University of Massachusetts Medical School

eScholarship@UMMS

UMass Center for Clinical and Translational Science Research Retreat

2013 UMass Center for Clinical and Translational Science Research Retreat

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

Using Medicare Part D Data for Research

Becky A. Briesacher University of Massachusetts Medical School

Let us know how access to this document benefits you.

Follow this and additional works at: https://escholarship.umassmed.edu/cts_retreat

Part of the Health and Medical Administration Commons, Health Services Administration Commons, and the Translational Medical Research Commons

Briesacher BA. (2013). Using Medicare Part D Data for Research. UMass Center for Clinical and Translational Science Research Retreat. Retrieved from https://escholarship.umassmed.edu/cts_retreat/ 2013/presentations/3

Creative Commons License

This work is licensed under a Creative Commons Attribution-Noncommercial-Share Alike 3.0 License. This material is brought to you by eScholarship@UMMS. It has been accepted for inclusion in UMass Center for Clinical and Translational Science Research Retreat by an authorized administrator of eScholarship@UMMS. For more information, please contact Lisa.Palmer@umassmed.edu.

Using Medicare Part D Data for Research

Becky Briesacher, PhD Associate Professor, Medicine Division of Geriatric Medicine

Funding and COI

Supported by grants R01AG028745 and R01AG022362 from the National Institute on Aging (NIA), and the Harvard Pilgrim Health Care Foundation. Dr Briesacher is also supported by a Research Scientist Development Award from the NIA (K01AG031836.

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)

arehouse » Home onditions Data	Waxahauaa		the Chronic Conditio	n Data Warehouse
	Warehouse		the Chronic Conditio	n Data Warehouse
	Marchausa	The CMS Chronic Co		
ional cino medicare and med		Medicare and Medica beneficiary across th files were required to	ondition Data Warehouse (CCW aid beneficiary, claims, and assu le continuum of care. In the past o perform extensive analysis rela-	essment data linked by t, researchers analyzing data ated to beneficiary matching,
care Data 👻 🛛 Medicaid Data 🥆	Data Dictionaries	the CCW data, this p	the CCW data, this preliminary linkage work is already accomplished and delivered	
icare Tables & Reports				research database designed to
icare Charts		make Medicare, Medicaid, Assessments, and Part D Prescription Drug Event data		
active CMS Data Chronic Conditions Dashboard	on and State, 2011	· · ·		to improve the quality of care
Landr.	© Leornd	Quick Links		
	G SPer Capita	About CCW		
	0.86 -0.15 0.95 - 1.05 1.05 - 1.14			
of the new Chronic Condition Da	ata Warehouse	•		
		Provide Feed	back	
	0.86 -0.95 0.96 - 1.05 1.06 - 1.14			
	care Tables & Reports care Charts active CMS Data Chronic Conditions Dashboard uses of the new Chronic Condition Da CCW website now provides inter propris and various statistical res ume of Medicare and Medicaid p	care Tables & Reports care Charts active Charts active CMS Data bronic Conditions Dashboard tests tests of the new Chronic Condition Data Warehouse CCW website now provides interactive reports and various statistical resources with valuable ume of Medicare and Medicald populations ranging from ironic conditions to Part D drug data.	are Data Medicaid Data Data Dictionaries tare Tables & Reports care Charts active CMS Data two two two two two two two two	Care Tables & Reports care Chards active CMS Data chronic Conditions Databoard water of Market Medicate (Nedicaid Assessments, and Part D more readily available to support research designed and reduce costs and utilization. Quick Links Cost of the new Chronic Condition Data Warehouse (CCW website now provides Interactive reports and various statistical resources with valuable ume of Medicare and Medicaid populations ranging from tronic conditions to Part D drug data.

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

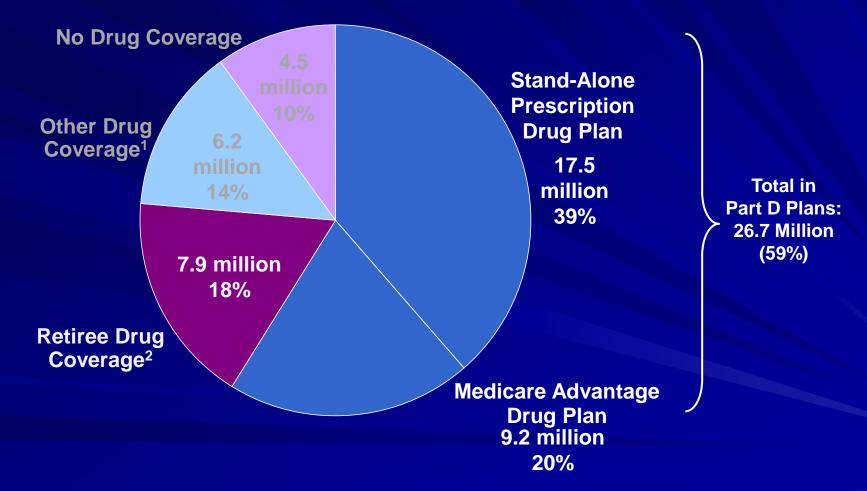
CCW offers chronic disease indicators (21 conditions).

