2010 Part D Symposium

Part D benefit design and cost-related non-adherence to Rx in the Medicare CAHPS sample

Presented by:

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Acknowledgement

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Presentation Outline

- Research Question/Background/Study Design
- Medicare Consumer Assessment of Healthcare Providers & Systems Survey (CAHPS)
- Analytic Data
- Findings/Conclusions

Research Question

Are Part D plan types and benefit designs associated with Part D enrollees' reporting of CRN?

Background

- Cost-related non-adherence to Rx (CRN) is a healthcare problem that could lead to adverse health outcomes
- Financial pressures (i.e., drug coverage, cost-sharing and income), polypharmacy (e.g, number of medications), socio-demographic indicators, health status and perceived medication benefits have been mapped to a theoretical model that predicts CRN[a]
- Previous studies on CRN were limited by lacking the control of a more comprehensive list of risk factors

[a]Piette JD et al. Soc Sci Med. 2006:62:846-57

Study Design

- Cross-sectional observational study
- Data Source: Medicare CAHPS mailed survey conducted in Spring 2007
  - Designed to capture 2006 Medicare experience
- First large scale assessment (335,249 respondents) of cost-related medication non-adherence since Part D enactment

CAHPS Survey

- Developed in 1995, by teams at Harvard Medical School, the Rand Corporation and the Research Triangle Institute, to evaluate commercial health plans
- Medicare CAHPS:
  - In 1997-2005, Medicare Advantage (MA)
  - In 2000-2004, Medicare Fee-for-Service (FFS)
  - Starting 2006, MA-PD, MA only, FFS-PDP, FFS only
- Multistage complex sampling design

Analytic Dataset

- Inclusions:
  - Community dwelling adult Medicare enrollees
  - Enrolled in Part D drug plans (non-LIS & partial LIS)
  - N = 114,678 in sample for analysis
- Exclusions: deemed low-income subsidy (LIS) recipients; enrollees who had other creditable drug coverage (i.e., TRICARE, VA, federal employee health benefits, state pharmacy assistance program, or private employer health benefits)

Dependent Variable – Cost-Related Non-adherence to Rx

- Survey respondents' answer to this question:

  In the last 6 months, did you ever delay or not fill a prescription because you felt that you could not afford it?

  1. Yes
  2. No
  3. My doctor did not prescribe any medications for me in the last 6 months

- Those who responded a "3" were excluded.

Predicting Variables – Plan Types

- Medicare PDP
- MA-PD HMO (Health Maintenance Organizations)
- MA-PD PFFS (Private Fee-For-Service Plans)
- MA-PD PPO (Preferred Provider Organizations)

Predicting Variables – Plan Benefit Designs

- Drug deductibles
- Tiered copayments
- Prior authorization or step therapy for 8 or more of the top 100 drugs
- Gap coverage
- Mail-order services

Covariates - Sociodemographics

Gender, age, race, education, rural/urban, LIS status, and geocoded neighborhood SES score derived from Census data

Covariates - Health Status Indicators

- Activities of daily living (ADL):
  Having difficulty bathing, dressing, eating, getting in/out of chairs, walking or using the toilet
- Disability or ESRD
- Self-reported general health and mental health, CMS hierarchical condition category risk scores (HCC), and smoking status

