Medicare Prescription Drug Benefit Symposium

Drug Use

CMS
CENTERS for MEDICARE & MEDICAID SERVICES

DEPARTMENT OF HEALTH & HUMAN SERVICES · USA

Discussion Topics

- Top 100 Drugs.
- Utilization and Non-utilization Rates.
- Variations in Generic Dispensing Rates.
- Question and Answer Panel.

Overview

- Extensive utilization in the first year of the Part D program although most beneficiaries did not have a full year's enrollment.
- Key differences in utilization between LIS and Non-LIS beneficiaries and between MA-PD and PDP enrollees.
- Small percentage of enrolled Part D beneficiaries did not have any Part D drug utilization.
- Use of generic drugs was high in the Part D program.

Top 100 Drugs

Methodology

Data Sources:

- 2006 Standard Analytical File (SAF) of PDE data.
- Medicare Beneficiary Database (MBD).
- Database of drug information derived from Medi-Span and First DataBank.

Methodology (continued)

1. Construct Beneficiary-Drug Level Analytical File.
   A. Sum Total Fills* and Total Gross Drug Cost by NDC at the beneficiary level.
   B. Assign beneficiary demographics.
2. Aggregate by NDC.
3. Assign and group by Brand Name.
4. Sum Total Fills and Total Gross Drug Cost.
5. Assign Additional Drug Information (Generic Name, Brand/ Generic Flag and Generic Therapeutic Class).
6. Sort by Total Fills or Total Gross Drug Cost.

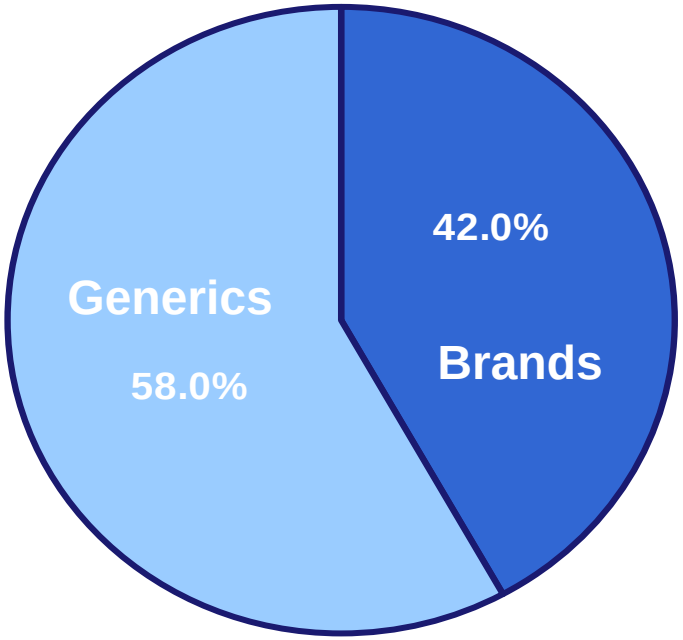
*One Fill = One PDE Record (not adjusted for 30-day prescription equivalents).

2006 Top 100 Drugs Analyses

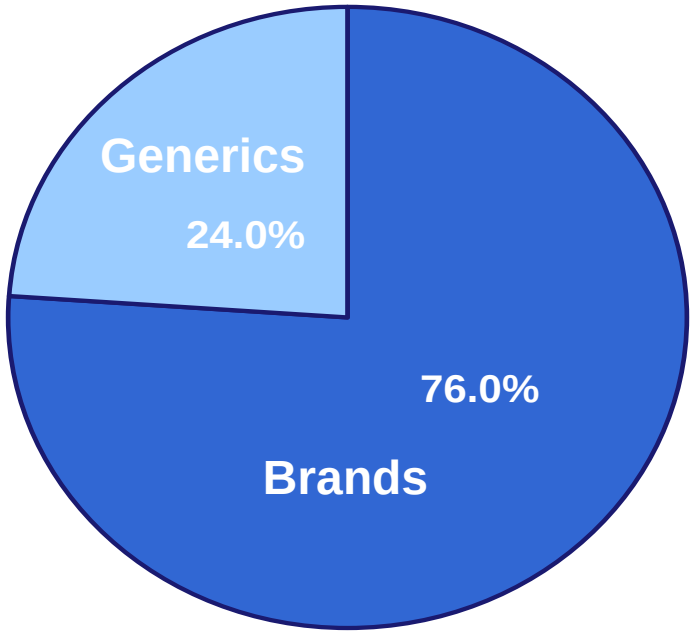
- Top 100 Drugs Ranked by Total Fills and by Total Gross Drug Cost.
  - Breakouts by LIS, Non-LIS, MA-PD, and PDP.
- Share of Total Drug Utilization.
- Therapeutic Classes Represented.
- Comparisons to Other Top Drug Lists.

