

# Sources of VA Care Costs and Providers

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# Topics for today's talk

- HERC person-level costs file
  - Non-VA cost questionnaire
    - Estimating non-VA costs
  - Wage index file
    - Geographic Variation in Costs
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# Topics for today's talk (cont.)

- VA provider data guidebook
    - VA data on health care providers
  - VA personnel data guidebook
    - VA PAID system
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# HERC Person-Level Costs

Jean Yoon, Ph.D.

# HERC Person-Level Costs

- Reports total annual costs and utilization of VA care for each patient
- Annual person-level file FY98-FY10
- Costs reported for five categories of inpatient care and four categories of outpatient care
- Costs include total pharmacy costs and total Fee Basis costs
- Utilization measured by inpatient length of stay by category and total outpatient visits

# HERC Person-Level Costs

- Inpatient stays beginning in one fiscal year and ending in another have costs allocated between the fiscal years based on the proportion of days of stay in each fiscal year
- Inpatient categories of care
  - Medical/surgical, behavioral, long term care, residential/domiciliary, all other
- Outpatient categories of care
  - Medical/surgical, behavioral, diagnostic , all other

# HERC Person-Level Costs

- For each inpatient stay and outpatient visit, HERC estimated two costs: national and local. National costs were estimated such that they sum to the total national expenditures for VA care (divided by care category) reported in DSS.
  - Local costs were estimated similarly, but reconcile to the total VA expenditures by care category at the medical center level as reported in DSS.
  - Pharmacy costs obtained from DSS national data extracts (NDE)
  - Fee Basis costs obtained from four Fee Basis (FEN) datasets: Inpatient (FENINPT), Ancillary (FENANCIL), Outpatient (FENMED), and Pharmacy (FENPHR )
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# HERC Person-Level Costs

- Inpatient and outpatient costs from HERC Average Cost data
  - HERC method of distributing costs to hospital stays and outpatient visits
  - Costs identical for all encounters with same characteristics
    - 1) Acute medical surgical stays
      - Estimate of what stay would have cost in a Medicare hospital, based on a regression model
    - 2) Other inpatient care
      - Length of stay
    - 3) Outpatient care
      - Hypothetical Medicare payment based on procedure codes assigned to visit
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# HERC Person-Level Costs

- The person-level cost datasets are named PLCOSTXX
  - XX refers to the fiscal year of dataset
- SAS files stored at Austin Automation Center in the RMTPRD.HERC.SAS
- *Guidebook for the HERC Person-Level Cost Datasets FY1998 – FY2010* available on HERC intranet site

# Estimating Non-VA Costs

Todd H. Wagner

# Learning Objective

- It is common for veterans to use non-VA providers.
  - At the end of the class, you will know the pros and cons of different methods for identify non-VA utilization and estimating non-VA costs
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# Non-VA Use is Common

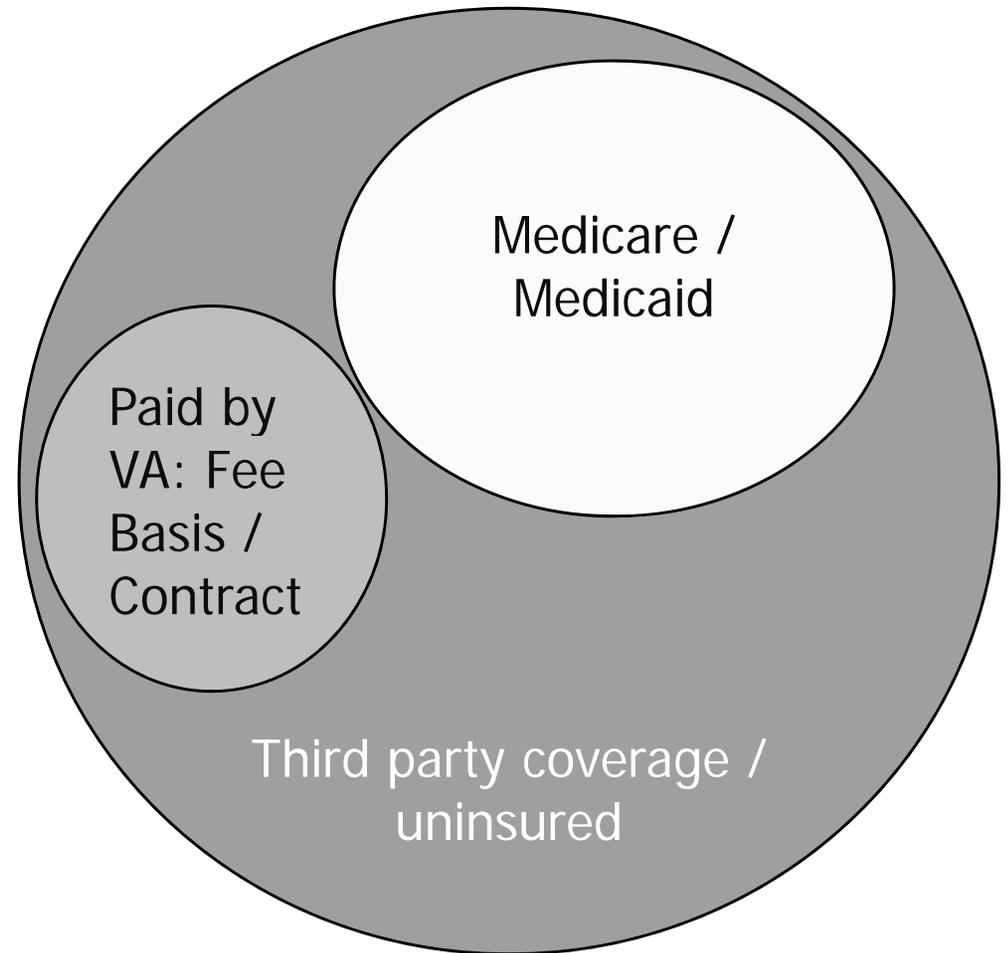
- Among Medicare enrollees, 80% of Veterans under age 65 relied on VA, while 53% of those over age 65 relied on VA\*
- Lower differential distance to the VA, and higher VA-determined priority for health care, predicted higher VA reliance
- Reliance varied by medical need– higher reliance on VA for SUD and MH treatment

