

# Drug Trends Yesteryear, Today, and Beyond

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Health Management Services





## Key Messages

- **Prescription drug costs are rising**
- **Utilization is a major factor in driving cost of drug plans**
- **New drugs will continue to increase cost of drug plans**



## Objectives

- **Review national trends**
- **Discuss the factors influencing costs of therapy**
- **Present trending data**
- **Show what the future may look like**

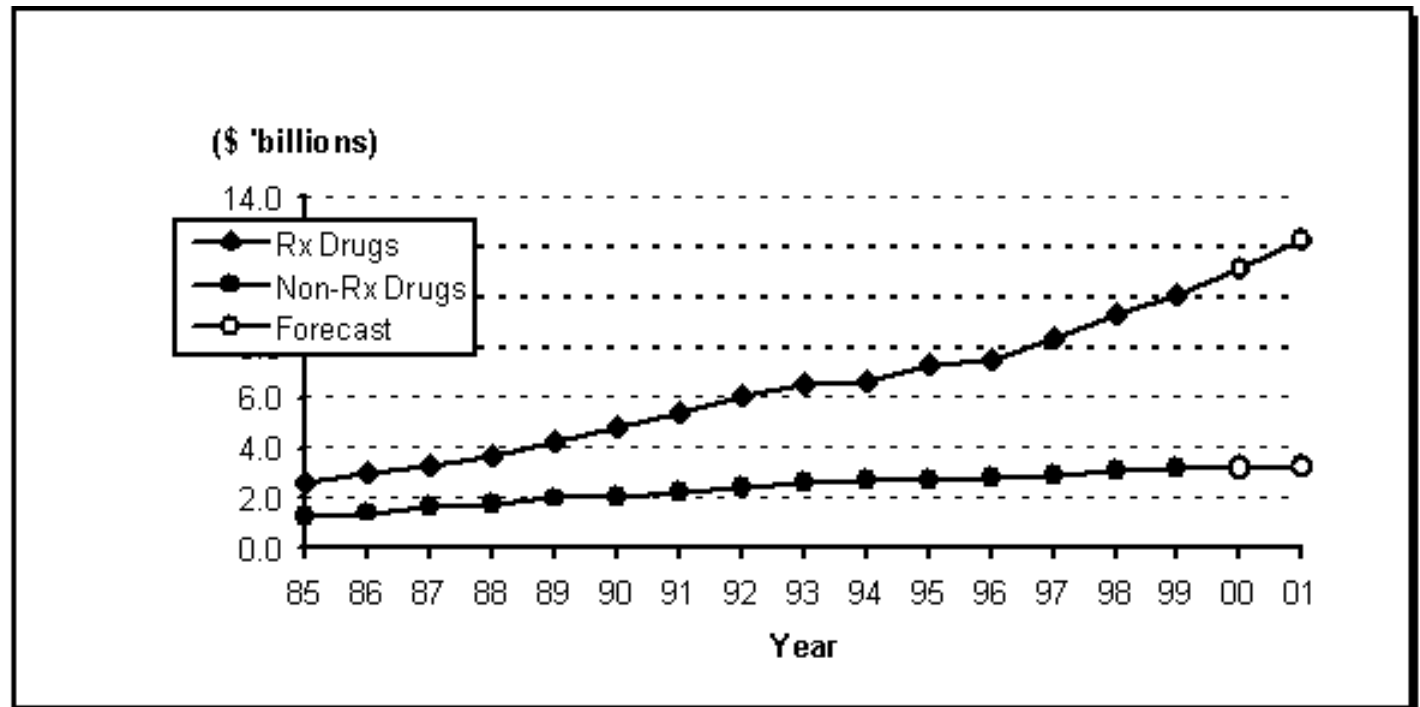


# National Drug Trends





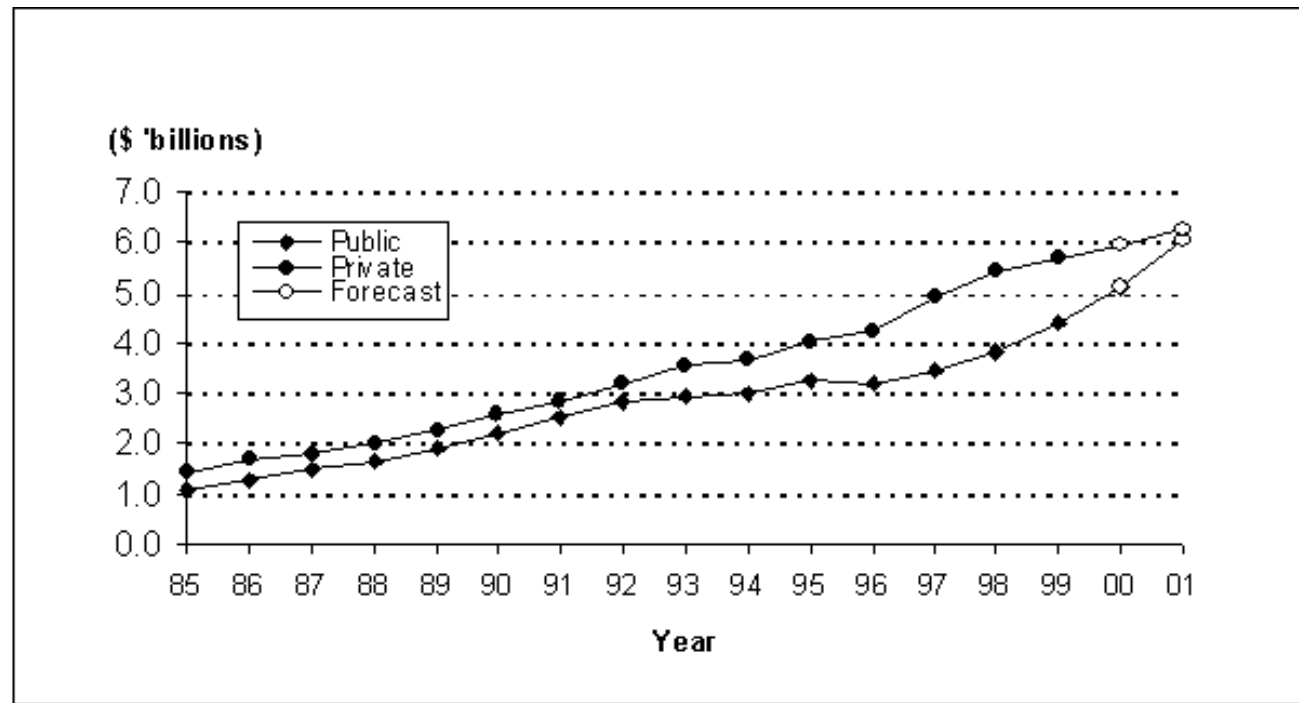
# Total Drug Expenditure by Type, Canada 1985 to 2001



Source: CIHI, Statistics Canada



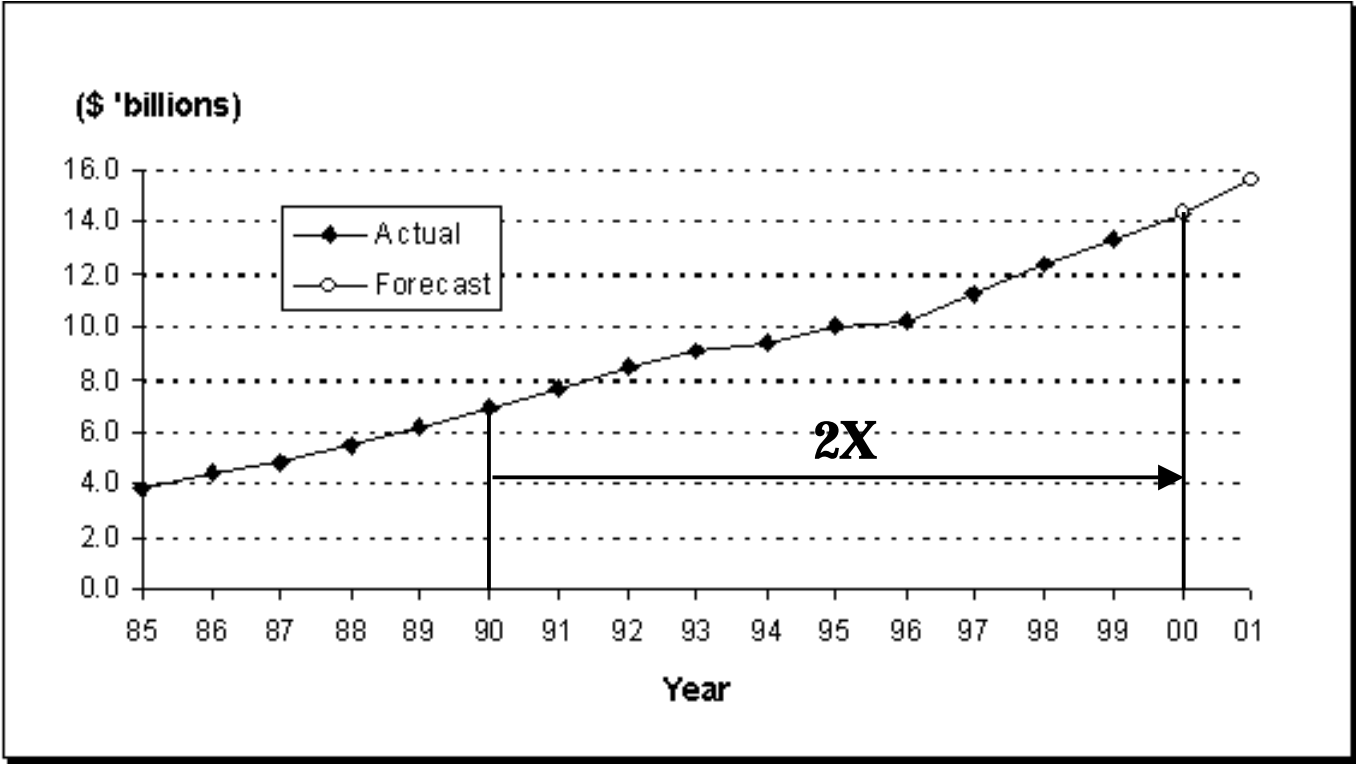
# Prescribed Drug Expenditure by Source of Finance, Canada 1985 to 2001