Brand-Generic Composition of Top 100 Drugs

Top 100 Drugs by Fills

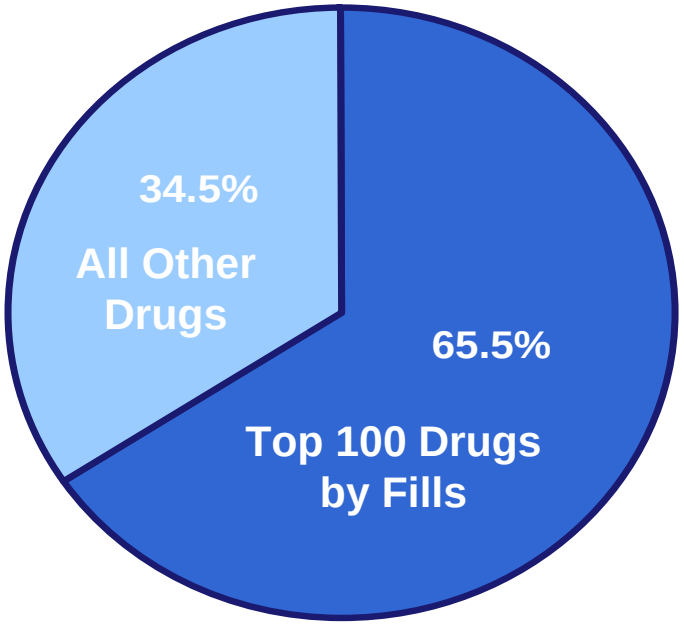


Top 100 Drugs by Cost

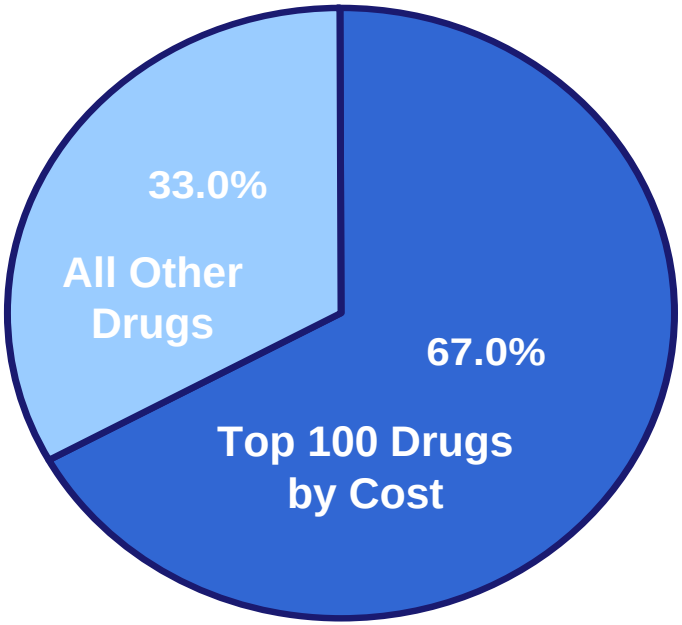


Share of Total Drug Utilization

Top 100 Drugs by Fills: Share of 2006 Total Fills

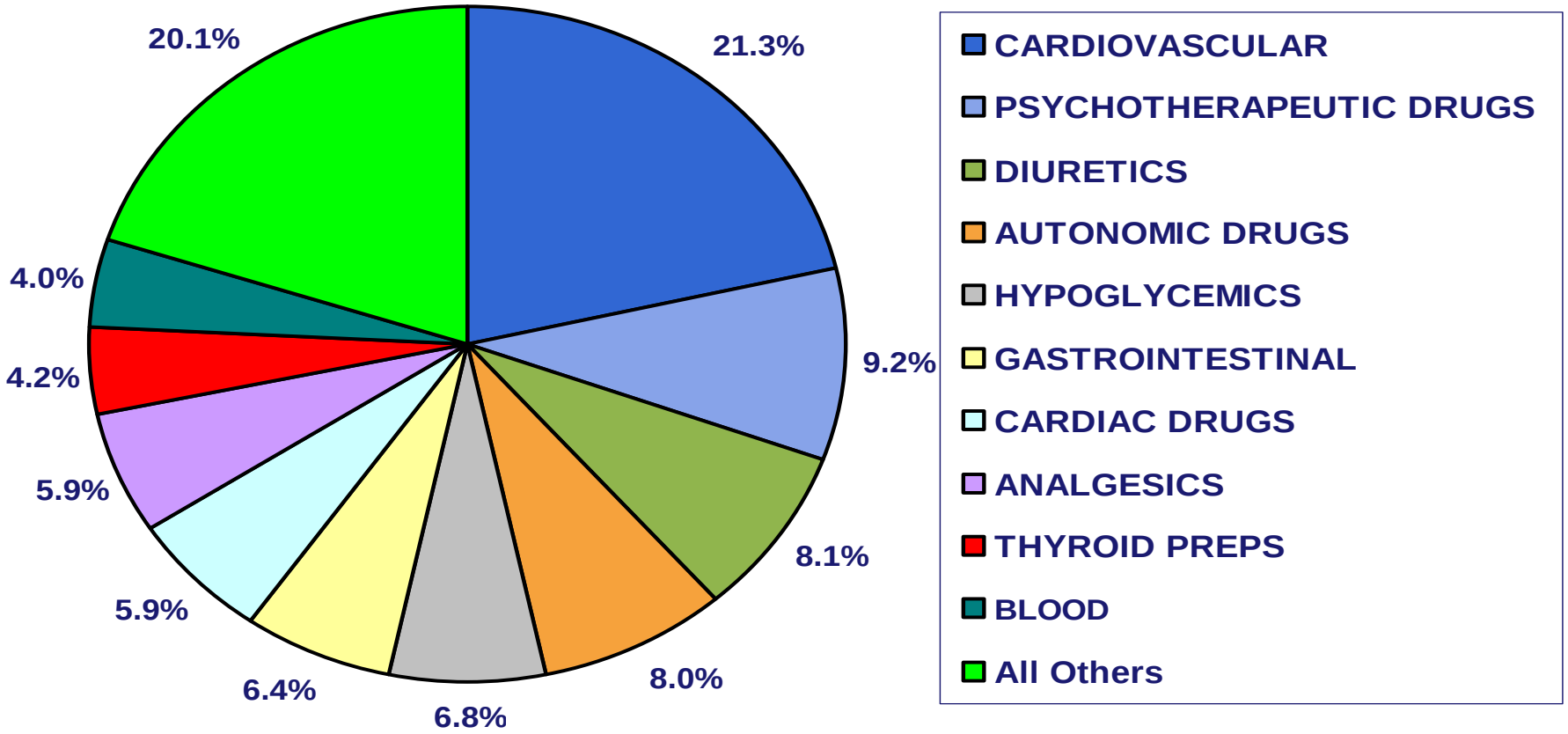


Top 100 Drugs by Cost: Share of 2006 Total Gross Drug Cost



Therapeutic Classes of Top 100 Drugs by Fills

All Beneficiaries



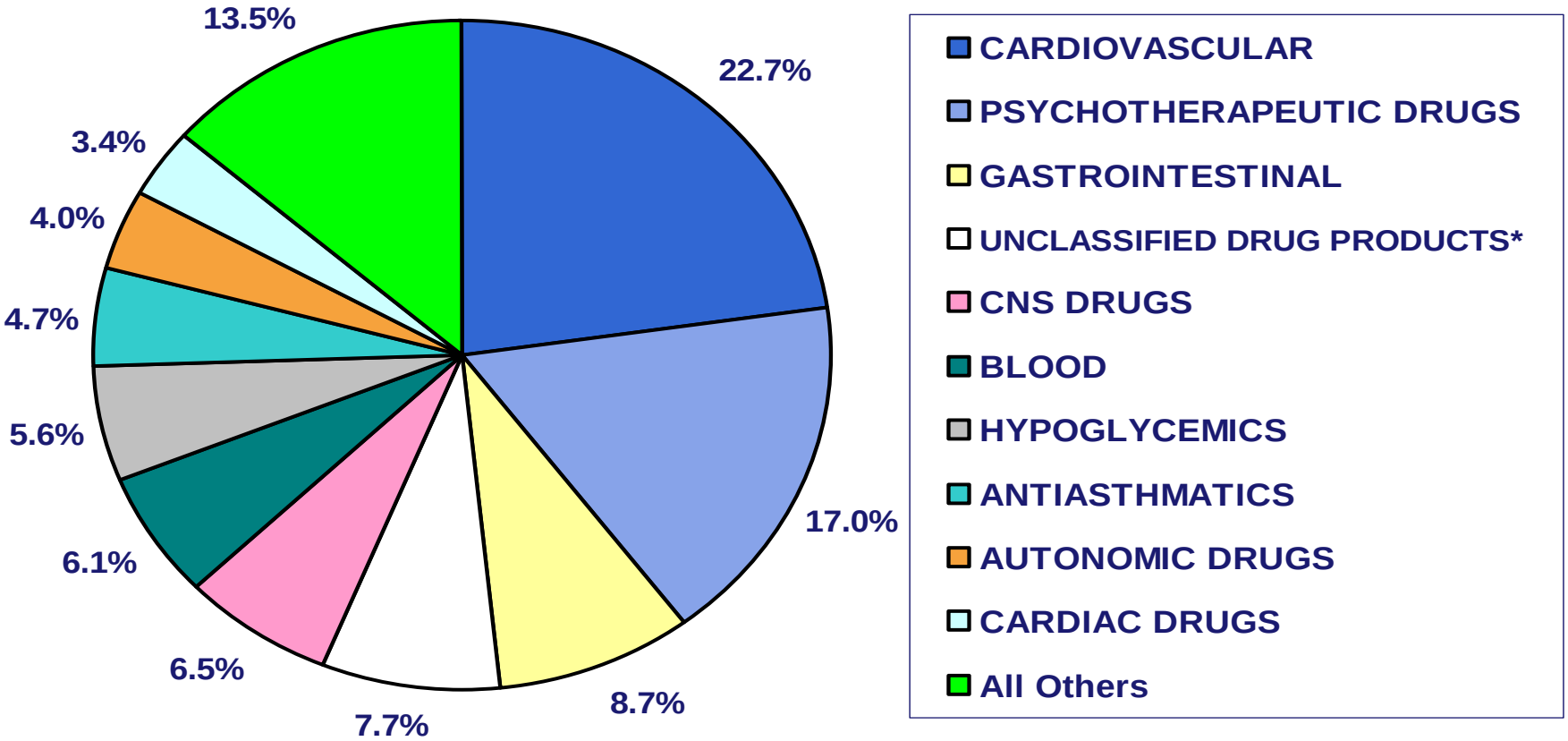
Therapeutic Classes of Top 100 Drugs by Fills

Overall Rank	Generic Therapeutic Class	Overall	LIS	Non-LIS	MA-PD	PDP
1	**CARDIOVASCULAR**	21.3%	16.5%	26.0%	25.3%	19.6%
2	**PSYCHOTHERAPEUTIC DRUGS**	9.2%	12.4%	4.6%	5.4%	10.0%
3	**DIURETICS**	8.1%	7.6%	8.6%	8.8%	7.9%
4	**AUTONOMIC DRUGS**	8.0%	6.9%	9.0%	9.0%	7.6%
5	**HYPOGLYCEMICS**	6.8%	6.9%	6.4%	7.5%	6.5%
6	**GASTROINTESTINAL**	6.4%	7.7%	4.2%	4.5%	6.8%
7	**CARDIAC DRUGS**	5.9%	5.5%	7.4%	7.5%	5.9%
8	**ANALGESICS**	5.9%	7.8%	4.0%	5.5%	6.1%
9	**THYROID PREPS**	4.2%	3.1%	5.3%	4.9%	4.1%
10	**BLOOD**	4.0%	3.7%	4.5%	3.8%	4.0%
