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Using Medicare Part D Data for Research

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Overview of Presentation

Brief overview of Medicare Part D

Brief overview of Part D data

Examples Medicare Part D studies

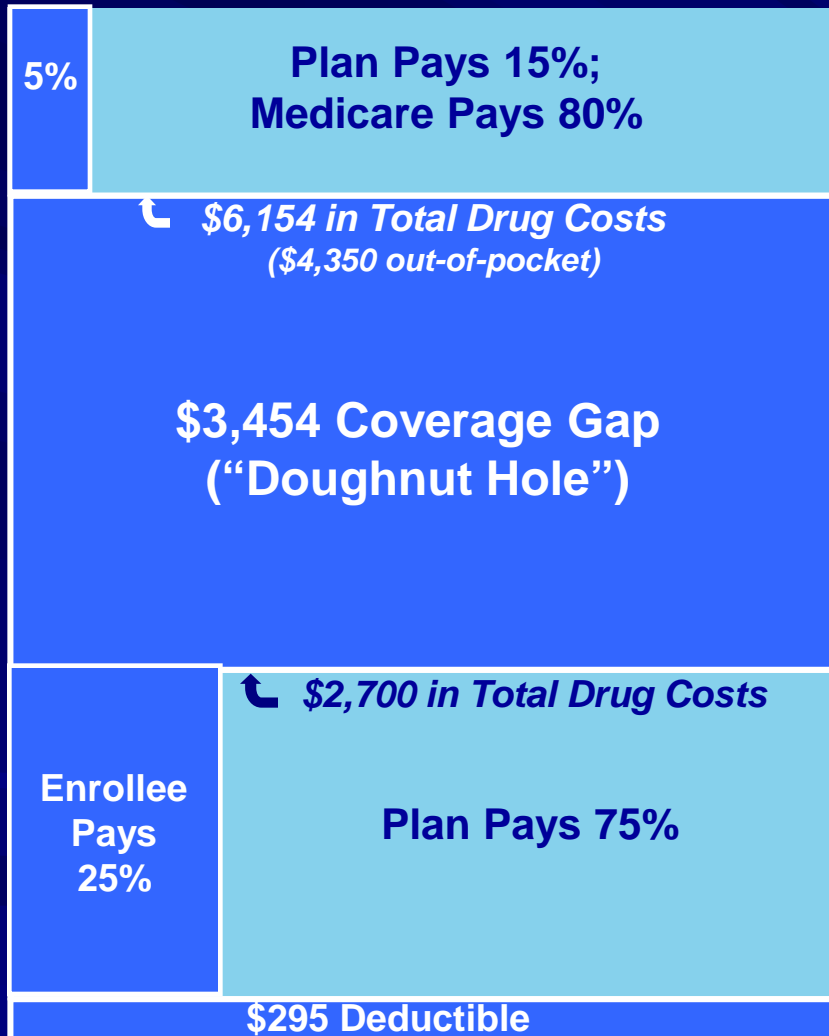# Overview of Medicare Part D Drug Benefit

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

5%   **Plan Pays 15%;** **Medicare Pays 80%**

↳ *$6,154 in Total Drug Costs*
($4,350 out-of-pocket)

$3,454 Coverage Gap
("Doughnut Hole")

↳ *$2,700 in Total Drug Costs*

Enrollee
Pays
25%

Plan Pays 75%

$295 Deductible

… **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)

