

## HERC Kicks Off HSR&D Cyberseminars

HERC investigators updated VA researchers on economic datasets in the premiere HSR&D cyberseminar, held in November. The seminar coupled traditional voice and visual presentation with new technologies aimed at enhancing learning and promoting interaction with students.

The distance-learning program combines Internet applications with telephone conference calls. The instructor can use PowerPoint slides, demonstrate desktop applications, use a virtual white board, and tally responses to multiple-choice questions, all in real time. Students can send text messages to the instructor or to one another.

In 2005, HERC will use the new technology to conduct its monthly seminar and an introductory course on health economics and cost-effectiveness analysis. The course emphasizes VA data sources and methods of VA cost determination. Other HSR&D resource centers will conduct sessions on VA data systems and outcomes measurement.

A committee of HSR&D resource centers chaired by HERC director Paul Barnett proposed the cyberseminar series. The HSR&D Service is providing two years of initial funding. The seminars are coordinated by Laurel Long, education director at the newest HSR&D Resource Center, the Center for Information Dissemination and Education Resources (CIDER).

For information about upcoming seminars, visit the HERC web site and click on "Training."

## New Report on VA Staffing Costs

HERC has determined the average cost of employing 70 categories of VA staff. The figures appear in a new HERC Technical Report, *A Guide to Estimating Wages of VA Employees*. The report will be useful for those needing to find the typical hourly cost of particular kinds of VA staff, such as physicians, nurses, social workers, and psychologists.

The report describes two sources of summary labor costs: the Financial Management System (FMS) and DSS Account Level Budgeter Cost Center (ALBCC) files. Both FMS and ALBCC data report total labor costs, the sum of wages and benefits. ALBCC data provide greater detail within each station, including the ability to specify staff in particular DSS departments. Wage data are in summary format and cannot be linked to particular individuals.

The technical report shows the average hourly and annual cost for each labor category by year, FY00-FY03. For common job categories such as full-time physicians and registered nurses, the two sources report very similar total costs. There was considerable variation, however, for temporary employees, trainees, and administrative staff.

The report is available on the HERC web site at [www.herc.research.med.va.gov/Technical%20Report%2012%20DSS-Report%2007-04.pdf](http://www.herc.research.med.va.gov/Technical%20Report%2012%20DSS-Report%2007-04.pdf)

### Health Economics for VA Researchers

Health economics, with an emphasis on VA data systems, will be taught again this spring by HERC faculty. No need to travel: use your phone and web browser to participate in this cyberseminar. Go to [www.herc.research.med.va.gov](http://www.herc.research.med.va.gov) and click on "Training" to learn more.



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# VA HEALTH ECONOMICS BULLETIN

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## HERC Staff

### Director

Paul G. Barnett, Ph.D.

### Associate Director

Mark W. Smith, Ph.D.

### Health Economists

Ciaran S. Phibbs, Ph.D.

Todd H. Wagner, Ph.D.

Wei Yu, Ph.D.

### Psychologist

Forest Baker, Ph.D.

### Research Associates

Lakshmi Ananth, M.S.

Leonor Ayyangar, M.A.

Shuo Chen, Ph.D.

Ariel Hill, A.B.

Reiling Lee, M.S.

Yesenia Luna, M.S.

Pon Su, M.S.

### Research Assistants

Vilija Joyce, B.A.

Samuel S. Richardson, B.A.

### Administrative Officer

Sharon Abas

## Health Economics Resource Center

VA Palo Alto Health Care System

795 Willow Road (152 MPD)

Menlo Park, CA 94025

(650) 617-2630

fax: (650) 617-2639

herc@med.va.gov

www.herc.research.med.gov

## New Person-Level Cost Data Sets Available

By Ariel Hill

VA researchers can now use a newly created database of the annual cost incurred by each patient who used the VA health care system between 1998 and 2002. The new datasets make it easy for researchers to find the cost incurred by any patient without extracting and tabulating inpatient, outpatient, and pharmacy databases.