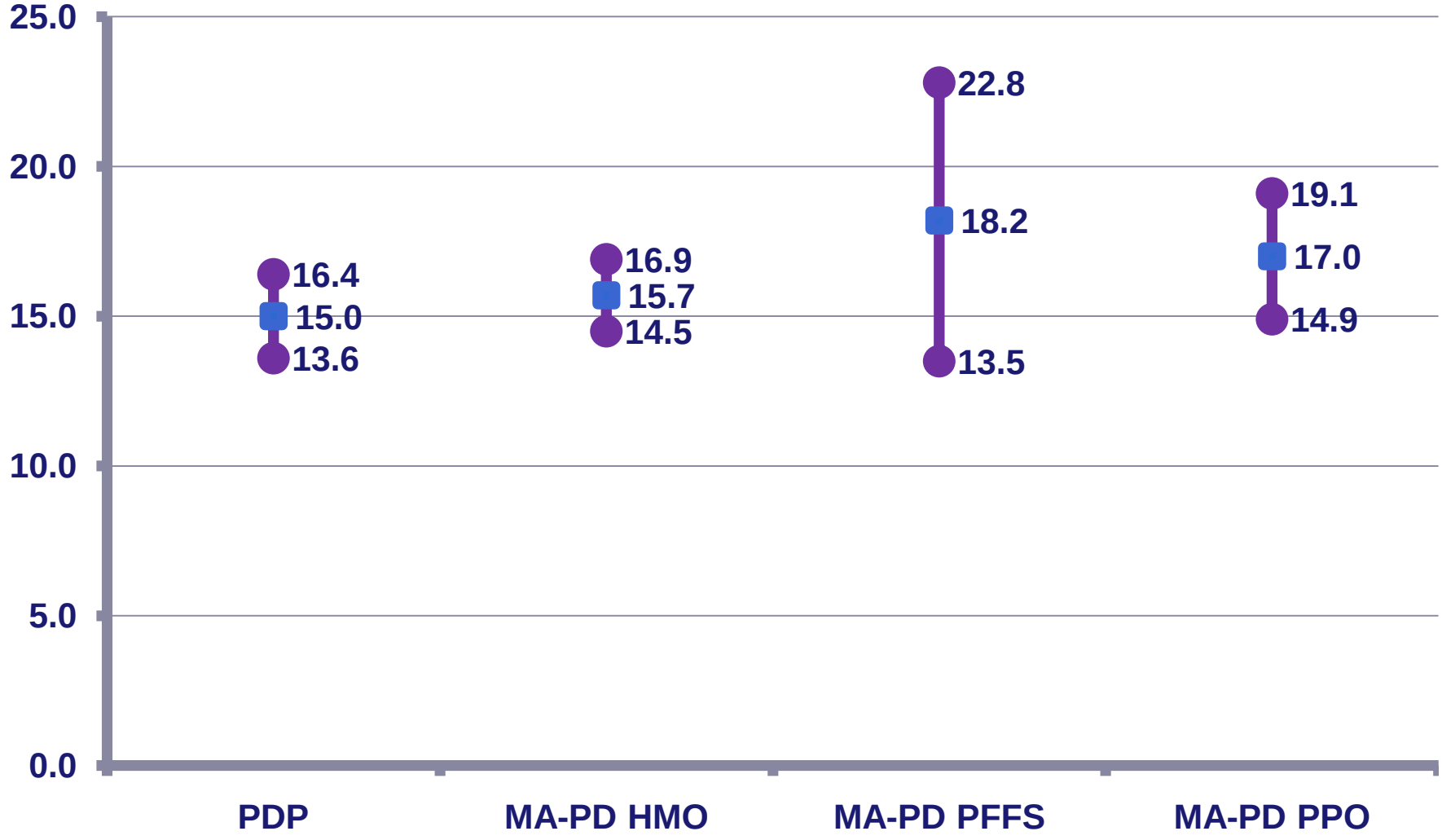
Covariates - Health Care Use

- Have a personal MD
- # visits for routine care in past 6 months
- # different Rx filled/refilled in past 6 months
- Phases in Part D (pre-coverage gap, coverage gap, or catastrophic phase)
- Had flu shot last year

