May 8th, 1:30 PM - 3:00 PM

Using Medicare Part D Data for Research

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Using Medicare Part D Data for Research

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Funding and COI

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I declare no conflict of interest.
Overview of Presentation

Brief overview of Medicare Part D
Brief overview of Part D data
Examples Medicare Part D studies
Overview of Medicare Part D Drug Benefit

Part D implemented in 2006

Voluntary enrollment unless in Medicaid

– Choose from dozens (~40) of private Rx coverage plans and Medicare Advantage organizations

– premiums are heavily subsidized, late penalty for late enrollment

Auto-enrolled into Part D if in Medicaid

Employers can offer Retiree drug subsidy benefits as generous as Part D, known as “creditable coverage”
This is what the “Standard” Part D drug benefit looks like in 2009

Most plans do not offer the “standard” benefit, and coverage varies across most dimensions, including:

- Monthly premiums
- Deductibles
- The “doughnut hole”
- Covered drugs and utilization management restrictions
- Cost sharing for covered drugs
Part D data is available for research from Chronic Conditions Data Warehouse (CCW)

Contains 100% Part D data and is official data source.

CCW offers chronic disease indicators (21 conditions).

Researchers may request random 10% or 20% sample.

Part D data are linkable to other Medicare data
Part D Data available only on Part D enrollees

All Medicare Beneficiaries = 45.2 Million, 2009

- No Drug Coverage
- Other Drug Coverage\(^1\)
- Retiree Drug Coverage\(^2\)
- Stand-Alone Prescription Drug Plan
- Medicare Advantage Drug Plan

<table>
<thead>
<tr>
<th>Coverage Type</th>
<th>Enrollees</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Drug Coverage</td>
<td>4.5 million</td>
<td>10%</td>
</tr>
<tr>
<td>Other Drug Coverage(^1)</td>
<td>6.2 million</td>
<td>14%</td>
</tr>
<tr>
<td>Retiree Drug Coverage(^2)</td>
<td>7.9 million</td>
<td>18%</td>
</tr>
<tr>
<td>Stand-Alone Prescription Drug Plan</td>
<td>17.5 million</td>
<td>39%</td>
</tr>
<tr>
<td>Medicare Advantage Drug Plan</td>
<td>9.2 million</td>
<td>20%</td>
</tr>
<tr>
<td>Total in Part D Plans:</td>
<td>26.7 Million</td>
<td>59%</td>
</tr>
</tbody>
</table>

\(^1\)Includes Veterans Affairs, retiree coverage without RDS, Indian Health Service, state pharmacy assistance programs, employer plans for active workers, Medigap, multiple sources, and other sources.  
\(^2\)Includes Retiree Drug Subsidy (RDS) coverage and FEHBP and TRICARE retiree coverage.

SOURCE: Centers for Medicare & Medicaid Services, 2009 Enrollment Information (as of February 1, 2009).
These are the types of Part D data files

- Part D Event Data
- Part D Drug Characteristics (Appended to the PDE)
- Part D Plan Characteristics Files, 2006
- Part D Plan Characteristics Files, 2007
- Part D Plan Characteristics Files, 2008
- Part D Plan Characteristics Files, 2009
- Part D Plan Characteristics Files, 2010
- Part D Plan Characteristics Files, 2011
- Part D Pharmacy Characteristics Files, 2006 - 2008
- Part D Pharmacy Characteristics Files, 2009 - 2011
- Part D Prescriber Characteristics Files, 2006 - 2011
- Part D Formulary File, 2010
- Part D Formulary Files, 2011

Detailed information about drug: (NDC), brand/generic name, costs.

Data are de-identified.

Researchers request from Centers for Medicare and Medicaid Services and provide variable-level justification.
ResDAC provides technical assistance on using Part D data

Introduction to the Use of Medicare Part D Data for Research

This workshop will familiarize the audience with the Medicare Part D program, the use of the Medicare Beneficiary Part D enrollment data, Part D Event data, and associated Part D Characteristic files for research. There is no charge for the workshop.

Educational Objectives:

- Understand the Medicare Part D Program and its benefits
- Understand what demographic, useful enrollment and linking information is available in the Master Beneficiary Summary file
- Understand the content of the Part D Event and Characteristics Files
- Understand issues involved with the use of Part D data for research
- Begin to appreciate the types of research that can be done using the Medicare Part D data
- Understand the requirements of the Centers for Medicare and Medicaid Services for obtaining and using Part D data

If you have questions about registering for our workshops, please contact Jennifer Schulz at (612) 626-4247 or schu2341@umn.edu.

Preferred Qualifications and Tech Requirements:
Attendees with prior experience working with Medicare data or have received Medicare data are preferred. Laptop computers with SAS will be provided for you. A working knowledge of SAS will be helpful.

Faculty: Barbara Frank
Kyoungae Jung
A. Marshall McBain

Workshop Date: Wednesday, May 15, 2013 - 8:30am to Thursday, May 16, 2013 - 4:00pm
Location:
Part D data are not just administrative claims data

Constructed variables “may not exactly represent the beneficiary experience at the time of the prescription fill.”

Part D data contains only final status records
Will not include drugs excluded from Part coverage or filled through 3rd party, or not filed as claim (e.g., 100% cash).
2-year lag in availability

Example: OPTIMIZING CHRONIC DISEASE PREVENTION AND MANAGEMENT IN ADVANCED DEMENTIA R21HS019579-01: PI Tjia

Data cost: $20,000

Request turnaround: 9 month lag
Final result: Part D data linked to Part A, MDS, and OSCAR on 200,000 Medicare enrollees with end-stage dementia in NHs.
Example of Use: Geographic Variation in Outpatient Antibiotic Prescribing Among Older Adults

A, Variation in adjusted antibiotic spending. B, Variation in adjusted counts of antibiotics, 2009

Example of Use: **Association Between the Initiation of Anti–Tumor Necrosis Factor Therapy and the Risk of Herpes Zoster**


<table>
<thead>
<tr>
<th>Table 4. Crude Herpes Zoster Incidence Rates and Adjusted Hazard of Herpes Zoster Among Patients With Rheumatoid Arthritis Stratified According to Tumor Necrosis Factor Antagonist Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Herpes zoster cases</strong></td>
</tr>
<tr>
<td>--------------------------</td>
</tr>
<tr>
<td>Person-years of exposure</td>
</tr>
<tr>
<td>Crude incidence rate (95% CI)&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Adjusted hazard ratio (95% CI)&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<sup>a</sup>Crude incidence rates per 1000 person-years of exposure.

<sup>b</sup>Adjusted for propensity score quintile adjustment and baseline glucocorticoid use.
Annual Prescription Drug Fills
absolute differences between observed and predicted means

Excellent to Good Health

- >=3 morbidities
- 1-2 morbidities
- 301+% FPL
- 201-300% FPL
- 151-200% FPL
- 101-150% FPL
- 0-100% FPL
- Medicaid
- Metropolitan
- Rural
- White/non-Hispanic
- Black/non-Hispanic
- Hispanic
- Non-elderly disabled
- Elderly

Change in Number of RX

2007
2006

Briesacher. 49(9):834-41, 2011 Sep.

Fair to Poor Health

- >=3 morbidities
- 1-2 morbidities
- 301+% FPL
- 201-300% FPL
- 151-200% FPL
- 101-150% FPL
- 0-100% FPL
- Medicaid
- Metropolitan
- Rural
- White/non-Hispanic
- Black/non-Hispanic
- Hispanic
- Non-elderly disabled
- Elderly

Change in Number of RX

2007
2006
Advantages of Part D include:

- Large and nationally representative data
- Linkable to other data