Source: CIHI, Statistics Canada



# Drug Expenditure, Canada 1985 to 2001

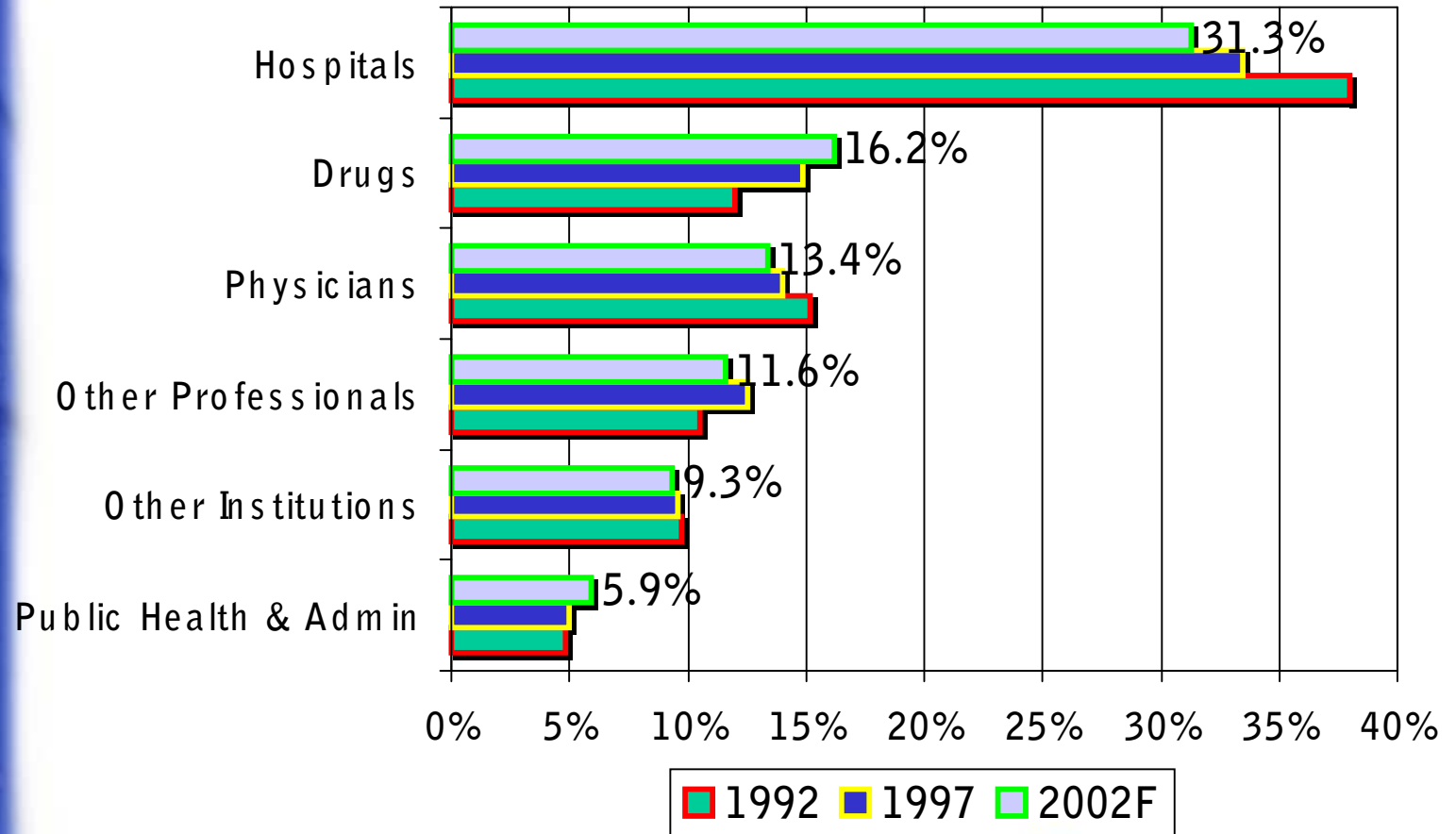


Source: CIHI, Statistics Canada