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\*Petersen L, et al (2010) Relationship between clinical conditions and use of Veterans Affairs health care among Medicare enrolled Veterans. HSR.

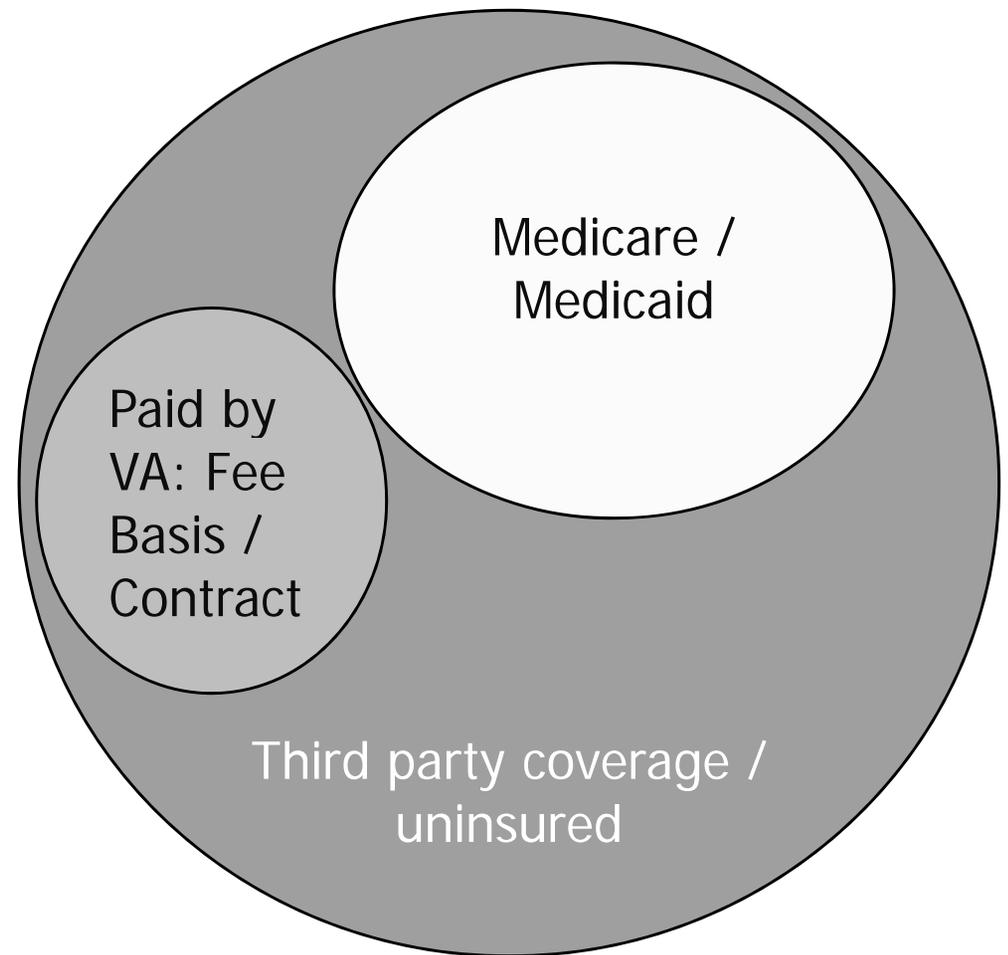
# Non-VA Utilization

- How do you identify the universe?
- If you use different methods, how do you prevent double counting?