Totals		79.8%	78.1%	80.0%	82.2%	78.5%

Top 10 Class for subpopulation Other Class

Therapeutic Classes of Top 100 Drugs by Cost

All Beneficiaries



*Includes agents to treat Osteoporosis, Multiple Sclerosis, BPH, Overactive Bladder, Parathyroid, Pulmonary Hypertension, Cancer.

Therapeutic Classes of Top 100 Drugs by Cost

Overall Rank	Generic Therapeutic Class	Overall	LIS	Non-LIS	MA-PD	PDP
1	**CARDIOVASCULAR**	22.7%	16.2%	31.8%	28.3%	21.2%
2	**PSYCHOTHERAPEUTIC DRUGS**	17.0%	24.3%	6.2%	9.1%	19.1%
3	**GASTROINTESTINAL**	8.7%	8.9%	8.0%	7.4%	9.3%
4	**UNCLASSIFIED DRUG PRODUCTS***	7.7%	5.3%	10.3%	8.5%	7.6%
5	**CNS DRUGS**	6.5%	8.3%	2.4%	3.7%	7.0%
6	**BLOOD**	6.1%	5.9%	7.0%	7.5%	5.8%
7	**HYPOGLYCEMICS**	5.6%	5.8%	5.6%	6.8%	5.1%
8	**ANTIASTHMATICS**	4.7%	4.7%	4.6%	4.8%	4.7%
9	**AUTONOMIC DRUGS**	4.0%	3.5%	4.5%	4.6%	4.0%
10	**CARDIAC DRUGS**	3.4%	2.5%	5.1%	5.7%	3.0%
Totals		86.4%	85.4%	85.5%	86.4%	86.8%

*Includes agents to treat Osteoporosis, Multiple Sclerosis, BPH, Overactive bladder, Parathyroid, Pulmonary Hypertension, Cancer.