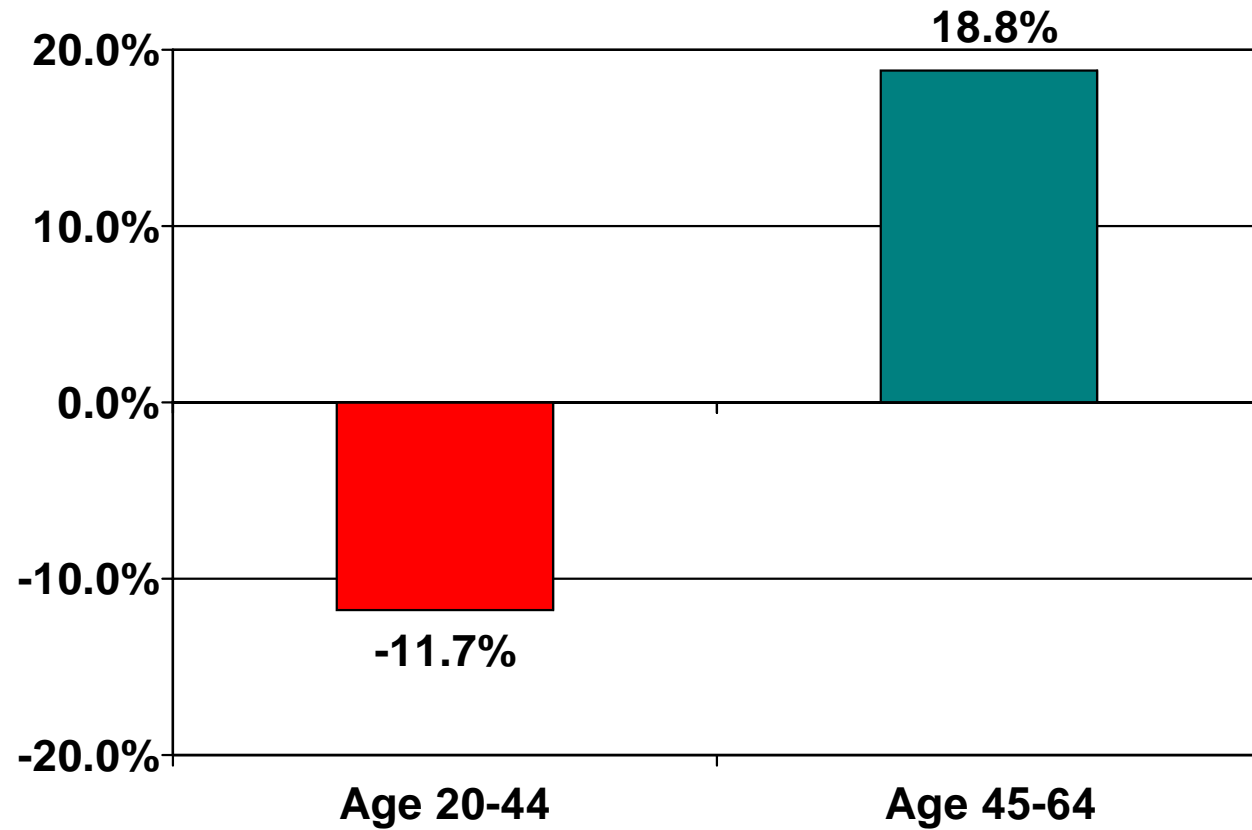
# Percentage Share of Health Expenditures in Canada 1992, 1997 and 2002 Forecast



