

## HERC Staff Update

**Lakshmi Ananth, M.S.**, joined HERC this past May as a Research Health Science Specialist. She is currently working with Paul Barnett on an initial analysis of utilization data for CSP27 (SNAP). During her free time Lakshmi enjoys volunteering at the Lucille Packard Children's Hospital at Stanford University where she helps prepare people for their newborn babies.

*\*Fun Fact: The name Lakshmi originates from Sanskrit and means the Hindu goddess of beauty and wealth. ([www.babynametwork.com](http://www.babynametwork.com))*

**Reiling Lee, M.S.**, joined HERC this past June as a Research Health Science Specialist. She previously worked as an independent contractor in statistical programming. With a master in Biostatistics from UCLA, Reiling has experience working in pharmaceutical, biotech, hi-tech, financial and educational institutions.

**Yesenia Luna, M.S.**, moved from Michigan to join HERC in July as a Research Health Science Specialist. She previously served as a Graduate Student Instructor in the Department of Biostatistics at the University of Michigan. Yesenia has worked on studies involving injury fatality profiles, causes, and distribution. During her free time she enjoys watching foreign films.

*\*Fun Fact: Although Michigan is often called the "Wolverine State" there are no longer any wolverines in Michigan. ([www.michigan.gov](http://www.michigan.gov))*

**Anne Sales, Ph.D.**, joined the HERC Steering Committee this past spring. She is a research scientist for HSR&D at the VA Puget Sound in Seattle, Washington. She is also an Associate Professor for the Department of Health Services at the University of Washington. Anne has been with the VA for over eight years, and has been involved in a number of health services research projects with a focus on improving the quality of care to veterans with Ischemic heart disease. Anne enjoys long walks with her husband and three dogs on Anderson Island, at the south end of Puget Sound.



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### Health Economics Resource Center

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# VA HEALTH ECONOMICS BULLETIN

## Average Cost Dataset Update

### *FY2003 Data Released*

The inpatient and outpatient HERC average cost datasets for FY2003 are now available at Austin, in the HERC directory (RMTPRD.HERC.SAS). You must be a registered user to access these data. Information on registering can be found on the HERC website at <http://www.herc.research.med.va.gov/ACM.htm>.

### Unique Identifier Added to Outpatient Data

In response to a request by HERC, the Austin Automation Center added a unique encounter identifier to each record in the outpatient data (SE file). This makes it easier to link datasets, including the HERC outpatient average cost data, with the SE file.

### Two Errors in the HERC Average Cost Inpatient Datasets

We found two errors with the average cost data. These errors are described below. They have been fixed and new data have been posted.

#### Error 1: Missing Medical/Surgical Cases in the MED/SURG Database

Some people with medical/surgical care were transferred to a non-medical/surgical bedsection, where they remained through the end of the fiscal year. These medical/surgical cases were accidentally excluded from the MED/SURG database. The error affected fewer than 1000 (0.1%) cases out of almost 700,000 hospitalizations for FY1998–2002. It did not affect the DISCHARGE dataset.

#### Error 2: SAS Error in Compiling DISCHARGE Dataset

A SAS error in compiling the DISCHARGE dataset affected non-medical/surgical cases in which the stay crossed fiscal years. Some costs were inadvertently excluded. For the affected cases, costs were lower than they should have been. The error did not affect medical/surgical care, non-medical/surgical cases that were admitted and discharged for each fiscal year, or any record in the FY1998 discharge file.

Fixing both errors involved approximately 30,000 cases per fiscal year (~4% of the cases). We have uploaded new HERC datasets to Austin and renamed the old files RMTPRD.HERC.SAS.OLD.filename. Users can now compare original and corrected cost estimates.



## Rules of Thumb When Using VA Inpatient Cost Data

Researchers now have two options for estimating inpatient VA costs: the Decision Support System (DSS) and the HERC average cost dataset. HERC staff compared FY2001 data from the two sources to create eight rules of thumb to guide researchers conducting economic analyses with VA data.

### Recommendation #1:

HERC and DSS rely on different financial information. The Cost Distribution Report (CDR), upon which HERC data rely, reports more inpatient costs per discharge than DSS; DSS medical/surgical costs average 84% (-\$1549) of HERC costs per discharge. Accordingly, researchers should not mix these databases. Instead, they should use either DSS or HERC for their analyses. Keeping in mind HERC data exclude outpatient pharmacy costs, researchers can conduct sensitivity analyses using the other dataset.

### Recommendation #2:

In choosing between HERC and DSS data, researchers should consider their audience. HERC medical/surgical data were created with non-VA relative value weights, whereas DSS uses both VA and non-VA relative value weights.

### Recommendation #3:

The costs of capital financing and mal-practice awards are not included in DSS or HERC. Capital financing costs are particularly important for researchers evaluating new programs, some of which may require additional space or other capital investments.

### Recommendation #4:

Researchers interested in psychiatry, substance use and psychosocial residential rehabilitation programs (PRRTP), including compensated work therapy, should choose a database carefully. HERC draws inpatient utilization data from the Patient Treatment File (PTF). Episodes of care are defined differently in DSS and PTF, and PRRTP treatment, defined as outpatient care in DSS, is sometimes considered inpatient care in PTF.

