

# 2010 Part D Symposium

## Part D Drug Utilization and Cost Trends



# Discussion Topics

- Utilization Rates.
- Generic Dispensing Rates (GDR).
- Top Classes and Drugs.
- Utilization of Biologics.

# Overview

- A higher proportion of Part D enrollees utilized the prescription drug benefit from 2006 to 2008.
- At the overall PMPM level, the number of prescriptions utilized appeared stable.
- The use of generics continued to increase and the availability of new generics appeared to be influencing trends in the classes and drugs utilized by enrollees.
- Vaccines appeared to be one of the key drivers in increased utilization of biologics.

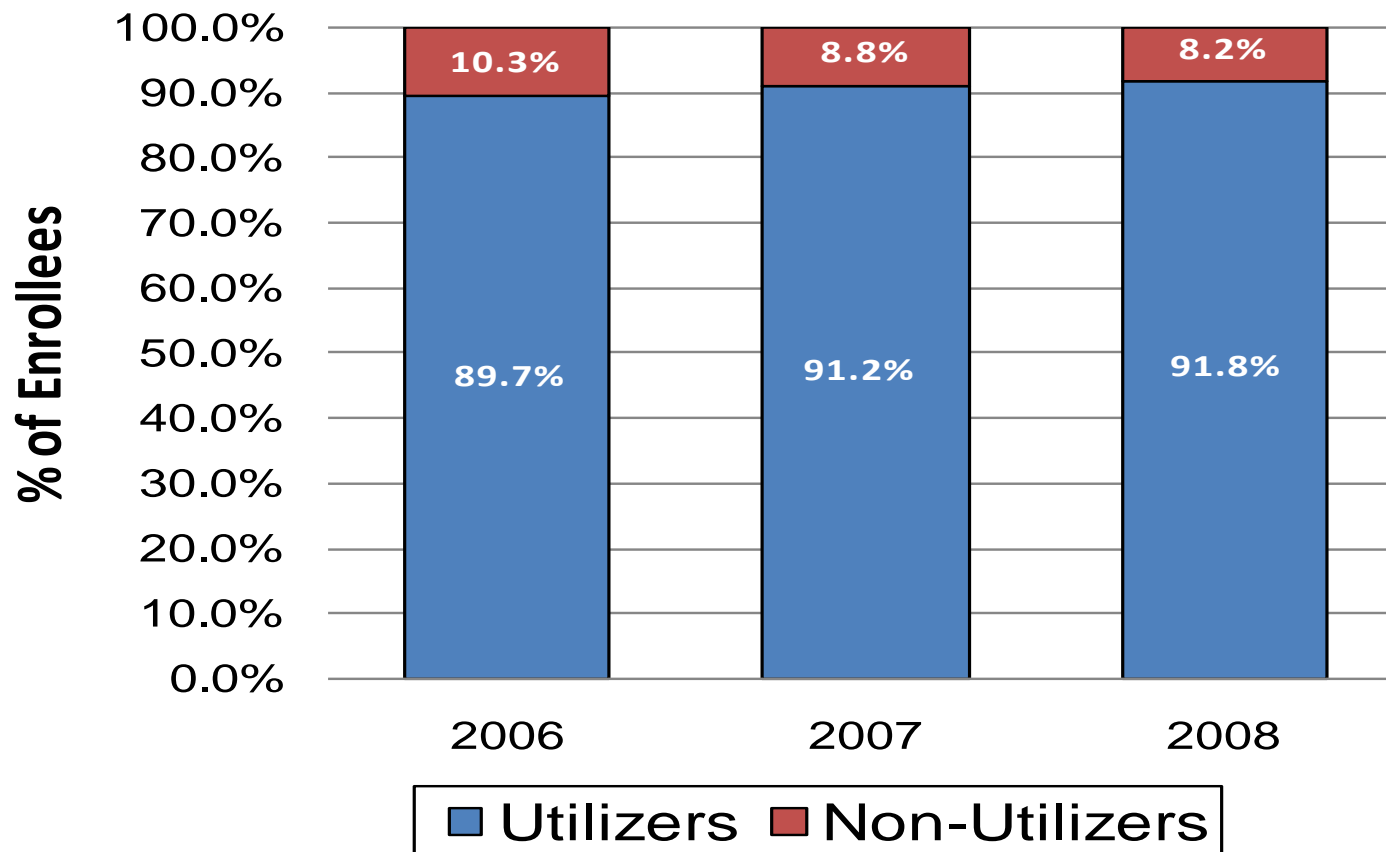
# Cost and Utilization Rates

# Overall Utilization Trends

- From 2006 to 2008, the number of utilizers and the share of utilizers increased.
- The average monthly gross drug expenditures increased from 2006 to 2008, but the increase closely trended with inflation (CPI) for this time period.
- The average number of prescriptions per member per month remained stable since 2006.