Source: CIHI



## Shift in Working Population (2002 – 2012)

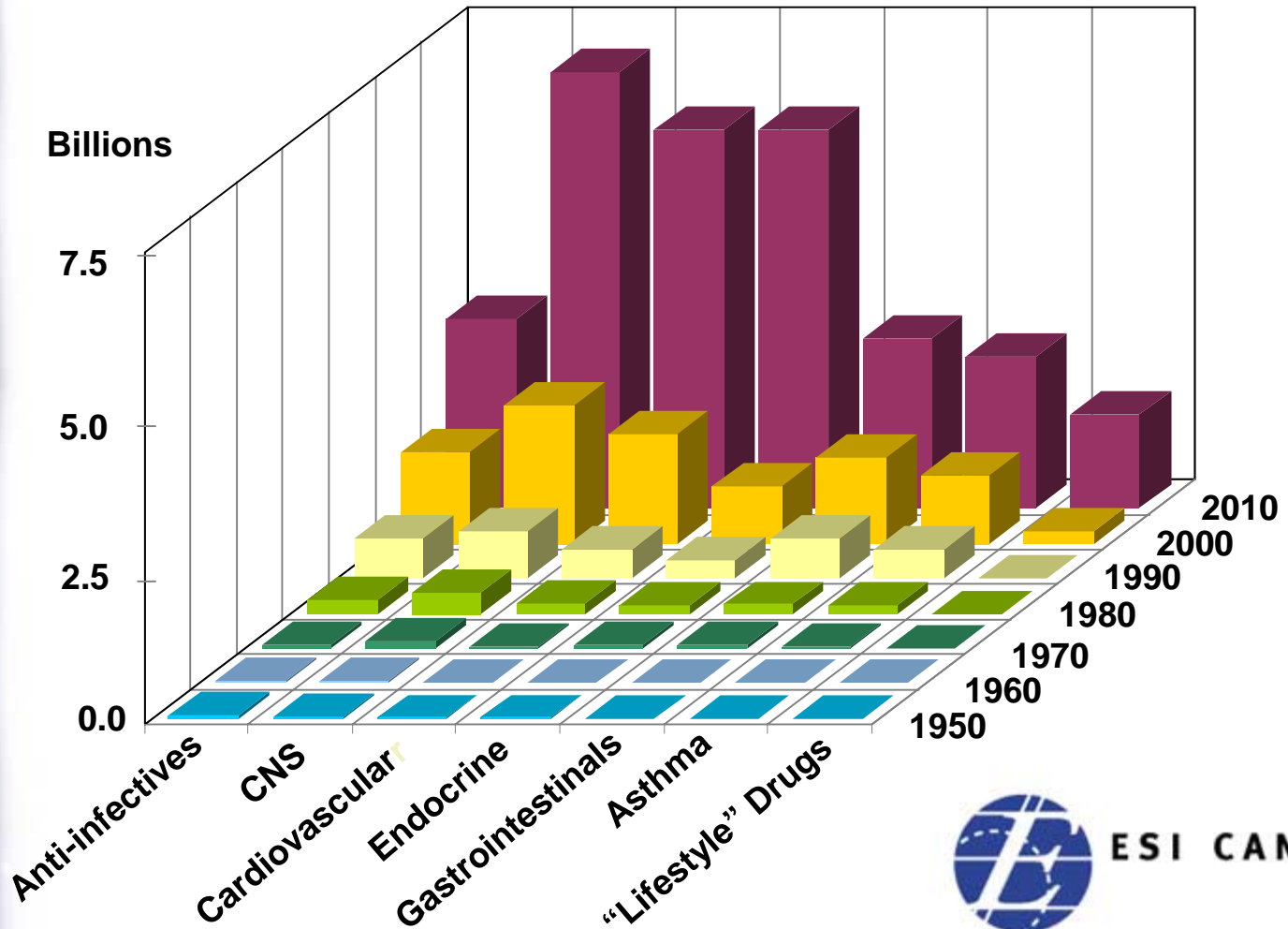


Source: Statistics Canada



## 1950-2010 Annual Drug Cost

# \$30 Billion



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# ESI Canada Drug Trends



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## What is Trend?

- **ESI Canada's use of "trend" differs from the group insurance industry's definition of "trend"**
- **One word — two concepts...**



## What is Trend?

- ESI Canada's "trend" looks back at how drug costs have changed from year to year
- Insurance industry's "trend" looks ahead to predict the price that should be charged to cover the cost of future health claims



## Terminology

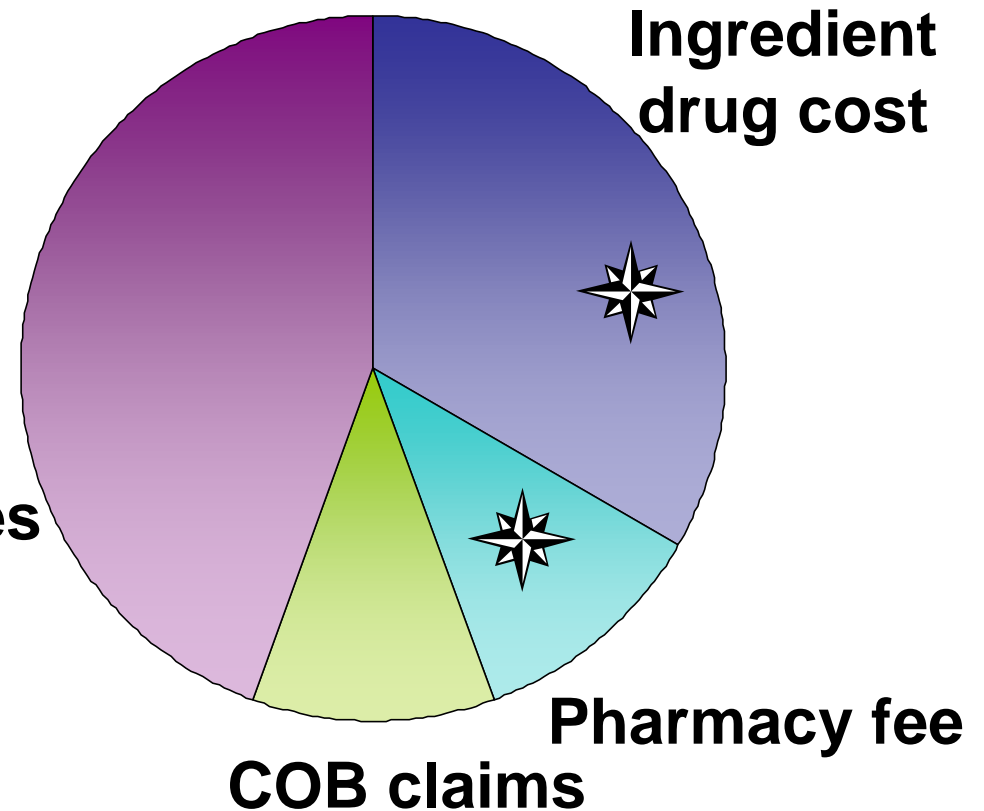
- **Allowable Costs =** amount payable before member contribution
- **Eligible Life =** certificate holder, spouse, dependent(s)  
(each represents one life)



