the SAS programming language is not needed. A web browser menu allows the user to choose a range of data to produce a report. Pre-formatted reports are also available on the site.

Formerly called the KLF Menu, this site has been renamed the "Assistant Deputy Under Secretary for Health/VISN Service Support Center Web Site," although its URL remains: <http://klfmenu.med.va.gov/>. In addition to custom reports, the ADUSH/VSSC web site offers finished reports that have already been run, answers to frequently asked questions, and news and documentation of VA databases.

Data from DSS national extracts are available at the ADUSH/VSSC web site. A variety of reports are

available. Examples include reports with the annual inpatient and outpatient costs per patient, and the number of unique patients at a medical center, regional network

(VISN), or the entire VA system. Another report gives the cost of hospital stays in each Diagnosis Related Group and provides comparisons to the mean cost of treating Medicare patients in non-VA hospitals.

The ADUSH/VSSA web site can be reached only from computers connected to the VA Private Intranet network. The web site is accessed with the same username and password employees use to access their VA e-mail accounts. Individuals who wish to access DSS data must also sign a non-disclosure agreement. Instructions are available on the web site.

When custom reports are run, the web site converts the menu choices to a SAS program that is run at the national VA data center in Austin, Texas. The user must have an Austin timesharing account to use this feature of the web site (see article on how to get an Austin Automation Center Account, at right).

How to Obtain an Account at the Austin Automation Center

VA employees can access DSS extracts and other data only if they create an account at the VA national data center in Austin Texas, the Austin Automation Center. To use DSS data, they must also sign agreements to promise to protect data confidentiality.

To get an account at the Austin center, fill out VA Form 9957 and submit it to the AAC Point Of Contact. Nearly every VA facility has a person who serves as the AAC Point of Contact (POC) and can open, change, and close Austin timesharing accounts using the Automated Customer Registration System. To locate the POC for your facility, call the Austin center's help desk at (512) 326-6780. The POC can tell you how to complete the form, including the specific task codes needed for DSS access.

Users of DSS data must also sign a form to promise not to inappropriately disclose VA data on the cost of specific health care products to the public. Users who need to access unscrambled social security numbers must take additional steps, including the completion of a privacy act statement.

HERC Offers Resources

The Health Economics Resource Center is a national center dedicated to improving the quality of health economics research in VA. HERC assists VA researchers in assessing the cost-effectiveness of medical care and evaluating the efficiency of VA programs and the providing of care. HERC helps researchers determine the costs of VA health care.

Research Consulting Service

HERC's economics research consulting service is accessible via a telephone support line: (650) 617-2630 or the HERC web site: www.herc.research.med.va.gov. Submit a help request or question online and HERC staff will contact you.

HERC Web Site

HERC offers a variety of resources on its web site: www.herc.research.med.va.gov. The site features essays with details of the three cost methods: Average Costing, Micro-costing, and the Decision Support System. HERC is proud to announce that versions of the following user guides are now available in PDF format on the web site:

- HERC'S National and Local Outpatient Average Cost Dataset for VA Care: Fiscal Years 1998-2000
- HERC's Inpatient Average Cost Datasets for VA Care: Fiscal Years 1998-2000
- HERC's Research Guide to Decision Support System National Cost Extracts Fiscal Years 1998-2000

Additional web resources include a searchable database of health economics experts, a form to submit help requests, a Frequently Asked Questions section, and training materials for the Health Economics Seminar Series course. **Please visit us at www.herc.research.med.va.gov soon!**



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