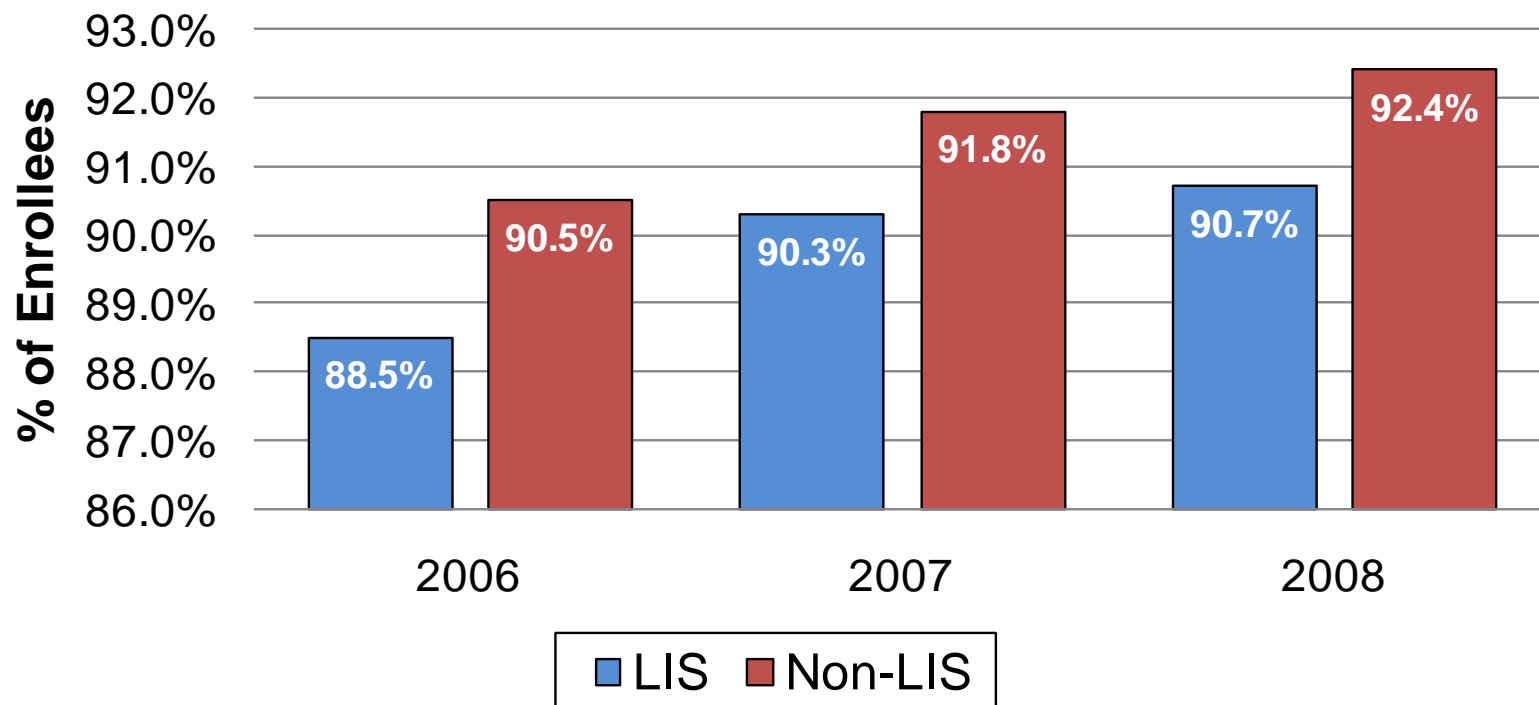


# Almost 92% of Part D Enrollees in 2008 were Utilizers



# Utilization Rates Vary for LIS and Non-LIS Beneficiaries

**Percent of Enrollees with At Least One Fill  
(Utilizers), by LIS Status**



# Gross Drug Cost and Utilization Per Member Per Month

- The average monthly drug expenditure in 2008 was \$221.
  - There was a steady increase in the average monthly expenditure from 2006 (\$202) to 2007 (\$212) and 2008.
  - This increase appeared to trend with inflation (CPI).
- The average number of prescriptions PMPM was 3.3 based, on the total number of PDE records.
  - The trend was relatively stable in the average number of prescriptions since 2006 (3.2) and 2007 (3.3).



# Average Monthly Cost and Utilization by category, 2008

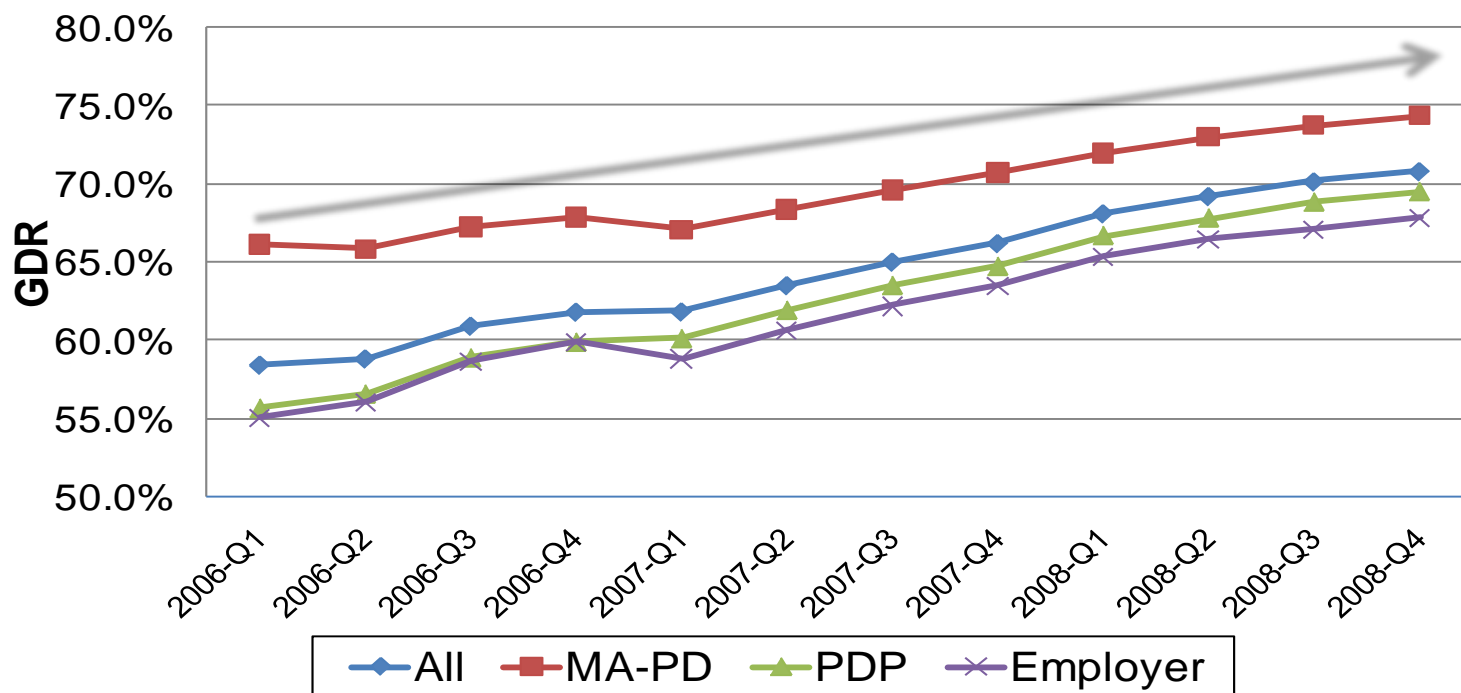
Category	Average Monthly Expenditure (Gross Drug Cost)	Average Number of Fills Per Month
<b>ALL</b>	<b>\$221</b>	<b>3.3</b>
<b>GENDER</b>		
<b>MALE</b>	\$213	2.9
<b>FEMALE</b>	\$225	3.6
<b>CONTRACT TYPE</b>		
<b>EMPLOYER</b>	\$214	2.7
<b>MAPD</b>	\$160	2.7
<b>PDP</b>	\$250	3.6
<b>LIS STATUS</b>		
<b>LIS</b>	\$321	4.4
<b>Non-LIS</b>	\$158	2.6