## What are Prescription Cost Trends?

**All other health claims:**

- Paramedical
- Out of country
- Hospital
- Nursing
- Medical supplies



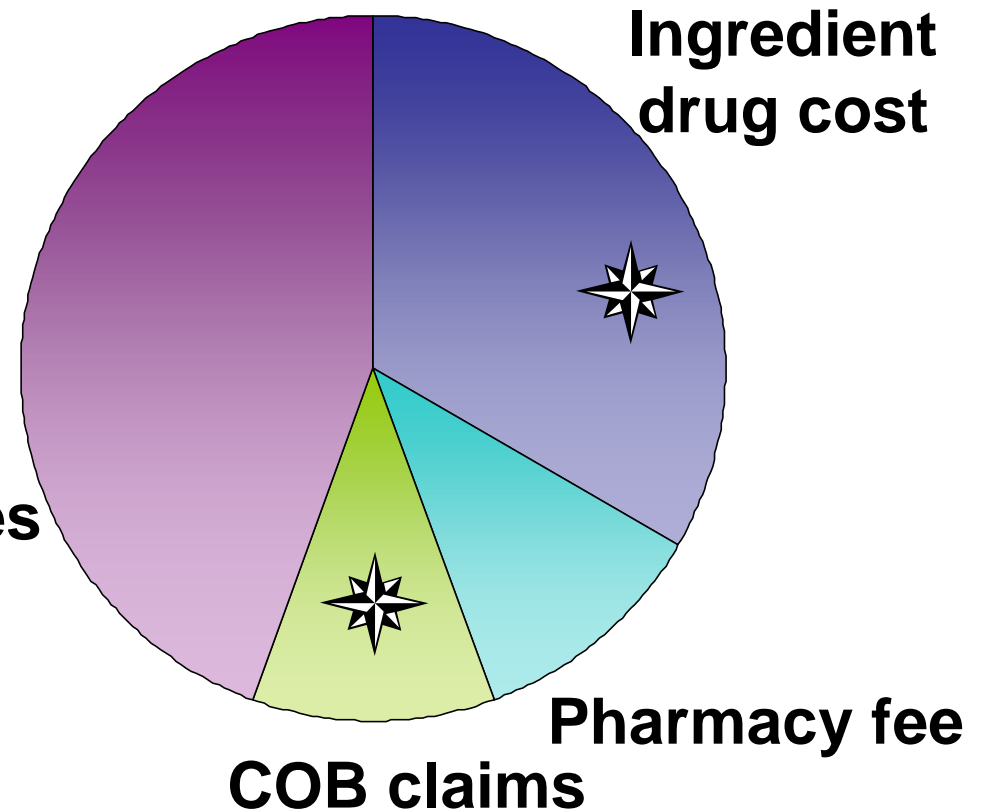
 = included in prescription trends



## What are Ingredient Cost Trends?

**All other health claims:**

- Paramedical
- Out of country
- Hospital
- Nursing
- Medical supplies



 = included in ingredient cost trends

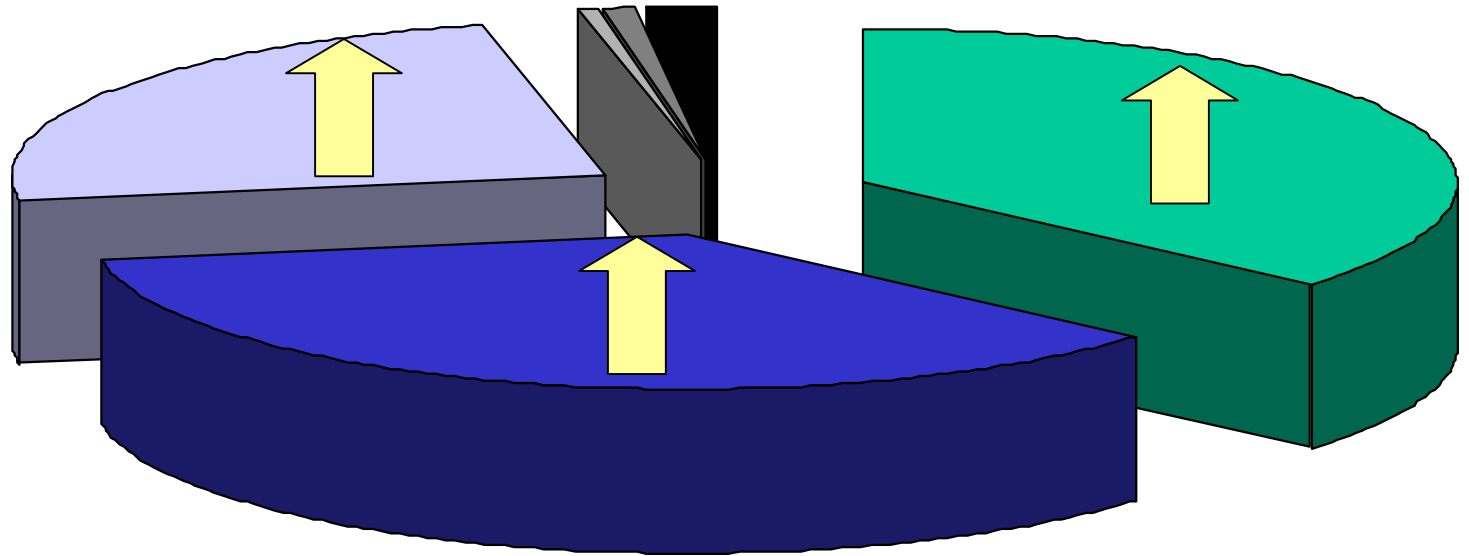


## Factors Affecting the Cost of Therapy

- **Biotechnology**
- **Computer assisted research**
- **New drugs**
- **Patent legislation**
- **Direct-to-consumer advertising**



# Drug Cost Drivers and Impact



- Utilization
- Therapeutic Mix
- New Drugs
- Strength Mix
- Units per Rx
- Inflation

