



# ***Mental Health and Substance Abuse Prescription Drug Spending Trends: Medicaid and Privately Insured Populations***

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# *Background*

- **Prescription drugs are the fastest growing component of mental health / substance abuse (MHSA) treatment spending**
  - Rx drugs increased from 17% to 21% of total public and private MHSA treatment spending
  - In private sector alone, rx contribution to overall MHSA spending doubled in 1990's (Mark et al, 2005)
- **20-30% annual growth in public and private MHSA drug spending in late 1990's (Zuvekas et al, 2005; Mark et al, 2005; Banthin and Miller, 2006)**
- **Contributing trends**
  - New medications (atypical antipsychotics, SSRI antidepressants)
  - Changing diagnostic and treatment thresholds
  - Managed care
- **Continued growth in 2000s for several drug classes**



# ***Overview of Study and Research Questions***

- **Purpose: Examine public and private MHSA prescription drug spending growth trends during a period of high growth to elicit lessons for drug management and policy the current environment**
- **Examine differences between public and private use of MHSA prescription drugs**
- **Research questions**
  - **What were the factors driving MHSA driving rapid rx spending growth? Price, volume, or new drugs?**
  - **How do MHSA rx spending trends differ between the public and private sector?**
  - **What are the drug classes that drive growth in each sector?**
  - **What are the trends for the elderly or disabled population in particular, to inform transition of Medicare beneficiaries to Part D?**



# Methods

- **Data**
  - Mental health and substance abuse prescription drug claims
  - Transaction costs, patient and program total per claim
- **Population**
  - Medicaid fee-for-service in Michigan, New Jersey, Pennsylvania and Washington (1996-1999)  $n \approx 1.4$  million each year
  - Private Pharmacy Benefits Manager national representation (1997-2000)  $n \approx 1.4$  million each year
- **Analysis**
  - Decomposition of drug spending growth
  - Proportion that is increased prices, proportion that is increased volume, and mix of drugs
  - Comparison of public and private trends
  - Separate drug classes, age, and Medicaid eligibility category



# Sources of Drug Spending Growth

**Prescription drug spending growth:  
Price versus volume**

$$\frac{\text{Cost}}{\text{Person}} = \frac{\text{Cost}}{\text{Day}} \times \frac{\text{Days}}{\text{Rx}} \times \frac{\text{Rx}}{\text{User}} \times \frac{\text{Users}}{\text{Population}}$$