# Generic Dispensing Rates (GDR)



# Part D GDR steadily increased to nearly 70%

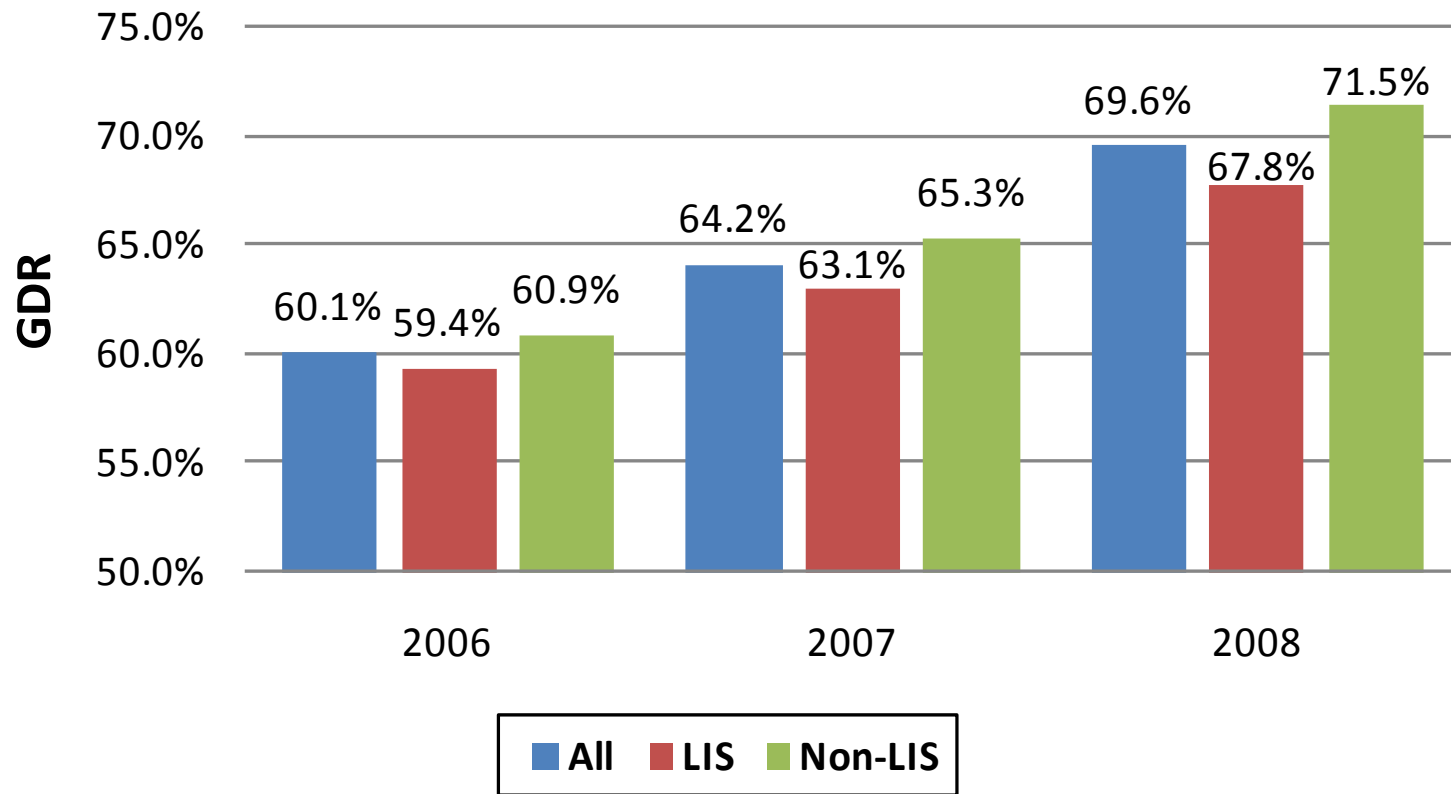
Quarterly GDR by Contract Type, 2006-2008



- 2008 GDR for overall Part D population: 69.6%.
- GDR increased by 4-5 percentage points each year from 2006-2008.