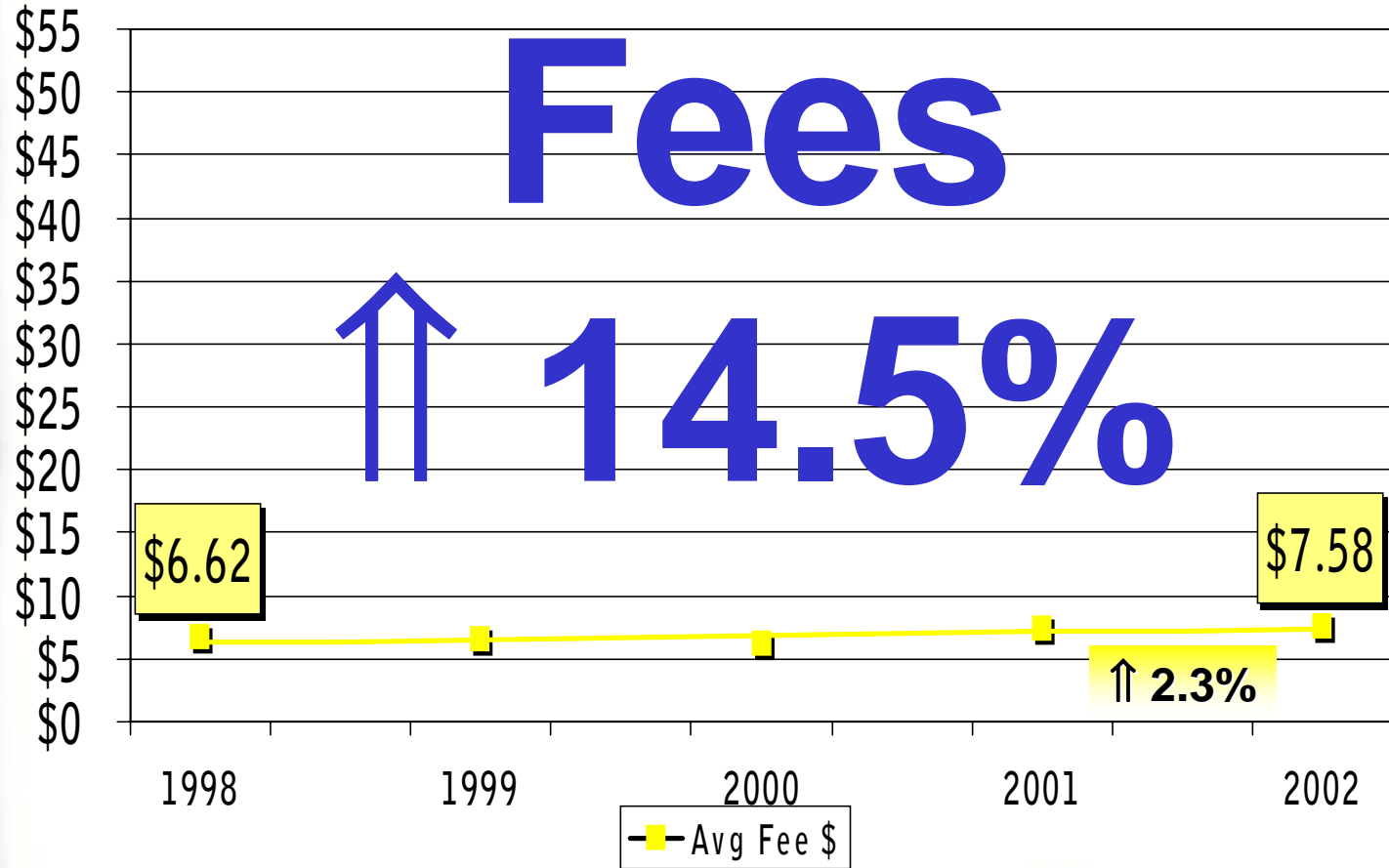
# Impact of Utilization



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