Top 10 Class for subpopulation Other Class

Top Ten Conditions from RxHCC Risk Adjustment Model (2007)

- Acute Myocardial Infarction and Unstable Angina.
- Asthma and COPD.
- Diabetes without Complication.
- Disorders of Lipoid Metabolism.
- Disorders of the Vertebrae and Spinal Discs.
- Esophageal Disease.
- Hypertensive Heart Disease or Hypertension.
- Other Musculoskeletal and Connective Tissue.
- Other Specified Endocrine/Metabolic/Nutritional Disorders.
- Significant Psychiatric Symptoms/Syndromes.

☑ Consistent with the therapeutic classes of the top drugs filled by Part D enrollees in 2006.

Additional Comparisons

- 2006 Top 10 Drugs by Fill Compared to Top 10 Drugs from 2005 Drug Card.
- 2006 Top 10 Drugs by Fill for LIS beneficiaries compared to 2005 Top 10 Drugs most commonly used by Medicaid dual eligibles (OIG Report: OEI-05-06-00090)

☑ Each comparison again showed consistency between the drugs lists. Therefore, in general, Part D Sponsors continued to cover the drugs beneficiaries use.

Top 10 Drugs by Fills

DRUG NAME	Overall	LIS	Non-LIS	MA-PD	PDP
FUROSEMIDE	1	1	3	3	1
LISINOPRIL	2	3	1	1	3
LIPITOR	3	4	2	5	2
HYDROCODONE-ACETAMINOPHEN	4	2	9	7	4
ATENOLOL	5	8	4	2	7
LEVOTHYROXINE SODIUM	6	5	6	10	6
NORVASC	7	6	7	11	5
HCTZ	8	9	5	6	8
METOPROLOL TARTRATE	9	10	10	8	10
METFORMIN HCL	10	7	11	9	11

Top 10 Drug for subpopulation Other Top 100 Drug for subpopulation

Top 10 Drugs by Cost

DRUG NAME	Overall	LIS	Non-LIS	MA-PD	PDP
LIPITOR	1	2	1	1	1
PLAVIX	2	7	2	2	5
ZYPREXA	3	1	48	20	2
NEXIUM	4	6	5	10	4
SEROQUEL	5	3	47	19	3
RISPERDAL	6	4	54	21	6
PREVACID	7	5	16	18	7
NORVASC	8	11	4	4	8
ARICEPT	9	8	8	6	9
ADVAIR DISKUS	10	10	9	8	10

Top 10 Drug for subpopulation Other Top 100 Drug for subpopulation

Part D Drug Utilization

Methodology

Data Sources:

- 2006 Standard Analytical File (SAF) of PDE data.
- 2007 PDE data.
- Medicare Beneficiary Database (MBD).
- Database of drug information derived from Medi-Span and First DataBank.

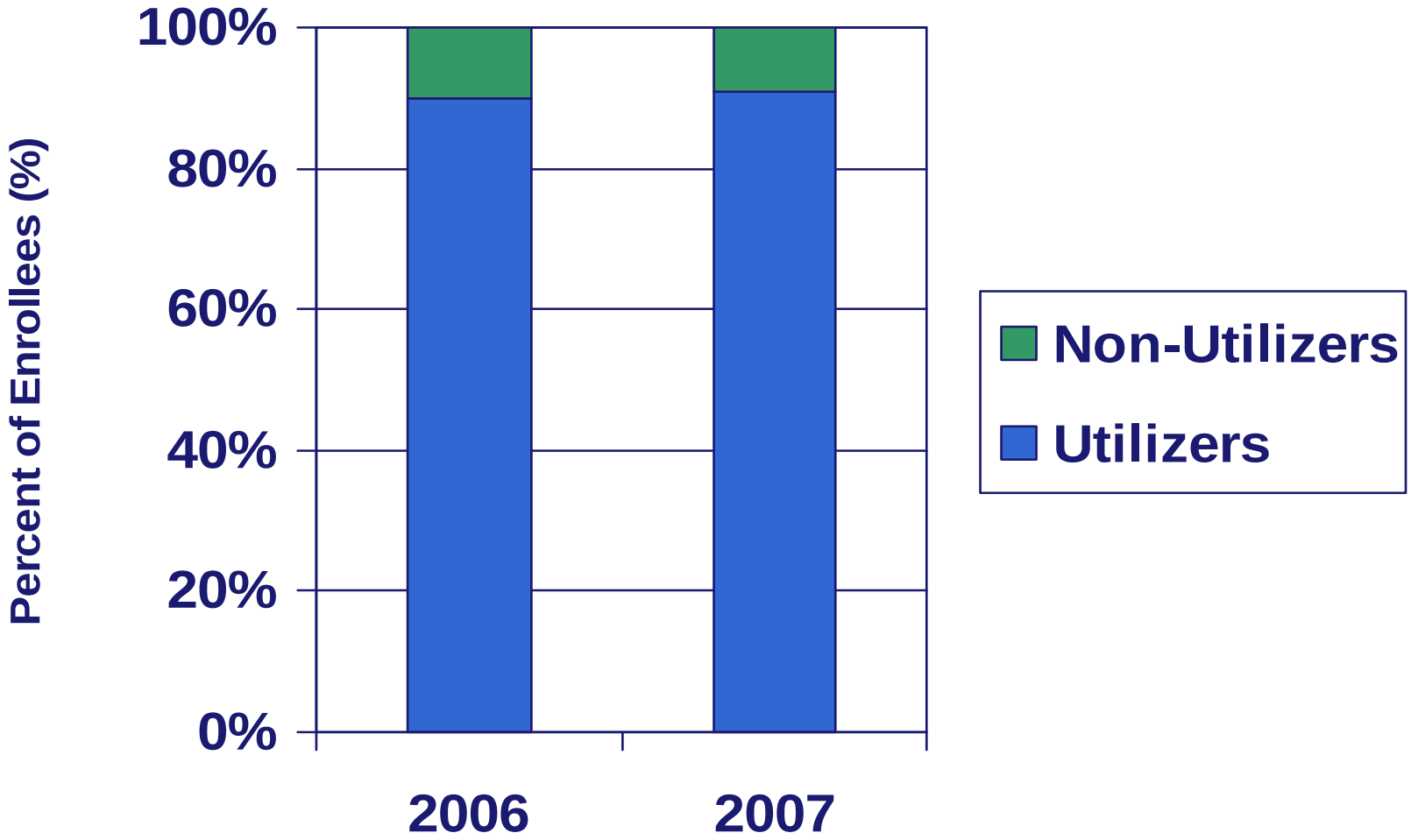
Methodology

- Beneficiary level files were created to include PDE records, contract information and demographic information.
- % Utilizing beneficiaries: total number of beneficiaries with at least one PDE record in the year divided by:
  - total number of beneficiaries ever enrolled.
  - total number of beneficiaries enrolled for the entire year.
- % Non-utilizing beneficiaries: total number of beneficiaries that did not have any PDE records divided by the total number of beneficiaries ever enrolled.