**Additional analysis for case mix versus price inflation using a “market basket” of drugs**

**Increased cost of rx/day over time =  
inflation + mix changes of existing drugs + new drugs**

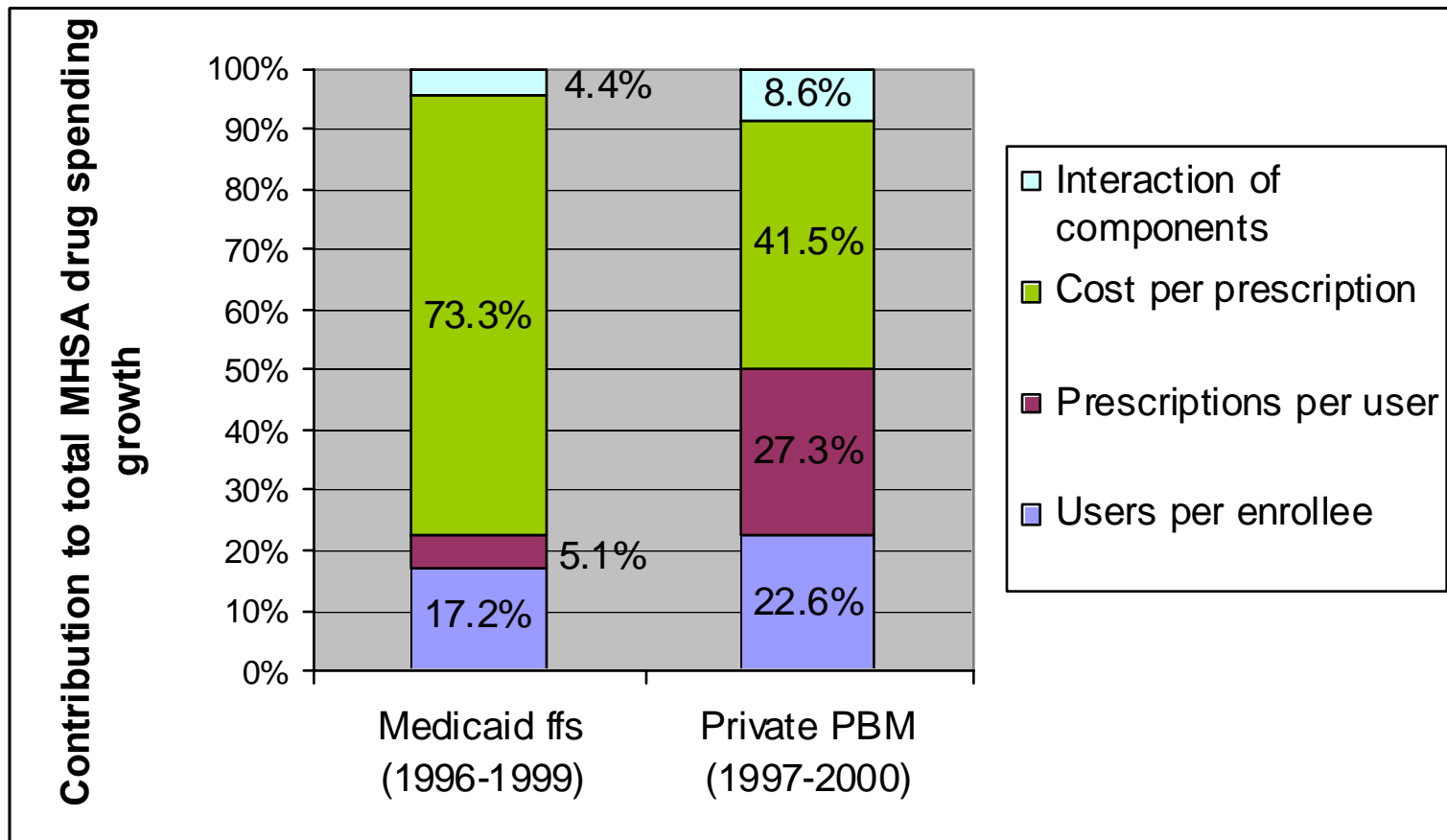


# Results: Public vs Private Differences in MHSA Drug Use and \$\$ Spending

Drug major class	Medicaid		Privately insured	
	1996	1999	1997	2000
<b>Contribution to utilization</b>				
Anti-anxiety	22%	20%	28%	25%
Antidepressants	32%	37%	51%	55%
Antipsychotics	32%	30%	8%	6%
Hypnotics	9%	9%	8%	10%
Stimulants	4%	4%	4%	4%
Substance abuse drugs	0%	0%	0%	0%
Miscellaneous	1%	0%	1%	1%
<b>Total all MHSA drugs</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>
<b>Contribution to spending</b>				
Anti-anxiety	10%	11%	10%	11%
Antidepressants	39%	34%	71%	69%
Antipsychotics	43%	50%	8%	9%
Hypnotics	4%	4%	6%	7%
Stimulants	3%	2%	4%	4%
Substance abuse drugs	0%	0%	0%	0%
Miscellaneous	1%	0%	1%	0%
<b>Total all MHSA drugs</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>



# Results: Differences Between Public and Private Sector in Sources of Drug Spending Growth





# Results: Public/Private Differences in Spending Growth by Drug Class

Major drug class	Share of MESA drug spending growth (increase in cost per enrollee)	
	Medicaid (1996-1999)	Privately insured (1997-2000)
Anti-anxiety	11%	12%
Antidepressants	28%	68%
Tricyclics	0%	2%
SSRI	15%	36%
SNRI	13%	30%
Antipsychotics	56%	10.2%
Typical	13%	3%
Atypical	44%	7%
Other	0%	0%
Hypnotics	3%	7%
Stimulants	1%	3%
Substance abuse drugs	0%	0%
Miscellaneous	0%	0%
<b>Total spending increase: all MESA drugs</b>	<b>100%</b>	<b>100%</b>
<b>Total increase in cost per enrollee</b>	<b>\$144.75</b>	<b>\$25.88</b>





# *Age 65+ Population: Critical Differences Between Public and Private Sector*

<b>Medicaid</b>	<b>1996</b>	<b>1999</b>	<b>Ave. annual % change, compounded</b>
<b>User/enrollee</b>	<b>40%</b>	<b>40%</b>	<b>-0.4%</b>
<b>Claims/user</b>	<b>11.2</b>	<b>11.6</b>	<b>1.2%</b>
<b>\$/claim</b>	<b>26.55</b>	<b>46.42</b>	<b>20.5%</b>
<b>\$ per enrollee</b>	<b>\$118.69</b>	<b>\$212.74</b>	<b>21.5%</b>
<b>Privately insured:</b>			<b>Ave. annual % change, compounded</b>
	<b>1997</b>	<b>2000</b>	
<b>User/enrollee</b>	<b>17%</b>	<b>20.5%</b>	<b>6.5%</b>
<b>Claims/user</b>	<b>5.1</b>	<b>6.1</b>	<b>5.6%</b>
<b>\$/claim</b>	<b>\$28.05</b>	<b>\$44.44</b>	<b>16.6%</b>
<b>\$/enrollee</b>	<b>\$24.43</b>	<b>\$59.15</b>	<b>34.3%</b>



# Summary of Results

- **MHSA drug spending growth near 30% annually in late 1990's**
- **Medicaid:**
  - Spending each year half attributable to antipsychotics
  - 75% of drug spending growth due to more expensive prescriptions (newer drugs, atypical antipsychotics)
- **Private PBM:**
  - Over half of utilization, 2/3 of spending, attributable to antidepressants – little antipsychotic use
  - Growth about half due to increased prices, half due to increased utilization, much in newer antidepressants
  - 2/3 of spending growth in the antidepressants
- **Elderly:**
  - MHSA drug spending in each period was approximately 4 times higher in Medicaid population



# *Implications for Policy*

- **MHSA drug spending growth due to more individuals taking more expensive drugs**
  - In current period, similar use of antipsychotics and antidepressants
  - Cost of newer antipsychotics was a strong driver of Medicaid spending
  - Newer drugs -- if they have improved effectiveness and side effect profile -- lower prescribing threshold
  - move to generics will be critical
- **Drug management challenges are considerable in bringing Medicaid elderly population into private sector Part D or MA plans**
  - Different drug management approaches necessary, without cost sharing incentives



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***Thank you! Questions?***