# Self-Report

- Perhaps the best way to measure all non-VA care
- Exception: everyone in sample is Medicare eligible (over 65 years of age or disabled)



# Consider...

- During the past 12 months, how many times have you seen a doctor?

Responses

0

1

2

3

4

5

6

7+

Do you have any concerns about this question?



# Whiteboard

During the past 12 months, how many times have you seen a doctor?

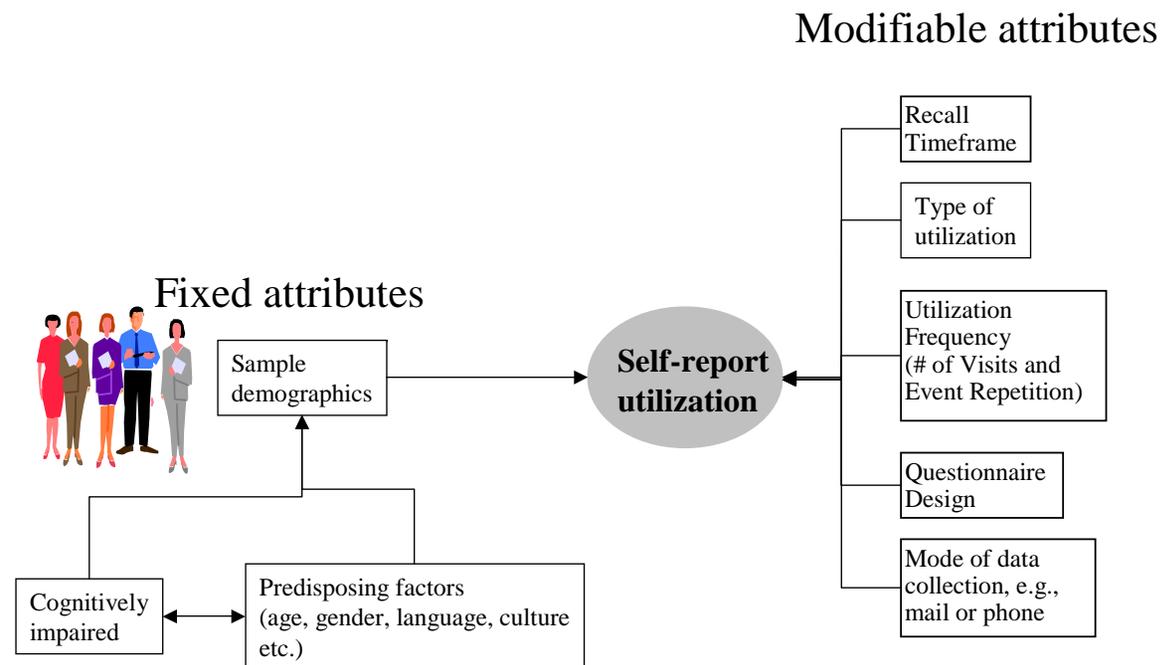


# Better Specificity

- During the past 12 months, how many times have you seen a doctor or other health care professional about your own health at a doctor's office, a clinic, or some other place? Do not include times you were hospitalized overnight, visits to hospital emergency rooms, home visits, or telephone calls.
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# What is Self-Report

- Cognitive process of recalling information



# Fixed Attributes

- Process influenced by illnesses or disabilities (e.g., dementia or mental retardation)
  - Older age is consistently correlated with poorer recall accuracy (spurious correlation)
    - Older adults more likely to under-report.
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# Recommendations

- Are respondents able to self-report?
    - Consider age and cognitive capacity
    - 14 is lower limit
    - Use cognitive screening tool, such as MMSE
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# Recall Timeframe and Frequency

## ■ Time Frame

- Longer recall times result in worse accuracy
- Longer timeframes lead to telescoping and memory decay

## ■ Frequency

- Under-reporting is exacerbated with increased utilization
  - As the number of visits increase, people forget some
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# Recommendations

- Avoid recall timeframes greater than 12 months
  - Shorter recall may be necessary for
    - Office visits (low salience)
    - Frequent users
  - Consider two-timeframe method (i.e., 6-2)
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# Data Collection