Utilization of Part D Drugs

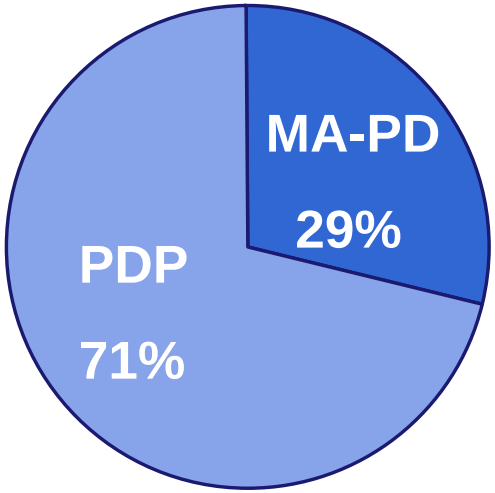
- In the first year of the program, 90% of Part D enrolled beneficiaries filled at least one prescription.
  - Increased to 91% in 2007.
- Of beneficiaries enrolled for all of 2006, 93% filled at least one prescription.
  - Slightly decreased in 2007.

The Majority of Part D Beneficiaries Utilized the Drug Benefit

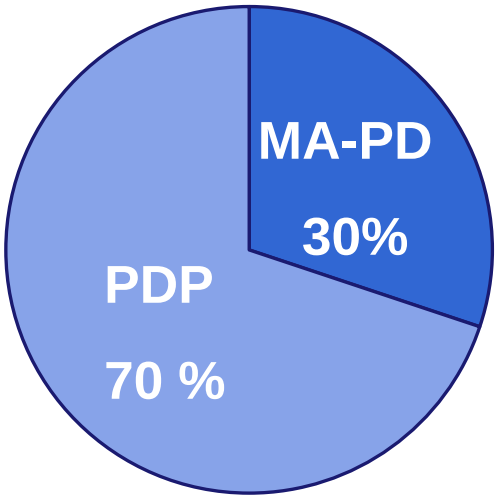


Most Non-Utilizing Beneficiaries Were Enrolled in PDPs

2006



2007



Characteristics of Part D Utilizers and Non-Utilizers

	Gender		Age	
	% Male	% Female	Mean	Median
2006				
Utilizers	38%	62%	70	72
Non-Utilizers	53%	47%	67	69
2007				
Utilizers	39%	61%	70	71
Non-Utilizers	54%	46%	66	68

Generic Dispensing Rate (GDR)

Discussion Topics

- 2006 and 2007 GDR Based on PDE data.
- 2006 and 2007 Distributions by Contract and Quarterly Trends.
- 2006-2008 GDR Trends Based on Plan-reported data.
- Breakouts by LIS, Non-LIS, MA-PDs, PDPs.

Methodology

Data Sources:

- 2006 Standard Analytical File (SAF) of PDE data.
- 2007 PDE data.
- Medicare Beneficiary Database (MBD).
- Plan-reported GDR.
- Database of drug information derived from Medi-Span and First DataBank.

Methodology

- The GDR was calculated as the total number of PDE records for generic drugs divided by the total number of PDE records.
- Generic drugs were identified using the National Drug Code (NDC) on the PDE records.
  - NDCs were linked to drug information from Medi-Span and First DataBank and then identified as either brand or generic.