The identity of individual patients is masked by encrypted VA medical record numbers. The data sets include one record per individual per fiscal year. Data elements include annual inpatient, outpatient, and pharmacy costs, total annual inpatient length of stay, and total annual number of outpatient visits. There are also cost subtotals for five categories of inpatient care (medical/surgical, behavioral, long term care, residential/domiciliary, and other) and four categories of outpatient care (medical/surgical, diagnostic, behavioral, and other).

The new files were created by the Health Economics Resource Center. HERC plans to tabulate data from more recent years as data become available. Inpatient and outpatient costs were calculated using the HERC average cost methodology. Pharmacy costs were obtained from the DSS national data extracts (NDE) pharmacy SAS datasets. Since DSS pharmacy costs data are not available for the 1998 federal fiscal year, pharmacy costs are included only in 1999 and later years. The federal fiscal year ends on September 30.

VA researchers who have an account at the national VA computer center can access the files by registering to use the HERC average cost datasets. Information on registering can be found on the HERC website at: [http://www.herc.research.med.va.gov/nondisclosure\\_form.htm](http://www.herc.research.med.va.gov/nondisclosure_form.htm).

A more detailed description of the new data sets can be found in HERC Technical Report #16, *Guidebook for the HERC Person Level Cost Data Sets* ([http://www.herc.research.med.va.gov/tech\\_report\\_16.pdf](http://www.herc.research.med.va.gov/tech_report_16.pdf)).

## QUERI Considers Economics

**E**conomic evaluation is becoming part of Health Service Research and Development efforts to improve the quality of VA health care. Funding guidelines for the Quality Enhancement Research Initiative (QUERI) call for investigators to consider economic implications when evaluating interventions that intend to change medical practice on a large-scale.

QUERI investigators test ways of influencing investigators to adopt treatment guidelines and improve the quality of care. Now that many single-site interventions have been tested, the

QUERI centers are planning larger “regional roll-out” projects that will carry these interventions to even more VA facilities.

The QUERI Economic Analysis Guidelines have been drafted by HERC to help researchers consider how to include economics in studies. The guidelines emphasize short-term managerial concerns rather than standard cost-effectiveness analysis. They detail the types of economic analyses commonly performed and enumerate factors that researchers should consider, such as study perspective, time horizon, and the likely impact of the inter-

vention on total treatment costs. The guidelines are available on the national HSR&D web site under the ‘QUERI’ tab, or by request to HERC. QUERI researchers may also contact the HERC consulting service for assistance.

HERC is involved in the QUERI program in other ways. Mark Smith, Associate Director of HERC, advises the national QUERI Research and Methodology Committee on the economic analyses proposed by QUERI centers. Other HERC economists participate in individual QUERI projects.

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## Outpatient Datasets to Include All CPT Codes

**I**n the previous issue of the HERC Bulletin (Vol 4, No. 1, August 2004) we reported on programming rules that affect how procedures are reported in the national files of VA ambulatory care, the National Patient Care Database (NPCD). The rules allow a given procedure code to appear only once in each record. Since some procedure codes are designed to be replicated, for example, to represent each 15 minutes of physical therapy, this programming rule has important implications.

To study the extent of the problem, staff at VHA National Data Systems (NDS) provided HERC with raw data on the outpatient visits of a random sample of ten percent of VA

users. These data included all procedure codes assigned in outpatient visits of these patients. HERC found that 10.5% of the procedure codes are excluded by the rule barring the second or greater replication of another code already used in the record. HERC found that most of these replications appear to be appropriate. Only 9% of the replicated codes appeared to be clearly inappropriate use of a code. These findings appear in HERC technical report #15.

NDS is planning a more detailed VA outpatient database. New database rules will allow replication of a procedure code within a visit and increase the maximum number of procedure codes in a record from 15 to 20.

NDS also plans to add up to three modifiers codes for each procedure. The Current Procedure and Terminology (CPT) coding system includes two-digit modifier codes. Modifiers can distinguish surgery from post-operative care. They are also used to distinguish the professional (physician) component of a radiology procedure from the technical (non-physician) component.