# Similar GDR Trends for LIS and Non-LIS beneficiaries

**GDR, LIS vs. Non-LIS beneficiaries, 2006-2008**



# Top Classes and Drugs

# Trends in Top Classes and Drugs

- Since 2006, there was little variation in the top classes of drugs utilized, but key generic launches impacted top 100 drug rankings.
- The top 5 classes accounted for over 50% of total drug expenditure.
- The top drugs by cost in all populations analyzed, with the exception of the LIS population, were cardiovascular drugs.
- There was a higher concentration of psychotherapeutic agents utilized by LIS and PDP beneficiaries.



# 2008 Top 10 Therapeutic Classes by Fills

## *All Drugs Utilized*

Overall Rank	Generic Therapeutic Class	Overall	LIS	Non-LIS	MA-PD	PDP	Emp
1	CARDIOVASCULAR	18.5%	15.4%	21.7%	20.9%	17.6%	19.6%
2	PSYCHOTHERAPEUTIC DRUGS	8.2%	10.6%	5.8%	6.6%	8.9%	6.5%
3	GASTROINTESTINAL	6.3%	7.3%	5.3%	5.8%	6.5%	6.0%
4	AUTONOMIC DRUGS	6.0%	5.1%	7.0%	6.4%	5.9%	6.5%
5	HYPOGLYCEMICS	6.0%	6.3%	5.7%	6.6%	5.8%	5.3%
6	CARDIAC DRUGS	5.9%	5.2%	6.7%	6.4%	5.8%	6.1%
7	ANALGESICS	5.8%	6.8%	4.6%	5.2%	6.0%	4.4%
8	DIURETICS	5.4%	4.9%	5.9%	5.7%	5.3%	5.4%
9	UNCLASSIFIED DRUG PRODUCTS	4.0%	3.3%	4.7%	4.1%	4.0%	5.3%
10	BLOOD	3.4%	3.1%	3.6%	3.3%	3.4%	3.8%
Total		69.6%	68.1%	71.1%	70.9%	69.1%	68.9%



Top 10 Class for Subpopulation



Other Class

# 2008 Top 10 Therapeutic Classes by Cost

## *All Drugs Utilized*

Overall Rank	Generic Therapeutic Class	Overall	LIS	Non-LIS	MA-PD	PDP	Emp
1	CARDIOVASCULAR	15.7%	11.2%	21.4%	18.6%	14.7%	22.1%
2	PSYCHOTHERAPEUTIC DRUGS	12.8%	18.2%	6.0%	8.3%	14.3%	5.7%
3	UNCLASSIFIED DRUG PRODUCTS	8.1%	6.7%	9.9%	8.7%	7.9%	10.3%
4	GASTROINTESTINAL	7.6%	7.8%	7.5%	7.1%	7.8%	8.6%
5	HYPOGLYCEMICS	6.8%	6.8%	6.9%	7.8%	6.5%	6.8%
6	CNS DRUGS	5.8%	7.5%	3.6%	4.2%	6.3%	3.6%
7	BLOOD	5.2%	4.5%	6.1%	6.0%	4.9%	5.9%
8	ANTIASTHMATICS	4.9%	5.0%	4.7%	5.3%	4.8%	4.3%
9	ANTIINFECTIVES/MISCELLANEOUS	4.2%	5.5%	2.4%	3.3%	4.5%	1.7%
10	ANALGESICS	4.0%	4.9%	3.0%	3.5%	4.2%	2.5%
Total		75.2%	78.1%	71.4%	72.9%	75.9%	71.5%

Top 10 Class for Subpopulation
  Other Class



# Composition of 2008 Top 100 Drugs

## Share of Total Utilization

- Top 100 drugs by cost accounted for 69% of overall gross drug costs, while the top 100 drugs by fills accounted for 67% of the total number of fills.

## Brand/ generic Composition

- The top 100 drugs by cost included 22 generics and 78 brands.
- The top 100 drugs by fills included a higher proportion of generics utilized, 66 generics and 34 brands.

# 2006-2008 Drug Trends by Fills

Drug Name	Generic Therapeutic Class	2006	2007	2008
2008 Top 10 Drugs				
LISINOPRIL	CARDIOVASCULAR	2	1	1
SIMVASTATIN	CARDIOVASCULAR	25	6	2
FUROSEMIDE	DIURETICS	1	2	3
HYDROCODONE-ACETAMINOPHEN	ANALGESICS	4	3	4
LEVOTHYROXINE SODIUM	THYROID PREPS	6	5	5
AMLODIPINE BESYLATE	CARDIAC DRUGS	.	14	6
LIPITOR	CARDIOVASCULAR	3	4	7
OMEPRAZOLE	GASTROINTESTINAL	18	13	8
HCTZ	DIURETICS	8	8	9
ATENOLOL	AUTONOMIC DRUGS	5	7	10
Notable Trends				
FOSAMAX	UNCLASSIFIED DRUG PRODUCTS	14	17	150
TOPROL XL	AUTONOMIC DRUGS	11	21	231
NORVASC	CARDIAC DRUGS	7	40	415
AMBIEN	SEDATIVE/HYPNOTICS	40	120	538
ZOLOFT	PSYCHOTHERAPEUTIC DRUGS	50	464	658