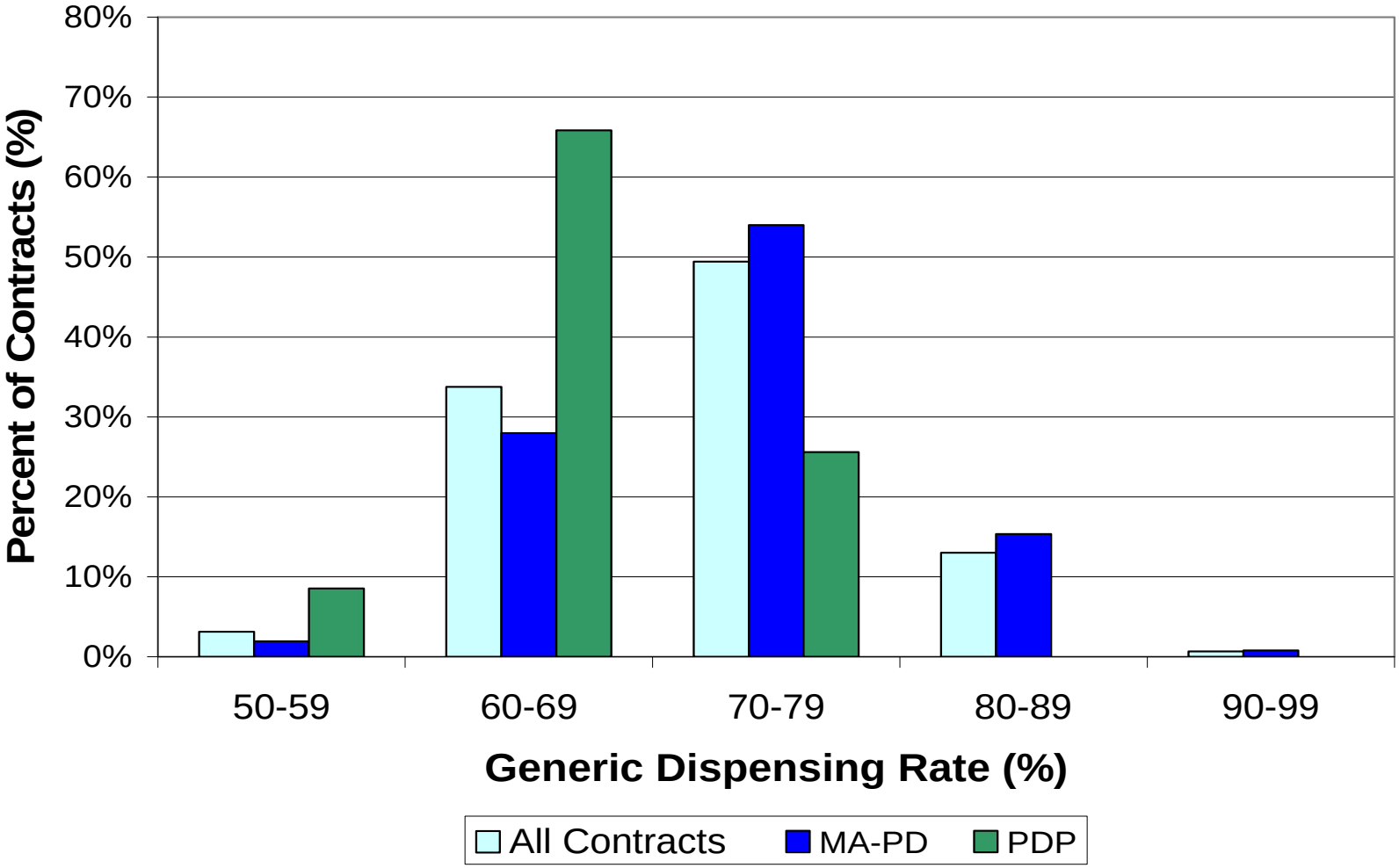
2006 Benefit Year

GDR was High in the First Year of Part D

- The overall generic dispensing rate for Medicare Part D was 60.1% in 2006.
  - The Part D GDR was 14% higher than the GDR for private third party payors[1].
- Medicare Advantage Prescription Drug plans (MA-PDs) had the highest GDR.
  - MA-PDs had a GDR of 66.9%.
  - PDPs had a GDR of 58.0%.