At the time of this writing, NDS expects to implement these changes in early 2005. Changes will first be made to data from the current (2005) fiscal year. NDS will then create revised versions of the outpatient data from the prior three fiscal years. CPT modifiers will be included only in 2003 and later years.

# How To: Estimating Medicare Reimbursement for Inpatient Care

By Todd Wagner

Although VA researchers can obtain patient costs from either DSS or the HERC Average Cost Data, we sometimes get question about how to calculate Medicare reimbursements. Sometimes the question is motivated by the need to estimate costs for non-VA providers and other times the question relates to efficiency—is VA more or less efficient than private hospitals? This article briefly reviews the process for calculating inpatient payments and discusses some limitations.

The Centers for Medicare and Medicaid Services (CMS) reimburses hospitals for inpatient stays by Medicare recipients. The payments are prospectively set each year—hence hospitals know ahead of time how much Medicare will pay them for a given patient, as long as the patient is not a high-cost outlier. Hospitals receive two payments: one for operating costs and another for capital costs. Both payments start with a “standardized” amount, which is modified each year. The standardized amount is then adjusted on the basis of the hospi-

tal’s urbanicity, prevailing wages in the hospital area; and patient acuity as measured by the diagnostic related group (DRG) weight. Qualifying hospitals receive additional payments to compensate for treating a large percentage of low-income patients and for indirect costs of medical education.

When a hospital has a high-cost outlier, the hospitals can request additional outlier payments. Teaching hospitals also receive an additional payment for direct medical education (DME). The DME is a hospital-specific rate per patient day. For example, in 2004, Baylor Medical Center (Houston TX) direct medical education per diem was \$166.05.

Calculating Medicare payments for specific hospitals is straightforward. CMS provides Pricer software on its website that can be used to estimate a hospital’s payment. Researchers can make some assumptions and calculate a “national average” reimbursement for a particular DRG. Calculating national averages is more complex, especially if one attempts to include outlier payments or payments

for direct medical education. Some researchers exclude these costs. But DME payments typically represent an additional 10-20% in total reimbursement. Hence, researchers should be careful when drawing conclusions in these circumstances.

The estimated Medicare payment is for the facility and it excludes physician fees and all other professional fees. Consequently, researchers should not directly compare VA cost estimates in the DSS national data extracts or HERC Average Cost Data to estimated Medicare facility payments. Both HERC and DSS include the cost of physician labor in the estimates.

If you would like more information about the nuts and bolts of calculating Medicare payments, please contact HERC. Also, if you are interested in outpatient costs, please refer to HERC’s Outpatient Average Cost Dataset Users Guide, which describes using Current Procedure Terminology (CPT) codes to calculate estimated payments.

## VA Phases Out Cost Distribution Report

By Todd Wagner & Paul Barnett

After more than two decades of use, VHA has pulled the plug on the venerable Cost Distribution Report (CDR). Researchers’ use of the CDR has waned in recent years due to the development of the Decision Support System (DSS) and the HERC Average Cost datasets. The loss of the CDR will have no effect on the DSS system, which assigns costs through the use of the Account Level Budgeter. But stopping the CDR will have important implications for the HERC Average Cost datasets.

HERC uses non-VA relative value weights to estimate the cost of hospital stays and outpatient visits. HERC used department-level costs reported in the CDR to adjust these estimates so that their sum equaled actual VA health care expenditures. The HERC staff is investigating how it will create its average cost datasets for 2004

fiscal year. Possible choices are to use the Monthly Program Cost Report (MPCR), the CDR’s replacement, to make this adjustment. HERC is also considering whether to create a department-level summary of the costs reported in the DSS inpatient and outpatient National Data Extracts.

DSS apportions more costs to outpatient care than the CDR; the CDR assigns more costs to inpatient care. As a result of the switch to a DSS based cost estimate, HERC Average Cost datasets will likely show an increase in outpatient costs and a decrease in inpatient costs.

HERC is working with the DSS team to learn more about the MPCR. In future issues of the Bulletin, we will report our findings. If you have questions about how this change will affect you, or if you are interested in analyzing department-level costs, please contact HERC.