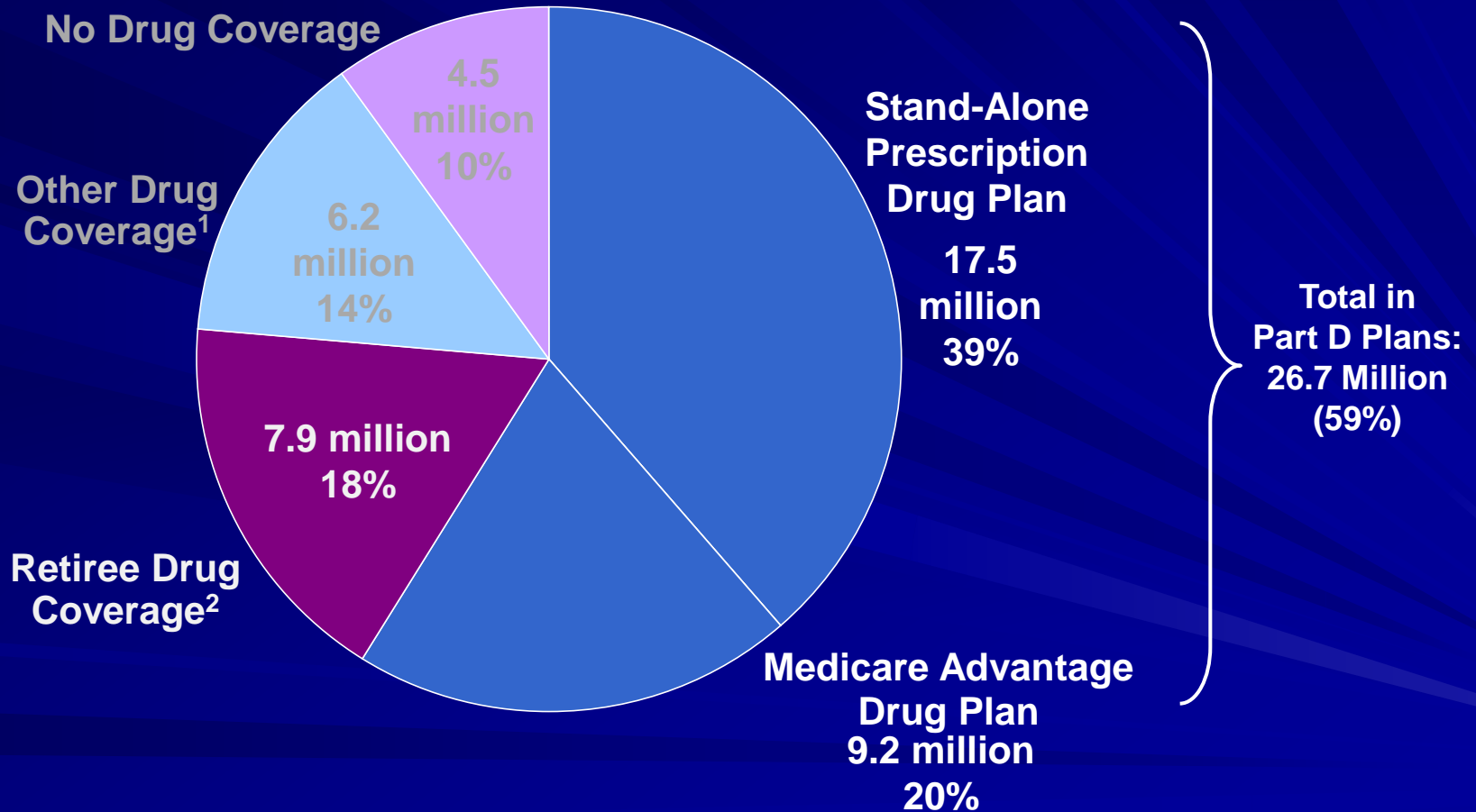Contains 100% Part D data and is official data source.

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]

4.5 million 10%

6.2 million 14%

Stand-Alone Prescription Drug Plan

17.5 million 39%

7.9 million 18%

Retiree Drug Coverage[2]

Medicare Advantage Drug Plan
9.2 million 20%

Total in Part D Plans: 26.7 Million (59%)

[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).