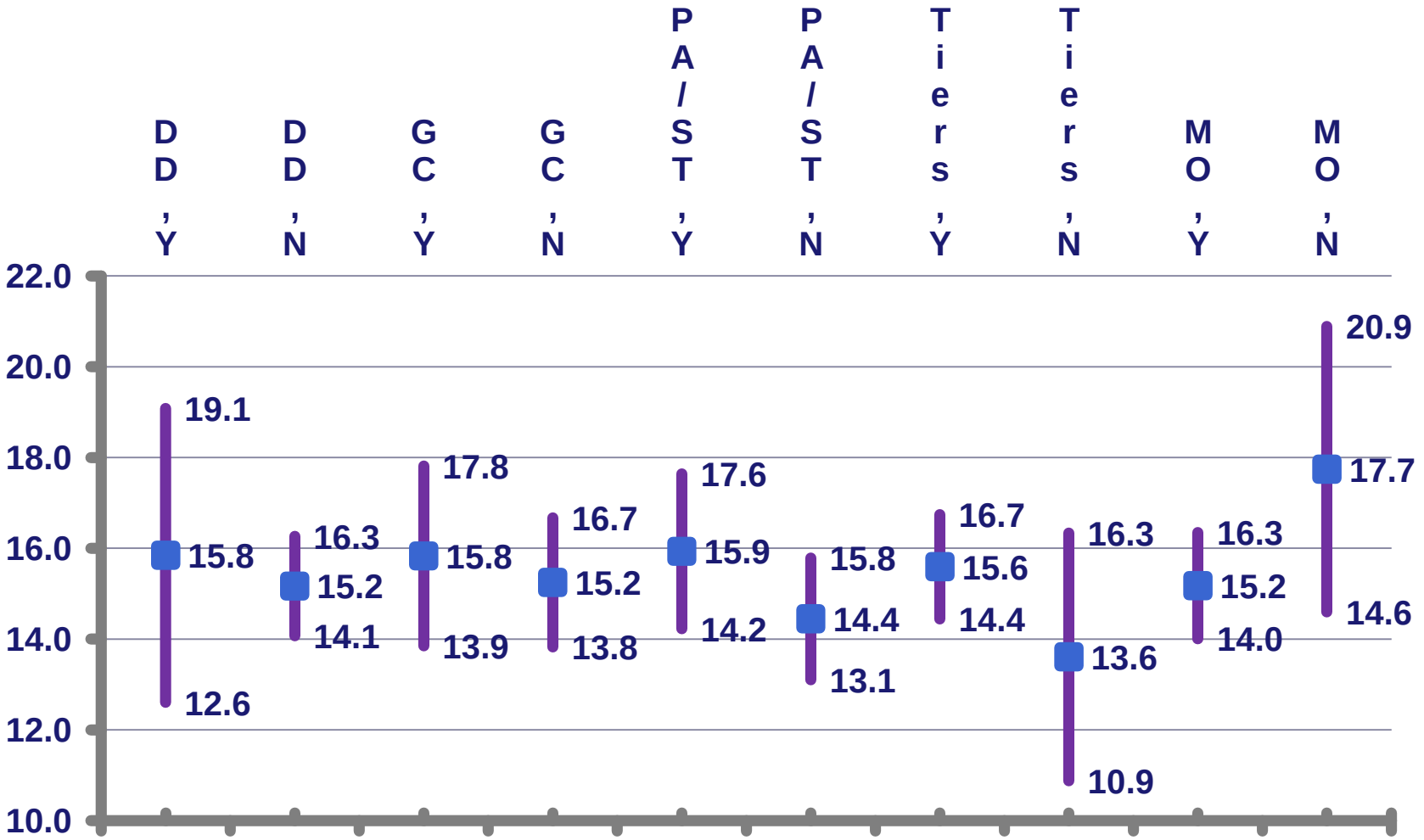
Results

- About 26% of the study sample (weighted N=9,395,290) were enrolled in an MA-PD
- Overall, 24% of the sample enrolled in a plan with drug deductibles, 14% had gap coverage, 59% were in plans requiring prior authorization or step therapy for 8 or more of the top 100 drugs, 87% had tiered copayments, and 94% offered mail-order services
- 15% of the sample reported CRN

Weighted % CRN by Plan Type



Weighted % CRN by Benefit Design



Adjusted logistic regression predicting CRN

	Odds Ratio (95% CI)
Part D Types (vs. stand-alone PDP)	
MA-PD PFFS	1.17 (1.10, 1.24)
MA-PD PPO	1.15 (1.04, 1.28)
MA-PD HMO	1.14 (1.05, 1.24)
Plan Benefit Design (Yes vs. No)	
Mail-order services	1.27 (1.07, 1.51)
Formulary tiers	1.17 (1.01, 1.37)
No gap coverage	1.11 (1.01, 1.23)
Drug deductibles	1.10 (1.00, 1.22)
Prior authorization/step therapy	1.07 (1.00, 1.13)

Limitations

- Cross-sectional study, no causal inferences can be made
- Self-report subject to potential:
  - Recall bias
  - Social desirability bias

Strengths

- Contemporaneous large national sample
- Multivariate model controlling for comprehensive risk factors

Conclusions - 1

- After controlling for potential confounders, people who were enrolled in an MA-PD were 14 to 17 percent more likely to report CRN compared with PDP enrollment
- Drug plans with mail-order services, tiered copayments, no gap coverage or requiring PA/ST were positively correlated with more reported CRN

Conclusions - 2

- People who entered the coverage gap were 34 percent more likely to experience CRN compared with those who did not enter the gap
- “Extra Help” in the form of Part D low-income subsidy (LIS) provided a safety net -- the partial LIS enrollees were 19 percent less likely to report CRN compared with the non-LIS enrollees

Policy Implications

- There are vital needs to further identify barriers of access to Rx in the various types of plans and the benefit designs
- Continued follow-up of the trends of CRN overtime are necessary

Comments/Questions?

For additional questions:

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