Top10 Drugs for Given Year
  Other

# 2006-2008 Drug Trends by Cost

Drug Name	Generic Therapeutic Class	2006	2007	2008
<b>2008 Top 10 Drugs</b>				
LIPITOR	CARDIOVASCULAR	1	1	1
PLAVIX	BLOOD	2	2	2
NEXIUM	GASTROINTESTINAL	4	3	3
SEROQUEL	PSYCHOTHERAPEUTIC DRUGS	5	4	4
ARICEPT	AUTONOMIC DRUGS	9	6	5
ZYPREXA	PSYCHOTHERAPEUTIC DRUGS	3	5	6
ADVAIR DISKUS	ANTIASTHMATICS	10	7	7
ACTOS	HYPOGLYCEMICS	13	10	8
PREVACID	GASTROINTESTINAL	7	9	9
ABILIFY	PSYCHOTHERAPEUTIC DRUGS	18	13	10
<b>Notable Trends</b>				
RISPERDAL	PSYCHOTHERAPEUTIC DRUGS	6	8	16
NORVASC	CARDIAC DRUGS	8	37	403
ZOCOR	CARDIOVASCULAR	11	297	546
ZOLOFT	PSYCHOTHERAPEUTIC DRUGS	26	387	548
CLOPIDOGREL BISULFATE	BLOOD	27	105	1676

Top 10 Drugs for Given Year
  Other

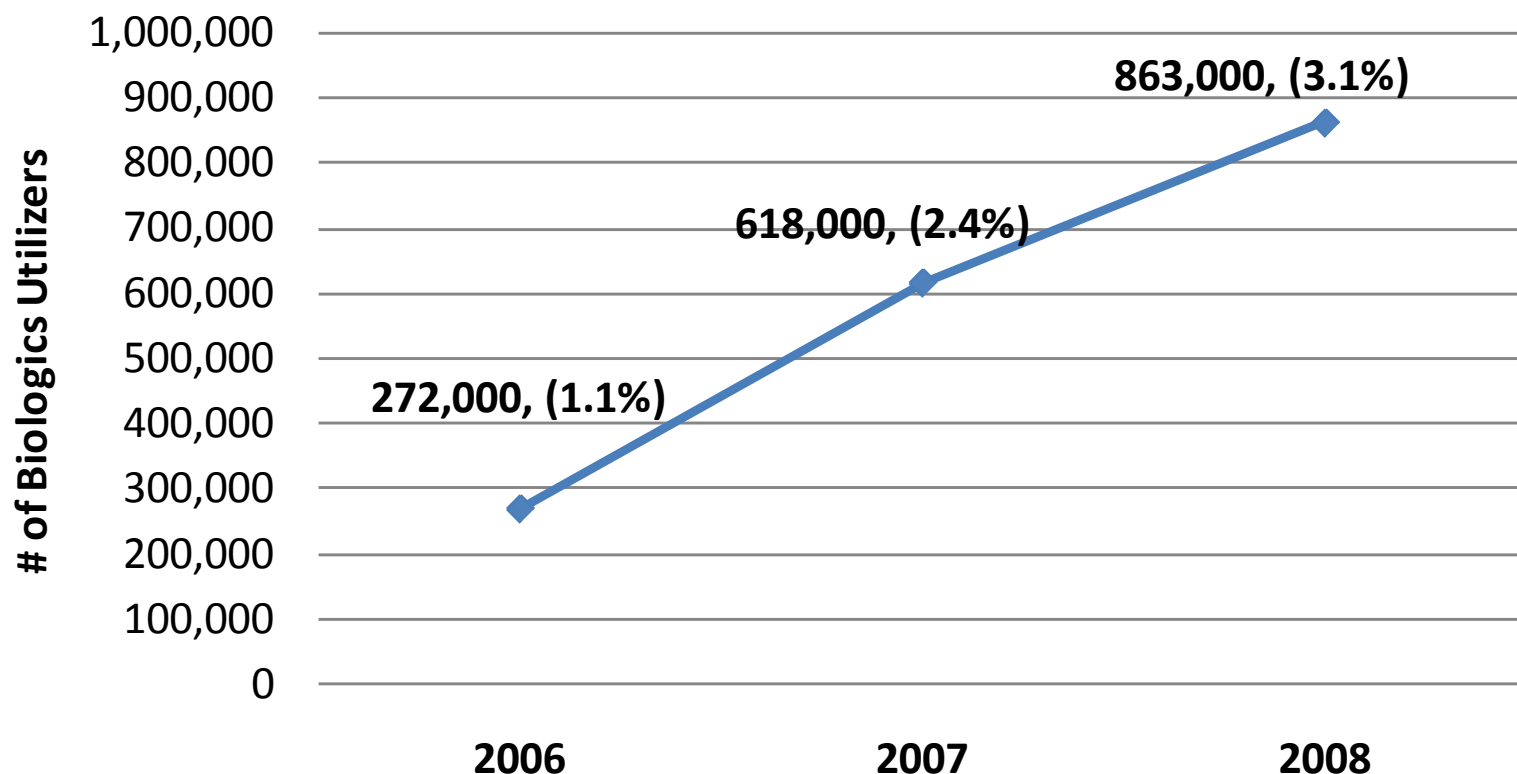
# Biologic Drugs

# Utilization of Biologic Drugs

- The number and share of beneficiaries utilizing biologics increased from 2006 to 2008.
- The majority of biologic consumption was concentrated in very few drugs.
- In 2007 and 2008, three drugs (Zostavax, Procrit, and Enbrel) accounted for more than 50% of biologic fills.
- Biologic use was especially concentrated in the western states in 2007 and 2008, whereas in 2006, no bias was seen.