- Modes: mail, telephone, Internet, and in-person data
    - No study has compared all four
    - Probing with memory aids can help improve accuracy
    - Stigma is important
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# Recommendations

- No standards exist and standards may not be possible
  - Pretest: Dillman (2000)
  - Placement in questionnaire might matter
  - Phone, in person and some Internet surveys allow for memory aids
    - For example, landmark events
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# Response Scale

- Use counts
    - Include “your best estimate is fine”
  - Avoid categories (0, 1-2, 3-5, 6+), which introduce biases and error in the statistical analysis
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# Costs

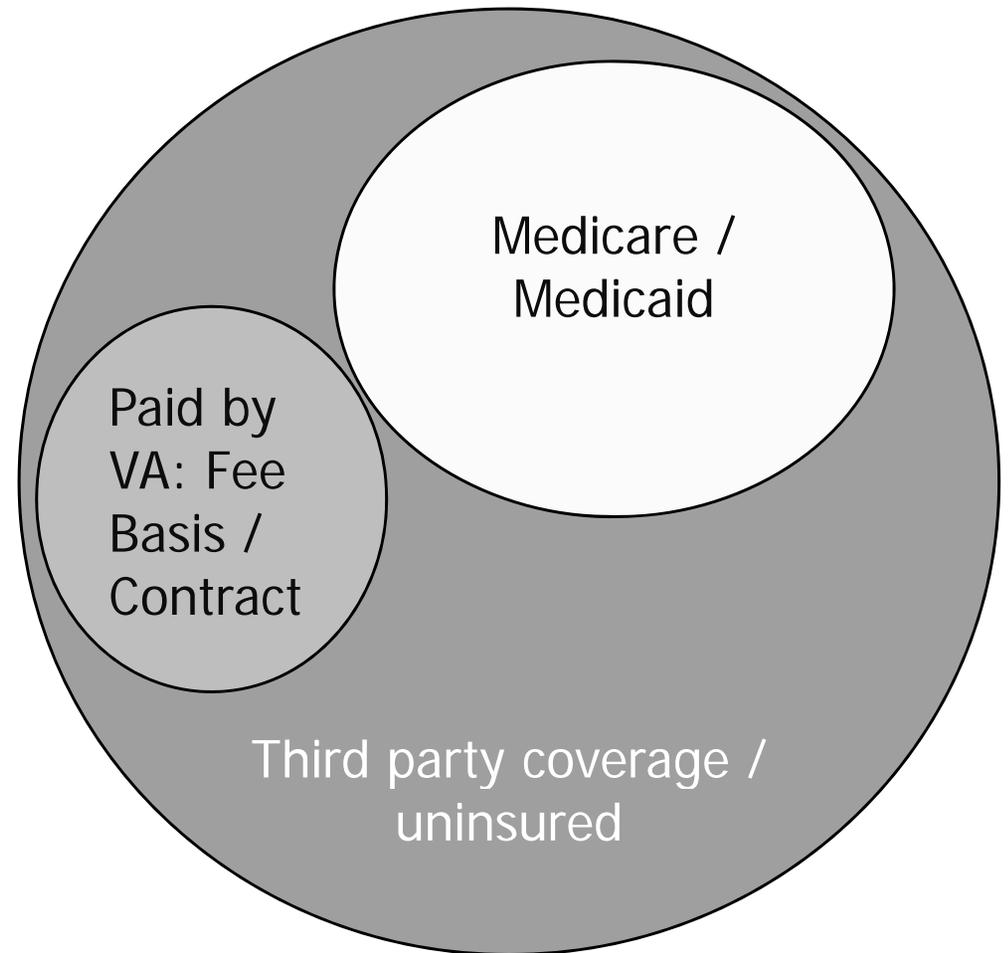
- Self-reported costs are unreliable
  - Must impute costs from self-reports
  - Limitations
    - can introduce biases
    - Not as precise as accounting data
  - Consider seeking billing data (discussed next)
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# Cost parameters

- Recent bypass trial
    - Inpatient per day \$2,553
    - Emergency Dept visit \$536
    - Ambulatory surgery \$475
    - Medicine visit \$280
    - Psychiatry visit \$249
    - Psychology visit \$199
    - Home health nurse visit \$462
    - Physical therapy \$182
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# Collecting Data from Non-VA Providers

- Self-report may not be sufficiently precise
- With permission, you can collect the grey area by collecting billing data from providers



# Overview of Method

- For each non-VA inpatient stay, ask for the following:
  - facility type (acute, nursing home, hospice, etc.)
  - facility name and location (at least city)
  - admission and discharge dates
- Obtain a signed release if you want information from the non-VA provider.
- Can collect inpatient and outpatient, or focus on inpatient and outpatient surgery

# Release of Information (ROI)

- The ROI authorizes the provider to release (disclose) information about the encounter to you.
- Key points about a ROI:
  - It is separate from the Informed Consent form.
  - It must be approved by the IRB.
  - It has many required elements. See VHA Handbook 1605.1, section 14.
  - A patient/representative cannot be forced or cajoled into signing it.