### Recommendation #5:

There is less agreement between HERC and DSS medical/surgical costs for cases with very large DRG weights (weight > 5). Researchers should identify whether any such cases exist in their data. Sensitivity analyses, using a plausible range of cost values, should be conducted if cases exist.

### Recommendation #6:

There is poor agreement between HERC and DSS data for cases with very short lengths of stay (one or two days). One possible explanation is that ancillary tests and procedures represent a larger percentage of short-stay costs, and it is unclear how well DSS and HERC capture this workload. More research is needed to understand which data source, if either, is more accurate.

### Recommendation #7:

For rehabilitation, mental health, and long-term care, both datasets predominantly use daily rates to estimate patient costs. Researchers should calculate a case's daily rate in order to identify outliers. These

cases can be excluded in sensitivity analyses or their costs can be replaced with suitable alternatives, such as national averages.

### Recommendation #8:

Both HERC and DSS are relatively new datasets. It is generally believed that DSS data inaccuracies were common prior to FY2000, but data quality has steadily improved over time. We recommend researchers use HERC data for time-series analyses that start in FY1998 or FY1999.

For more information see the report by Todd Wagner and Jesse Velez titled: "A Comparison of Inpatient Costs from the HERC and DSS National Data Extract Datasets," available at [www.herc.research.med.va.gov/Pubs.htm](http://www.herc.research.med.va.gov/Pubs.htm)

## New HERC Review Panel

HERC is recruiting 10 to 12 VA economists and health service researchers to review upcoming technical reports and guidebooks. Technical reports on VA pharmacy, prosthetics, outpatient procedures, and DSS cost data are being drafted, as well as guidebooks on DSS national cost datasets. Reviewers are also needed to comment on the HERC plan to evaluate cost and utilization data.

For more information, please contact HERC at [herc@med.va.gov](mailto:herc@med.va.gov), 650-617-2630.

## New Report Shows VA Costs Have Shifted

A new cost report derived from the Decision Support System (DSS), the Monthly Program Cost Report (MPCR), is replacing the VA Cost Distribution Report (CDR). It uses cost allocation methods that are much more accurate than those used to report CDR and the expenses of each VA medical center by cost account.

The accounts are similar to those in CDR in that they represent the cost of

different inpatient bed-sections, groups of outpatient clinics, and other costs such as contract care, home health services, national programs, and national/regional administrative offices. MPCR revealed that spending on outpatient care has been greater than indicated in CDR.

MPCR is based on the VA general ledger, the DSS account-level budget cost system, and DSS encounter-level national cost extracts. Updated monthly, it reports

cumulative costs for the fiscal year; it distinguishes personnel cost from all other costs; and it provides staffing, workload, and unit cost estimates.

MPCR was first prepared in October 2003. Both MPCR and CDR will be created for fiscal year 2004, but this may be the last year for CDR. HERC is developing a guidebook to describe the methods used to prepare MPCR and how researchers can use it.

## Outpatient Datasets Exclude Duplicate Procedure Codes

HERC has learned that the National Patient Care Database (NPCD) excludes legitimate duplicates of procedure codes. When VHA programmers create NPCD, they drop duplicate procedure codes recorded in VISTA. Repetition of codes, however, is often appropriate. Physical therapy, for instance, is represented by codes for 15-minute intervals of service, and thus a 30-minute visit requires use of two identical codes. Because the HERC Average Cost Dataset for outpatient care uses procedure codes to estimate costs, exclusion of the duplicate codes will cause the HERC data to understate the cost of outpatient care.

The VHA National Data System is working with HERC to

solve the problem. They provided HERC with data for the visits of a 10% random sample of VA patients. Just over 10% of procedures coded in the extract were duplicates of other codes in the same visit. HERC evaluated whether these duplicates were appropriate. Only 9% of the duplicate codes appeared to be used inappropriately, 57% were among those clearly intended to be repeated if necessary, and 34% were probably appropriate for duplication.

HERC is developing a recommendation for changes to NPCD. A key issue is whether to allow duplication of any code or to exclude repetition of codes that should never be duplicated. Another issue is whether to increase the number of procedure codes allowed on each NPCD record beyond the current limit of fifteen.

## HERC Health Economics Cyber Seminars—Fourth Wednesday of Every Month

Interested in participating in a monthly seminar for VA economics researchers? No travel required! HERC is hosting a series of teleconferences to discuss a broad range of topics: analyses of VA costs, applied cost-effectiveness studies, efficiency analysis, volume-outcome relationships, health-care demand studies, decision models, and other health economics issues. Our goal is to create a community of economic researchers who meet regularly to exchange information, ideas, and research results.

The teleconferences take place on the fourth Wednesday of every month at 2 PM (Eastern). PowerPoint slides are delivered to each participant one week before the seminar.

To enroll in the series, please call or email Vilija Gulbinas (650-493-5000 x23852, [vilija@stanford.edu](mailto:vilija@stanford.edu)). You may participate without enrolling. To participate in the call, dial 1-800-767-1750 and use access code 45043. For more information, call the HERC help desk at 650-617-2630.

Only those enrolled for the seminar will receive a copy of each month's PowerPoint slides.