

Sources of VA Care Costs and Providers

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Topics for today's talk

- HERC person-level costs file
- Estimating non-VA costs: using a questionnaire
- Geographic Variation in Costs: Wage index file
- VA data on health care providers
- VA personnel data guidebook: VA PAID system

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-FY11
- Costs reported for five categories of inpatient care and four categories of outpatient care
- Costs include total_p 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)
 - Lag in Fee records, so Fee costs not added until 1-2 years after FY
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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) Out patient 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 Center in RMTPRD.HERC.SAS
 - Files will eventually be stored at Corporate Data Warehouse
 - *Guidebook for the HERC Person-Level Cost Datasets FY1998 – FY2010* available on HERC intranet site
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Estimating Non-VA Costs

Todd H. Wagner, PhD

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

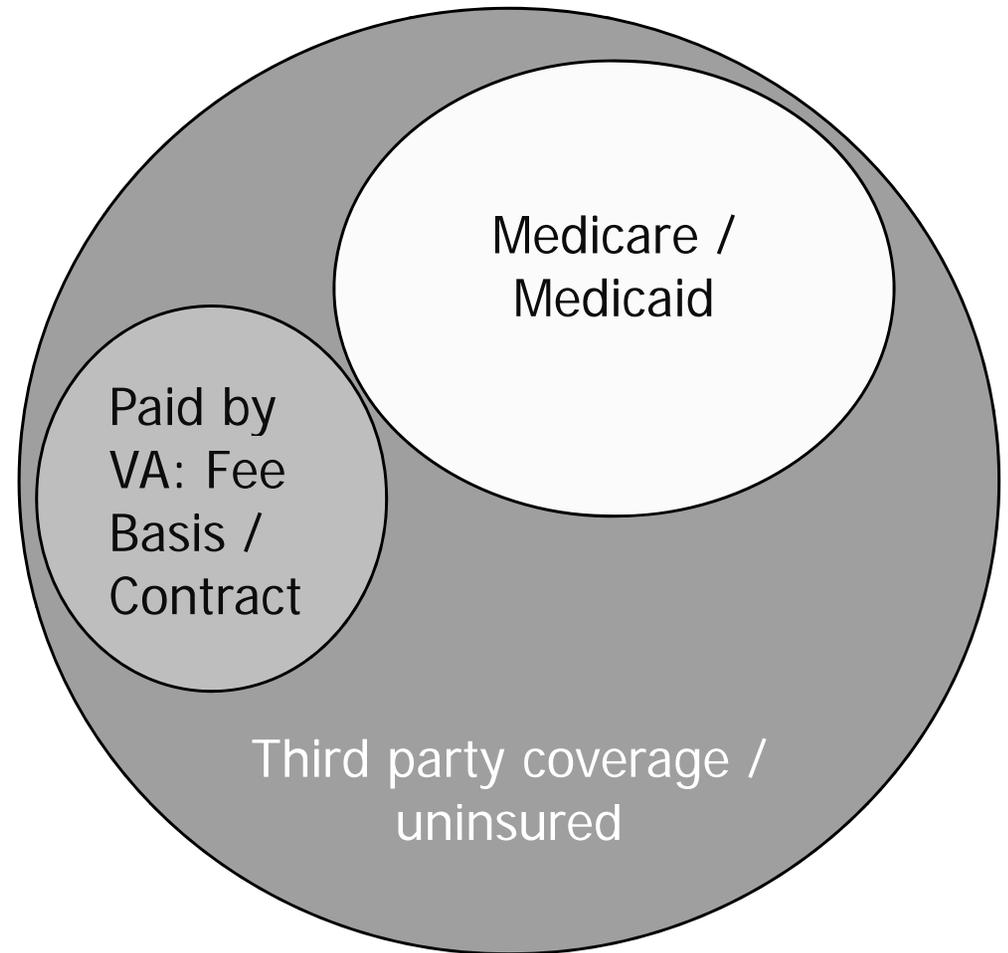
Non-VA Use is Common

- 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

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

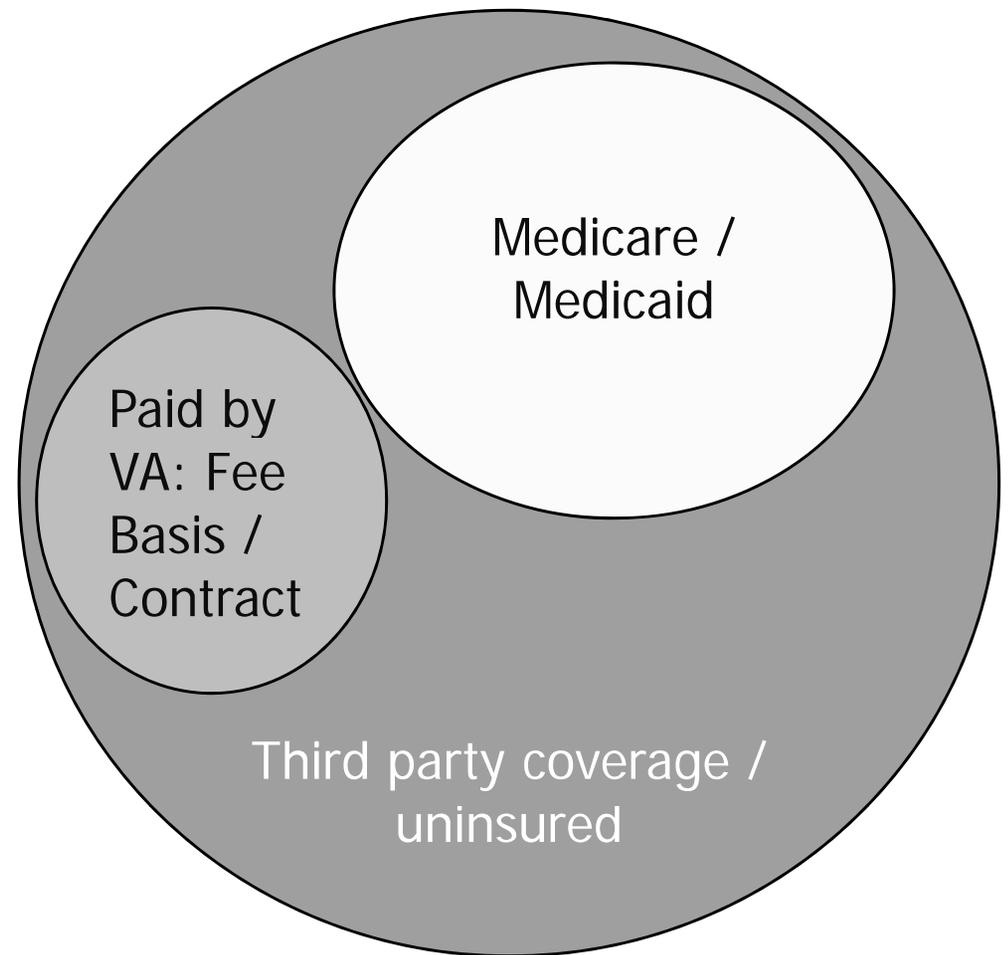
Non-VA Utilization

- 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

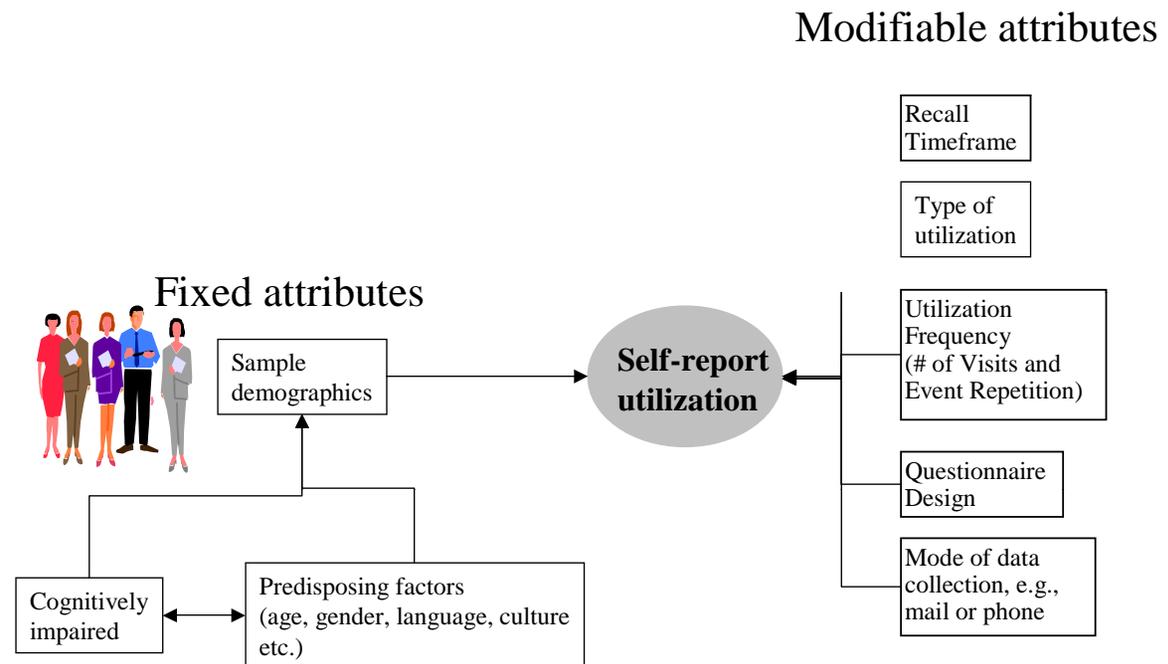
During the past 12 months, how many times have you seen a doctor?