[1] - http://www.cms.hhs.gov/apps/media/press/release.asp?Counter=2081

2006 GDR Distribution by Organization Type

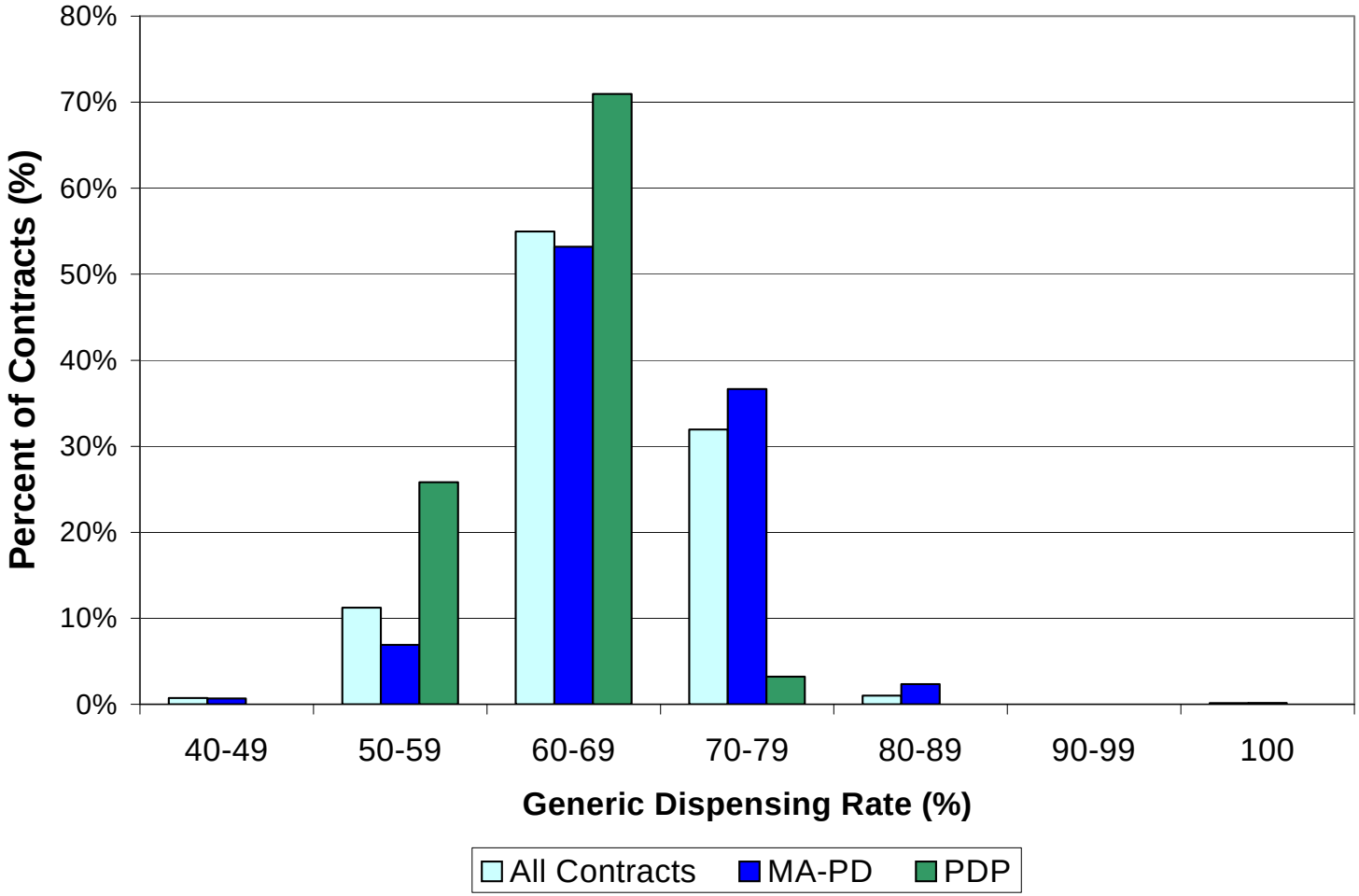


2007 Benefit Year

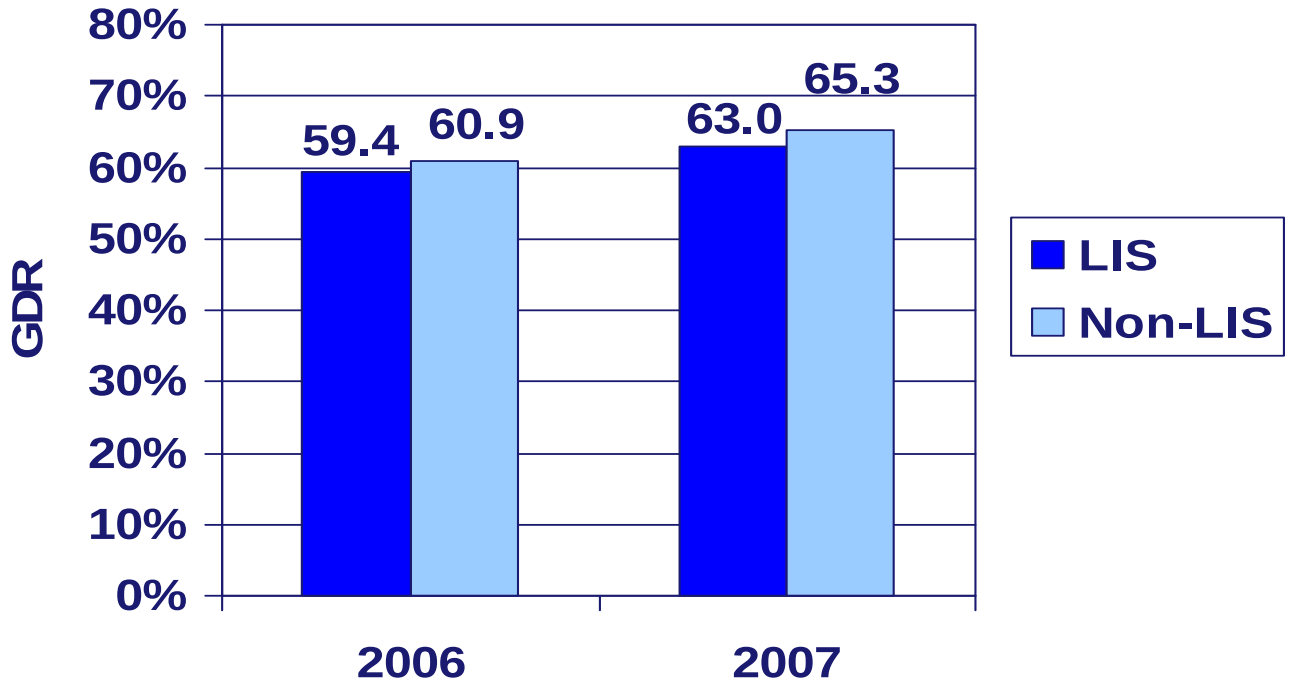
Part D GDR Increased in 2007

- Overall the GDR increased 6.9 percent from 60.1% in 2006 to 64.2% in 2007.
  - The GDR for PDPs increased by almost 8 percent from 2006 to 2007.
  - The GDR for MA-PDs increased by approximately 3 percent from 2006 to 2007.

2007 GDR Distribution by Organization Type

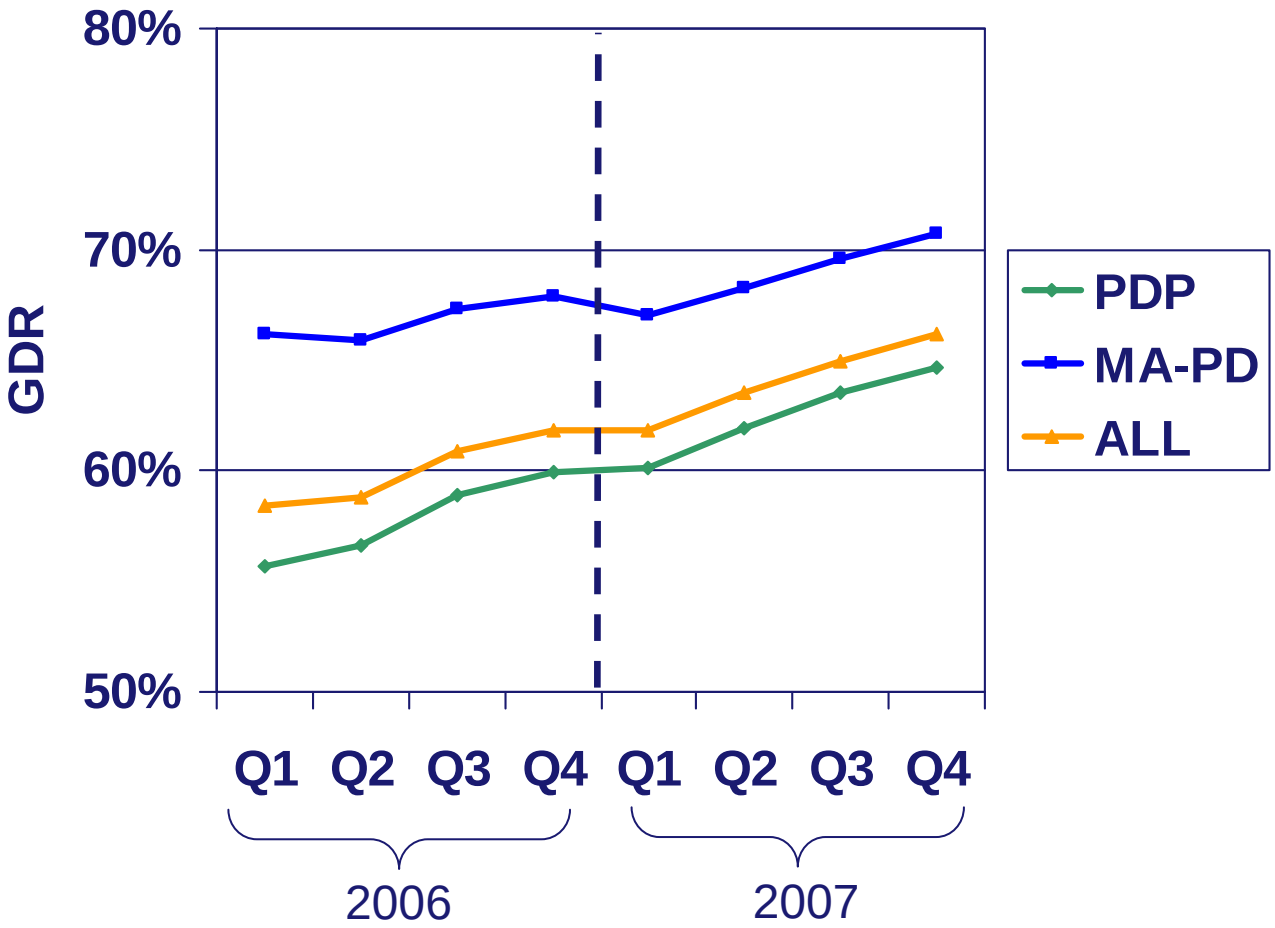


Comparison of GDR for LIS and Non-LIS Beneficiaries



- Rates were similar for both LIS and Non-LIS beneficiaries.
- For both groups, the GDR increased at approximately the same rate.