# Necessary Elements: Highlights

- The ROI must contain the following:
  - Patient's name (a few providers require the SSN as well)
  - Description of information requested
  - Name of person/organization making the request
  - Name of person/organization to whom data will be disclosed/used
  - Description of purpose for disclosure/use
  - Expiration date for disclosure/use (can be “none” in certain cases)
  - Signature of patient or authorized representative
  - Statements about revocation, VA benefits being unrelated to request, and possibility of re-disclosure

# After Obtaining the ROI

- Find fax and telephone numbers of non-VA provider.
- Call to find the person to whom info should be faxed.
- Fax cover letter and ROI.
- If it doesn't come within a week, try again.

# Costs vs. Charges

- Billing records usually report charges
  - Charges are fictitious
  - Need to deflate charges using hospital level cost to charge ratio, or
  - Use the information on the bill to estimate Medicare payment or VA cost
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# Inflation

- Costs vary over time
- Should adjust using the general consumer price index or the producer price index
- The medical care consumer price index overstates inflation (does not sufficiently control for changes in quality).\*

# Geographic Variation in Costs

- Labor represents a large component of medical care costs.
  - Wages vary considerably by geographic market
  - Must normalize the costs
  - HERC has developed a Wage Index file
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# Wage Index

- Medicare creates a Wage Index file
  - We have linked VA hospitals (at the sta6a level) to the Medicare Wage Index file
  - Data are available from 2000-2010
  - Adjust for wages in the multivariate analysis
  - More info:  
[www.herc.research.va.gov/publications/guidebooks.asp](http://www.herc.research.va.gov/publications/guidebooks.asp)
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# VA Data on Health Care Providers

Paul G. Barnett, Ph.D.

# Use of provider data

- Evaluate interventions directed at providers
- Study how provider characteristics relate to efficiency or quality
- Control for correlation of patients seen by the same provider

# **Provider is identified in many VA datasets**

- Outpatient visits
- Inpatient encounters
- Primary care assignments
- Hospital discharges
- Prescription fills
- Laboratory and radiology orders

# National Health Care Practitioner Database (NHCPD)

- Contains provider name
- Medical center
- ID number
- Real and scrambled Social Security  
Number

# Provider identification number

- Used in all datasets
  - Identifies a specific provider
  - One number at each site where provider practices
  - Formatted differently in DSS
  - Different variable name in different datasets
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# Provider type

- Provider Classification System
  - Developed by CMMS and ANSI
  - 6-character code
  - Type of provider and area of specialization
  - Different variable name in different datasets
  - Not in the NHCPD
-

# Other provider characteristics

- Personnel and Accounting Integrated Data System (PAID)
- Gender and age
- Education and certification
- Hire date and rate of pay

# More information

Guide to VA Data on Health Care

Providers Dina Roumiantseva, Patricia L. Sinnott, Paul G. Barnett, June 2011

See [www.herc.research.va.gov](http://www.herc.research.va.gov)

→ publications → guidebooks

# PAID Data

Ciaran S. Phibbs, Ph.D.

# PAID

- VA's payroll data system
- PAID has many different types of data
- 2 parts to PAID
  - History file, data from each pay period
  - Master file, annual file with human resources data

# PAID, cont.

## ■ PAID History file

- Data on hours worked, including hours with shift differentials
- Data on pay, including all deductions and adjustments
- Essentially all of the detail for generating paychecks

# PAID, cont.

## ■ PAID Master file

- Education/qualifications, including degree dates
- Demographics
- Hire date
- Job description/title

# Linking to PAID

- Individual identifiers
  - SSN, name, birthdate, etc.
- Workplace identifiers
  - TLU, facility, BOC (type of employee)

# Linking to PAID, cont.

## ■ Providers

- DSS, PTF, NPCD all have a provider ID
- There is a crosswalk between provider ID and SSN
- Use SSN to pull PAID data and link to providers

# Linking to PAID, cont.

## ■ Nurses

- Nurse manager of each unit has own TLU
- All nurses working for that unit assigned to that TLU
- From DSS, can get mapping of TLUs to ALBCCs
- This only works for nurses

# **Next HERC Cyber Course**

November 30, 2011

Creating a Decision Model

Abra Jeffers, M.Phil.