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.

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.

Recommendations

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

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 v visits increase, people forget some

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)

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

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

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

Costs

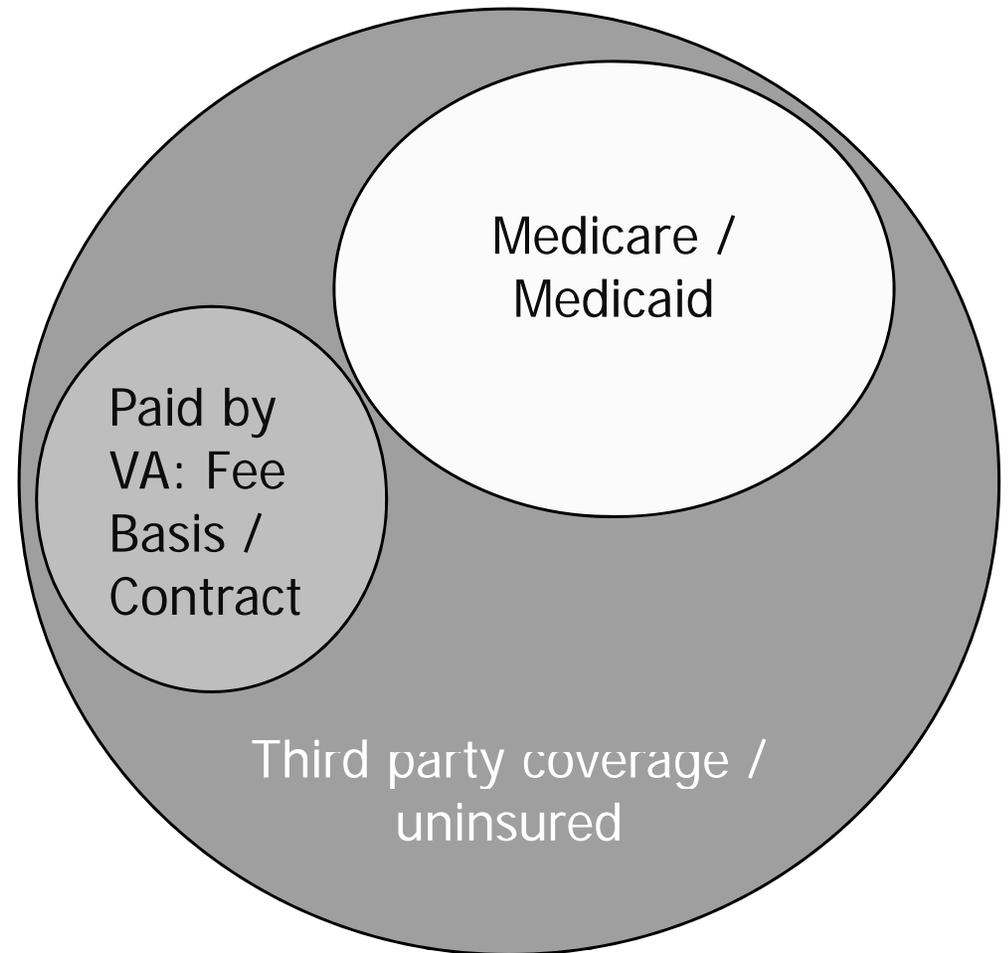
- Self-reported costs are unreliable
- Must impute costs from self-reports
- Limitations
 - can introduce biases
 - Not as precise as accounting data
- Consider seeking billing data (discussed next)

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

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
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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

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).*

Geography and Wages

Todd H Wagner, Ph.D.

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

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

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

→ 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

October 24, 2012

Medical Decision Making and Decision
Analysis

Jeremy Goldhaber-Fiebert, Ph.D.