kaiserEDU.org

These are the types of Part D data files

Medicare Part D

- 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

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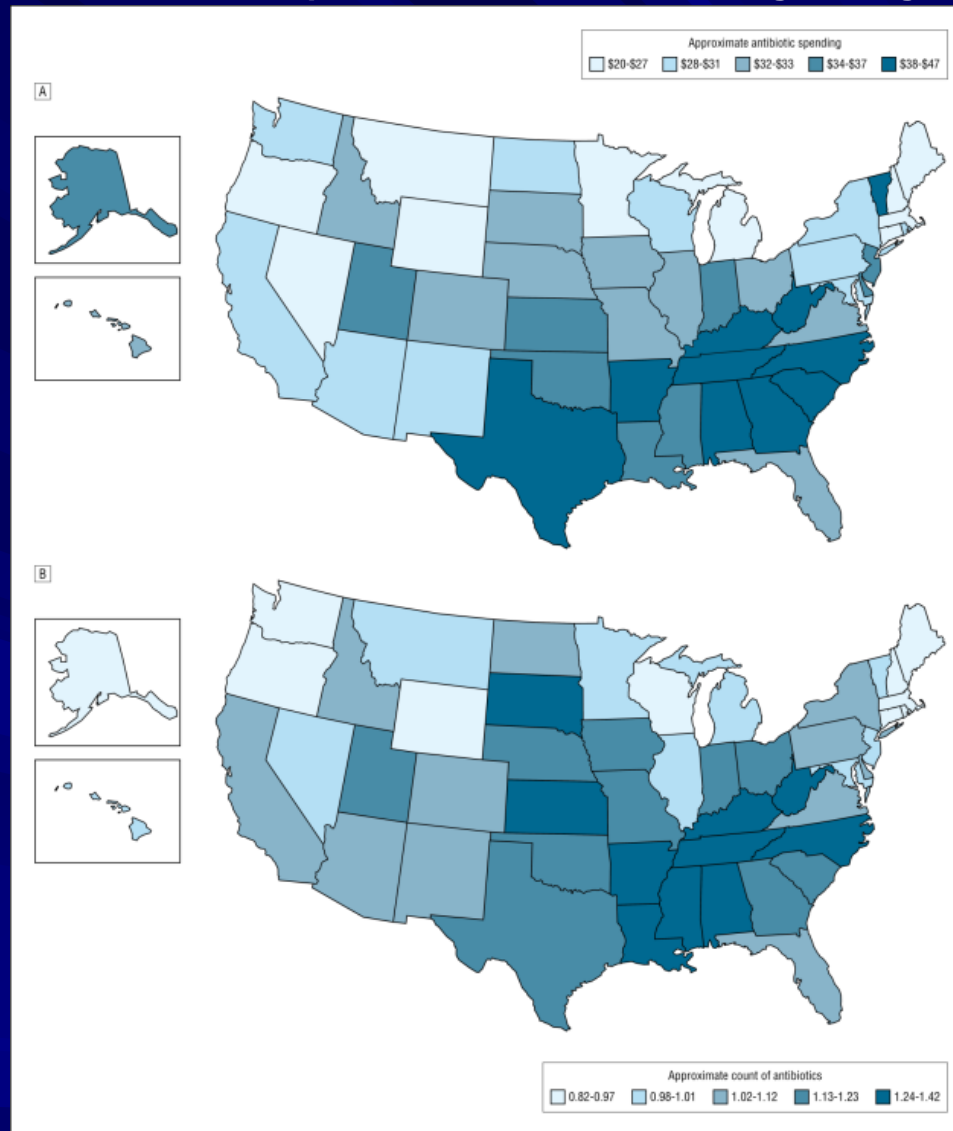
A, Variation in adjusted antibiotic spending. B, Variation in adjusted counts of antibiotics, 2009

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

Table 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

|	Infliximab (n = 8087)	Etanercept (n = 10 138)	Adalimumab (n = 6711)
Herpes zoster cases	124	105	42
Person-years of exposure	9086	8513	4218
Crude incidence rate (95% CI)[a]	13.6 (11.4-16.3)	12.3 (10.2-14.9)	10.0 (7.4-13.5)
Adjusted hazard ratio (95% CI)[b]	1 [Reference]	1.09 (0.82-1.45)	0.82 (0.55-1.22)

[a] Crude incidence rates per 1000 person-years of exposure.
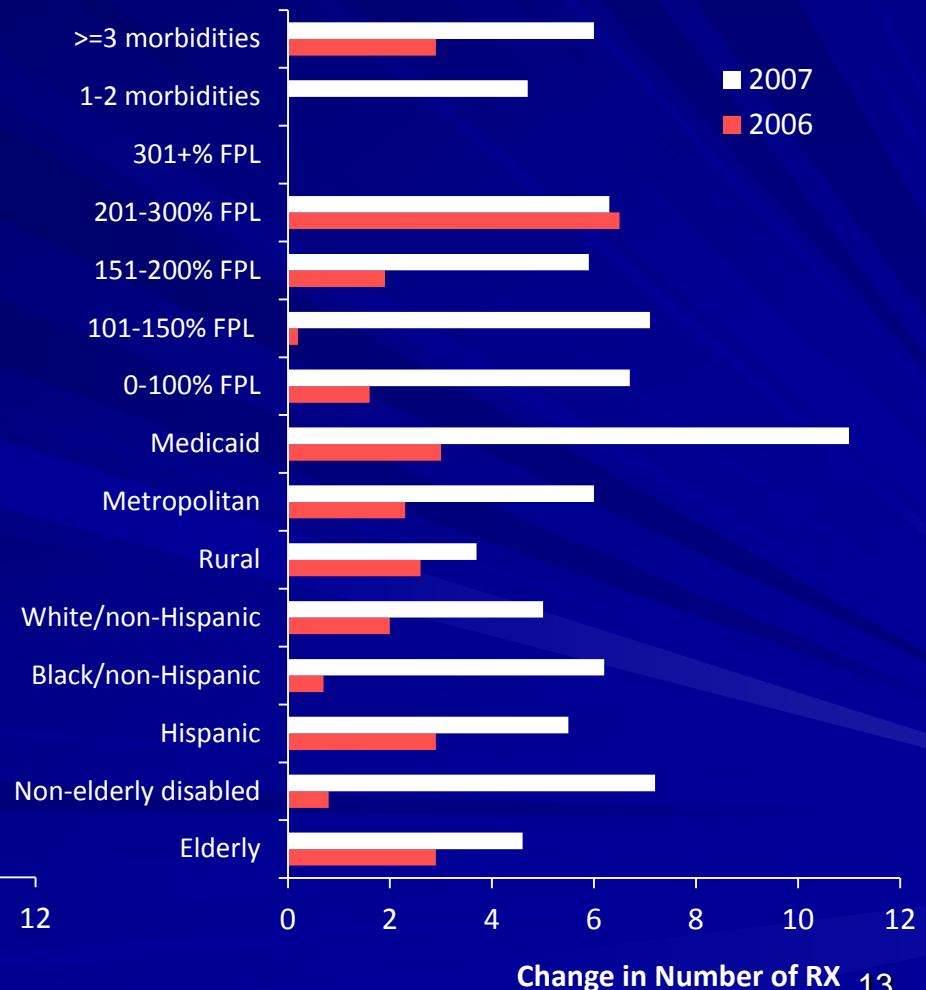[b] Adjusted for propensity score quintile adjustment and baseline glucocorticoid use.