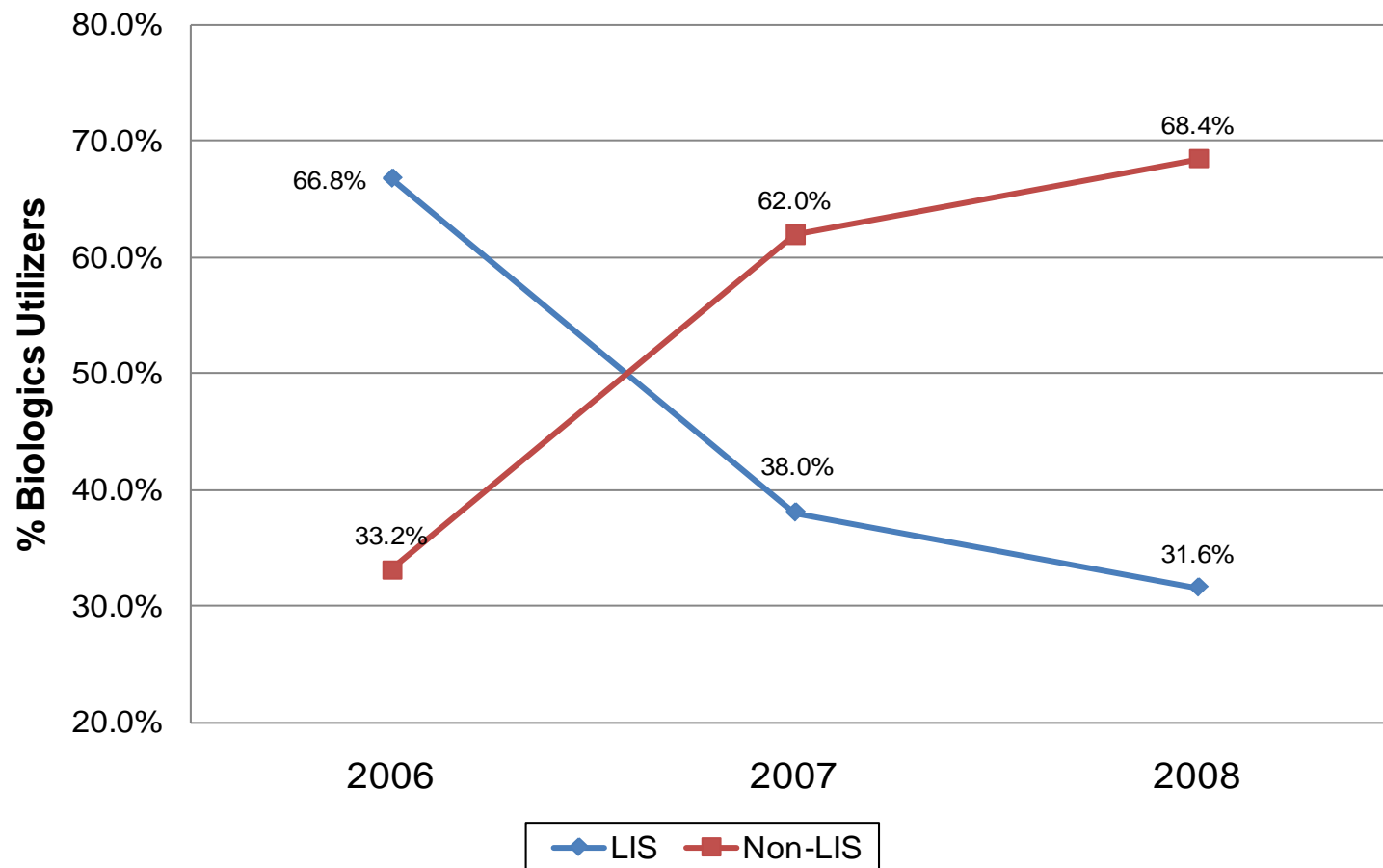


# Number of Biologics Utilizers Increased (Share of Part D Enrollees)



# Characteristics of Biologics Utilizers

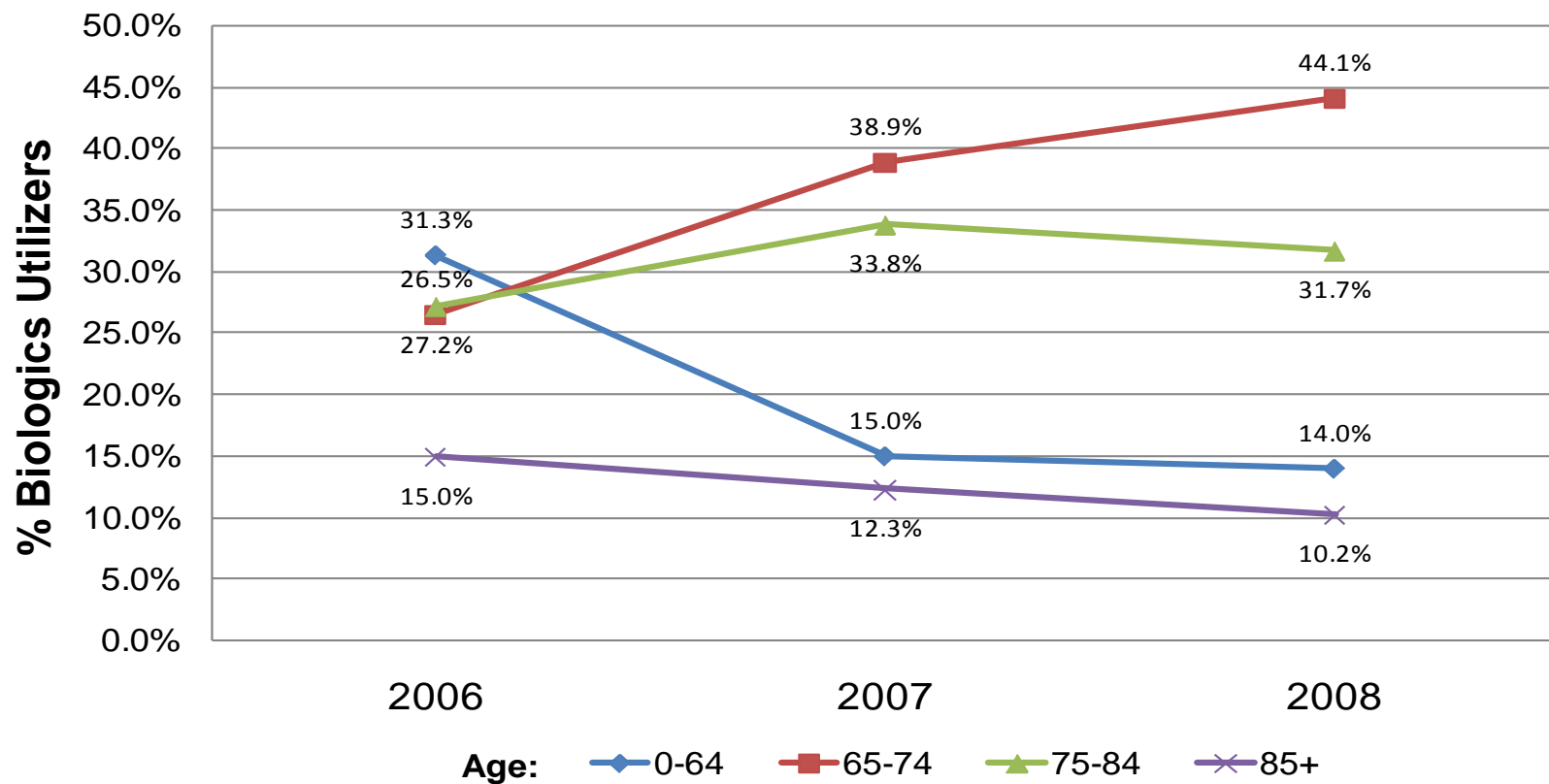