2006-2007 Trend of GDR by Quarter



Medicare Part D Reporting Requirements
Plan-Reported GDR

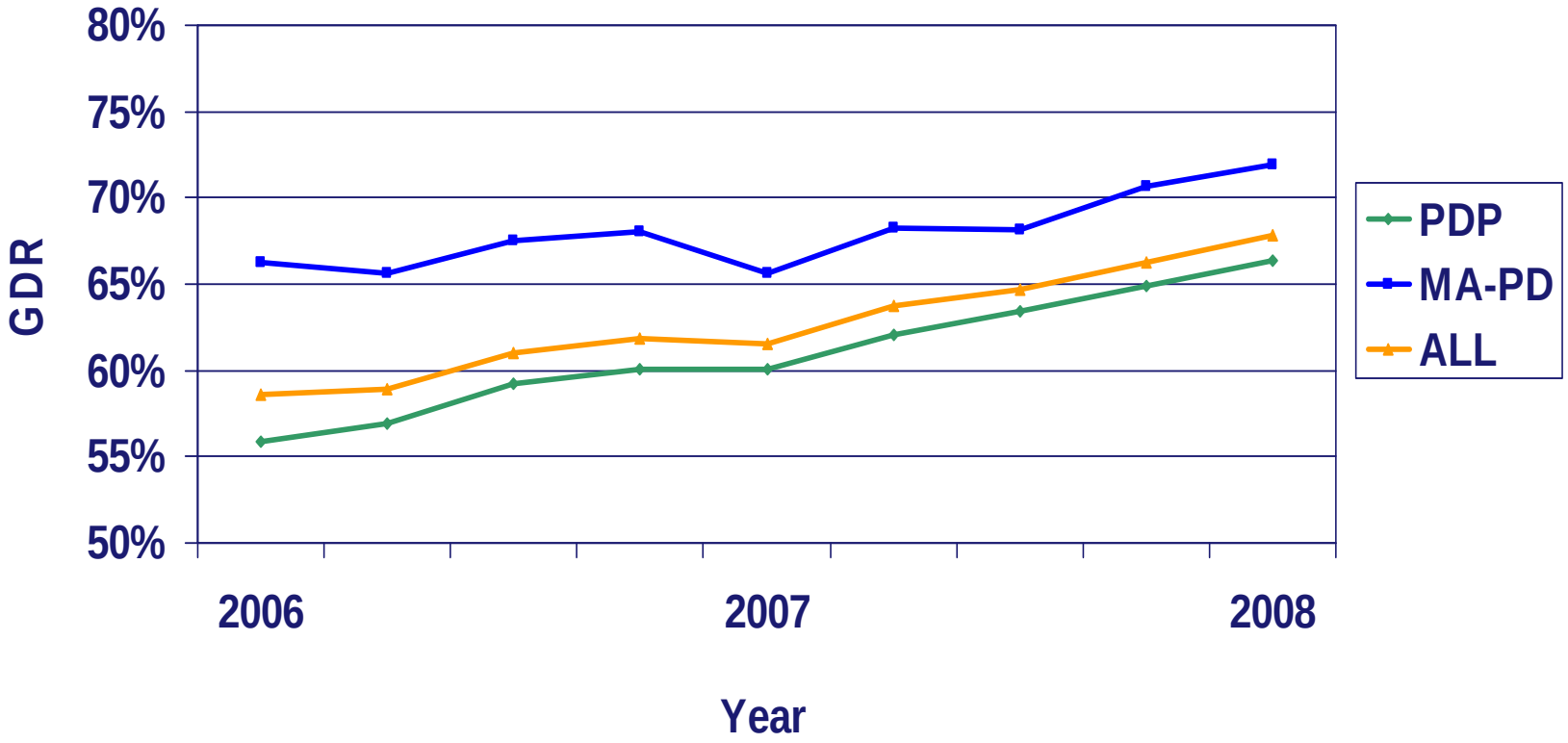
Description of Plan-Reported Data

- Since 2006, Part D Sponsors have been required to self-report data to CMS for a variety of operational areas including Exceptions, Appeals, Medication Therapy Management, Grievances, and GDR.
- For GDR, Sponsors report the total number of generic prescriptions filled and the total number of all prescriptions filled on a quarterly basis.

PDE GDR is Comparable to Part D Plan-Reported GDR

Organization Type	2006		2007	
	GDR-PDE	GDR-Plan Reported	GDR-PDE	GDR-Plan Reported
ALL	**60.1%**	**60.3%**	**64.2%**	**64.1%**
MA-PDs	66.9%	66.9%	68.9%	68.1%
PDPs	58.0%	58.3%	62.6%	62.7%

Trend of Plan-Reported GDR



Medicare Part D GDR Remains High in the Third Year of the Drug Benefit

- To date, the use of generic drugs has been high in Part D, increasing from 60.1% in 2006 to 64.2% in 2007 based on PDE data.
- Generic dispensing rates calculated from the PDE were similar to plan-reported data.
- GDR continued to increase each quarter; the first quarter of 2008 plan-reported data showed the overall Part D GDR was 67.8%.

Overall Summary

- Therapeutic classes of top drugs utilized in Part D were those used to treat the most prevalent conditions in this population.
- Differences were found between most commonly used drugs by LIS and Non-LIS beneficiaries.
  - Cardiovascular drugs most common overall, but LIS enrollees used more mental health drugs than Non-LIS.
- Initial evaluations have shown the successful implementation of Medicare Part D in both high levels of utilization and utilization of lower cost generic alternatives.

Questions?