Annual Prescription Drug Fills
absolute differences between observed and predicted means

Excellent to Good Health

Fair to Poor Health

Change in Number of RX

Change in Number of RX

13
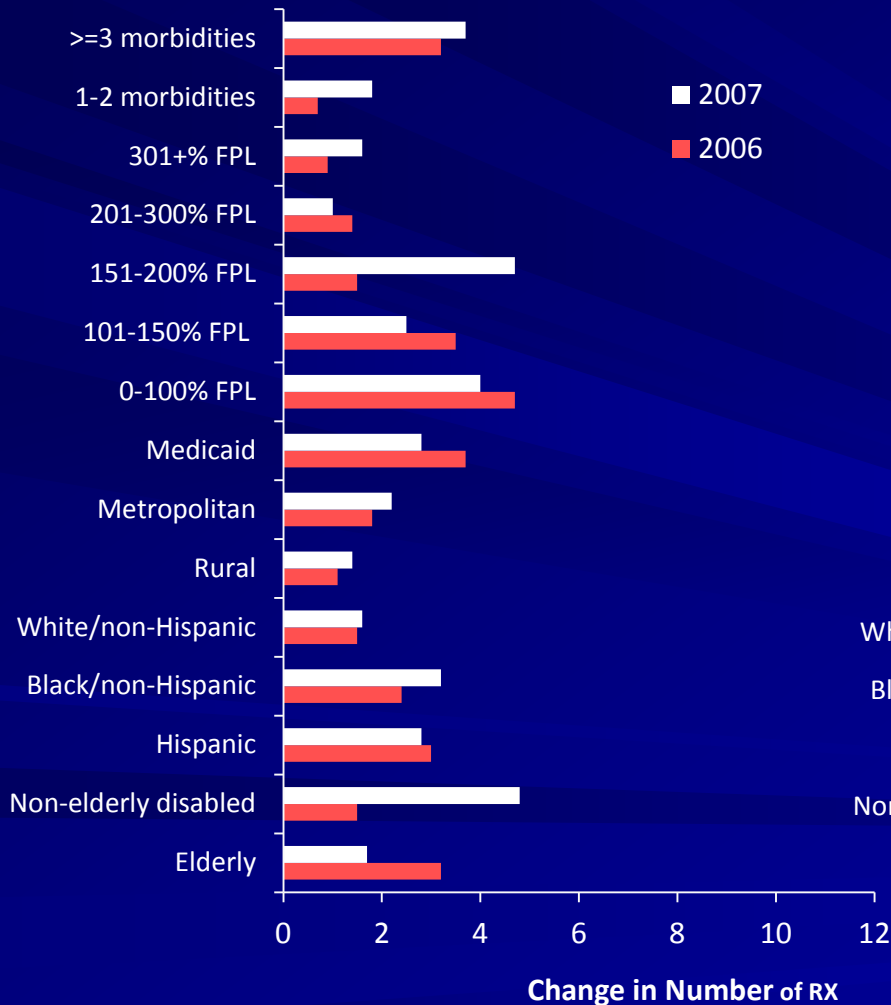
Advantages of Part D include:

-Large and nationally representative data

-Linkable to other data