## *LIS Status*



# Characteristics of Biologics Utilizers

## Age

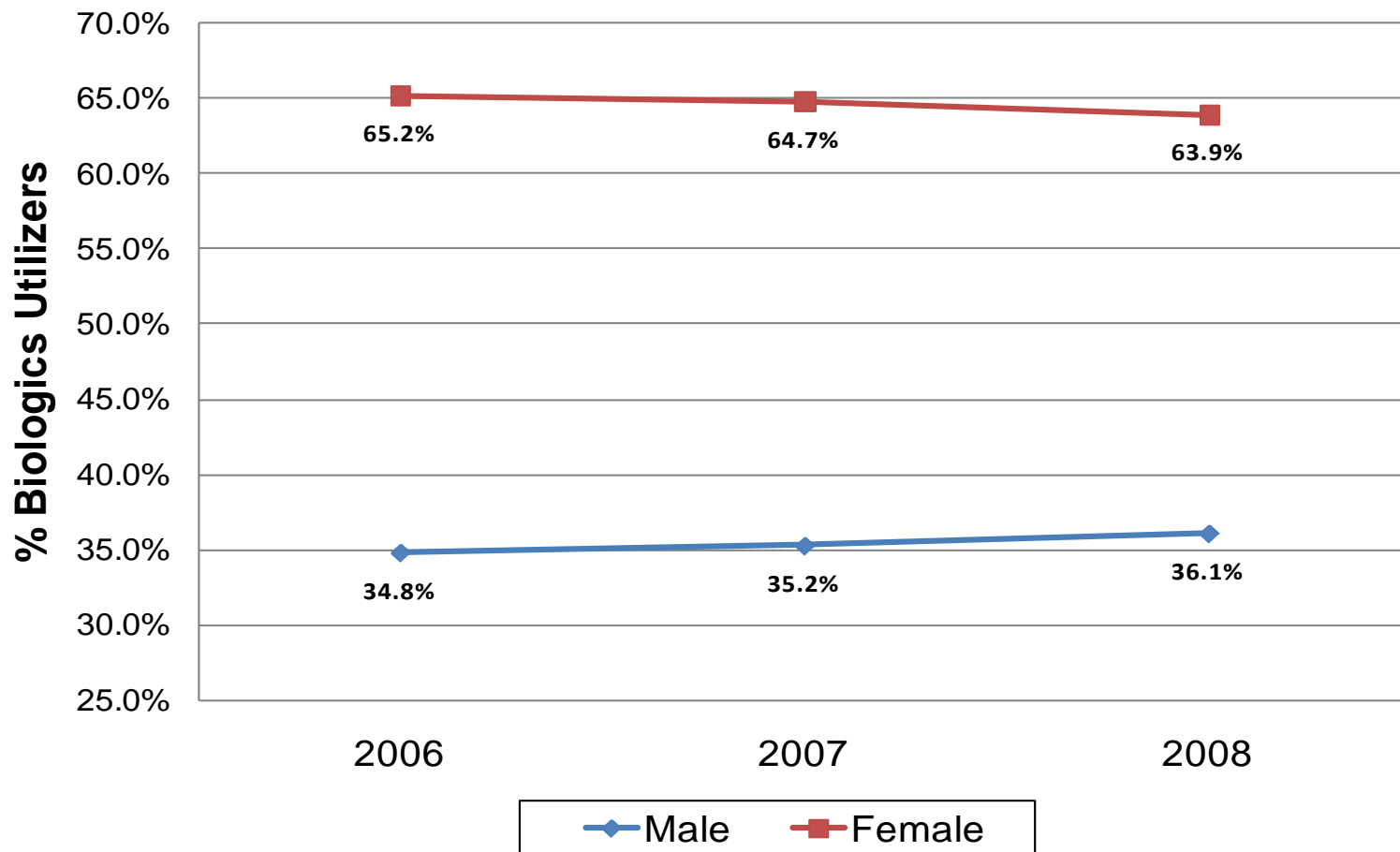
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# Characteristics of Biologics Utilizers