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



¹Includes Veterans Affairs, retiree coverage without RDS, Indian Health Service, state pharmacy assistance programs, employer plans for active workers, Medigap, multiple sources, and other sources. ²Includes 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

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

RESEARCH DATA ASSISTANCE	CENTER	Careers	: News Contact
ABOUT RESDAC CMS	DATA TRAINING RESCONNE	ест	٩
WORKSHOPS Intro to Medicare Workshop Videos Intro to Medicaid Workshop Videos Intro to Medicare Part D Intro to Economic Research MEDICARE PART D WORKSHOP MAILING LIST	Introduction to the Use of Med Overview Repeats This workshop will familiarize the audience Beneficiary Part D enrollment data, Part D I research. There is no charge for the works Educational Objectives: • Understand the Medicare Part D Program • Understand what demographic, useful en Beneficiary Summary file • Understand the content of the Part D Ex • Understand issues involved with the use • Begin to appreciate the types of researce • Understand the requirements of the Century Part D data	with the Medicare Part D program, the us Event data, and associated Part D Chara shop. n and its benefits nrollment and linking information is availab vent and Characteristics Files e of Part D data for research ch that can be done using the Medicare F	se of the Medicare cteristic files for ble in the Master Part D data
Sign Up	If you have questions about registering for 626-4247 or schu2341@umn.edu. Preferred Qualifications and Tech Requi Attendees with prior experience working wi preferred. Laptop computers with SAS will helpful. Faculty: Barbara Frank Kyoungrae Jung A. Marshall McBean Workshop Date: Wednesday, May 15, 201 Location:	irements: ith Medicare data or have received Medic be provided for you. A working knowledge	are data are e of SAS will be

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

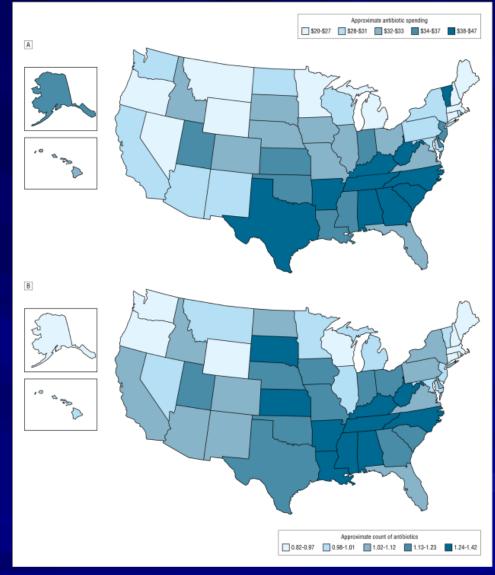
Example: OPTIMIZING CHRONIC DISEASE PREVENTION AND MANAGEMENT IN ADVANCED DEMENTIA R21HS019579-01: PI Tjia

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

Arch Intern Med. 2012;172(19):1465-1471. Example of Use: Association Between the Initiation of Anti–Tumor Necrosis Factor Therapy and the Risk of Herpes Zoster

JAMA. 2013;309(9):887-895.

Table 4. Crude Herpes Zoster Incidence Rates and Adjusted Hazard of Herpes Zoster AmongPatients With Rheumatoid Arthritis Stratified According to Tumor Necrosis Factor AntagonistExposure

	Infliximab (n = 8087)	Etanercept (n = 10138)	Adalimumab (n = 6711)
Herpes zoster cases	124	105	42
Person-years of exposure	9086	8513	4218
Crude incidence rate (95% Cl) ^a	13.6 (11.4-16.3)	12.3 (10.2-14.9)	10.0 (7.4-13.5)
Adjusted hazard ratio (95% Cl) ^b	1 [Reference]	1.09 (0.82-1.45)	0.82 (0.55-1.22)
_			

^aCrude incidence rates per 1000 person-years of exposure.

^bAdjusted for propensity score quintile adjustment and baseline glucocorticoid use.

Annual Prescription Drug Fills absolute differences between observed and predicted means

>=3 morbidities >=3 morbidities 2007 2007 1-2 morbidities 1-2 morbidities 2006 2006 301+% FPL 301+% FPL 201-300% FPL 201-300% FPL 151-200% FPL 151-200% FPL 101-150% FPL 101-150% FPL 0-100% FPL 0-100% FPL Medicaid Medicaid Metropolitan Metropolitan Rural Rural White/non-Hispanic White/non-Hispanic Black/non-Hispanic Black/non-Hispanic Hispanic Hispanic Non-elderly disabled Non-elderly disabled Elderly Elderly 2 8 10 12 8 10 0 6 4 2 6 0 Δ

Excellent to Good Health

Change in Number of RX

Fair to Poor Health

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

12

Change in Number of RX 13

Advantages of Part D include: -Large and nationally representative data -Linkable to other data