## *Gender*



# Top 10 Biologics By Fills

2007

Drug Name	Overall	LIS	Non-LIS
PROCRIT	1	1	3
ZOSTAVAX	2	7	1
ENBREL	3	2	2
HUMIRA	4	3	4
SANTYL	5	4	6
ARANESP	6	5	7
AVONEX	7	6	5
BETASERON	8	8	10
REBIF	9	9	11
PEGASYS	10	10	19

2008

Drug Name	Overall	LIS	Non-LIS
ZOSTAVAX	1	7	1
PROCRIT	2	1	3
ENBREL	3	3	2
SANTYL	4	2	5
HUMIRA	5	4	4
AVONEX	6	6	6
ARANESP	7	5	8
BETASERON	8	8	9
REBIF	9	9	11
PEGASYS	10	10	21



Top 10 Biologics for Subpopulation



Other

# Share of Total Biologics Fills

2008 Rank by Fill	Brand Name	Share of Total Biologics Fills	
		2007	2008
1	ZOSTAVAX	18.2%	22.1%
2	PROCRIT	22.3%	17.0%
3	ENBREL	13.7%	13.0%
Total		54.2%	52.1%

# Top 10 Biologics by Cost

2007

Drug Name	Overall	LIS	Non-LIS
ENBREL	1	1	1
PROCRIT	2	2	3
HUMIRA	3	3	2
AVONEX	4	4	5
BETASERON	5	5	6
ARANESP	6	6	7
REBIF	7	7	8
PEGASYS	8	8	12
ZOSTAVAX	9	20	4
NEUPOGEN	10	9	9

2008

Drug Name	Overall	LIS	Non-LIS
ENBREL	1	1	1
HUMIRA	2	2	2
PROCRIT	3	3	4
AVONEX	4	4	5
BETASERON	5	5	7
REBIF	6	6	8
ARANESP	7	8	9
ZOSTAVAX	8	22	3
PEGASYS	9	7	13
GAMMAGARD LIQUID	10	9	6



Top 10 Biologics for Subpopulation



Other

# Share of Total Biologics Cost

2008 Rank by Cost	Brand Name	Share of Total Biologics Cost	
		2007	2008
1	ENBREL	21.1%	21.3%
2	HUMIRA	14.0%	15.4%
3	PROCRIT	16.2%	12.3%
Total		51.4%	49.0%

# Share of Total Biologics Utilizing Beneficiaries

2008 Rank Rank by Utilizers	Brand Name	Share of Total Biologics Utilizers	
		2007	2008
1	ZOSTAVAX	49.8%	53.8%
2	SANTYL	8.5%	13.4%
3	PROCRIT	15.0%	10.9%

# Summary

- Efficiencies in the implementation of the prescription drug benefit were reflected in the overall utilization trends.
  - The percent of beneficiaries utilizing the benefit increased while the average number of prescriptions PMPM remained stable.
  - The annual increase in the average monthly drug expenditure per member was not notable as it trended with inflation.
  - The use of lower cost generic alternatives continued to increase which appeared to offset the average increase in drug prices for brand drugs during that time.
  - Vaccinations have emerged as a driver of increased utilization of biologics.

# Appendix:

## Data Sources

## And Methodologies



# Data Sources

- 2006-2008 Standard Analytical File (SAF) of PDE data.
- Common Medicare Environment (CME).
- Database of drug information derived from Medi-Span and First DataBank.
- FDA Center for Drug Evaluation & Research (CDER) and Center for Biologics Evaluation and Research (CBER) websites.

# Methodology

## *Utilization and Non-Utilization rates*

- 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.

# Methodology

## *Average Claims and Drug Costs*

- Average Gross Drug Cost Per Member Per Month
  - Total drug costs were summed across all PDEs for each year and divided by the total member-months of enrollment.
- Average Claims Per Member Per Month
  - Total number of PDEs for each year were counted and divided by the total member-months of enrollment.
  - Results were not adjusted for multiple month fills (e.g. 90-day supplies).

# Methodology

## *Generic Dispensing Rates (GDR)*

- 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.

# Methodology

## *Top 100 Drugs*

1. Construct Beneficiary-Drug Level Analytical File.
  - Sum Total Fills\* and Total Gross Drug Cost by NDC at the beneficiary level.
  - 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).



# Methodology

## *Biologics Utilization*

- Obtain a list of biologic drug names from the FDA CBER & CDER websites.
- Match list with data from First DataBank and Medi-Span.
  - For drugs with a GPI from Medi-Span, include all other NDCs under the GPI that have not yet been captured.
  - Supplement list of biologics using therapeutic class information from FDB.
- Remove NDCs that have been identified as non-biologics.