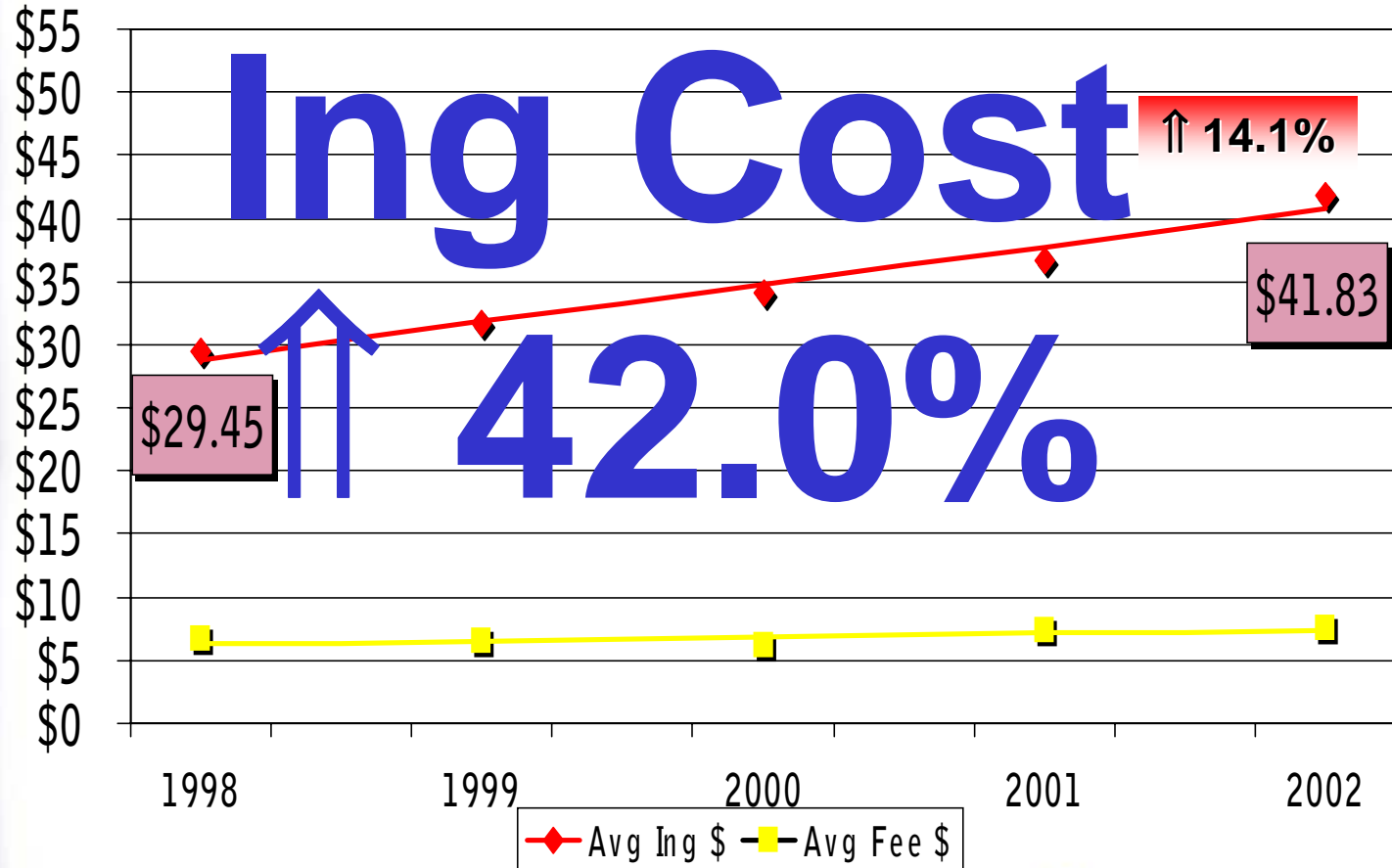


# Average Allowable Professional Fee Cost Per Prescription 1998 - 2002



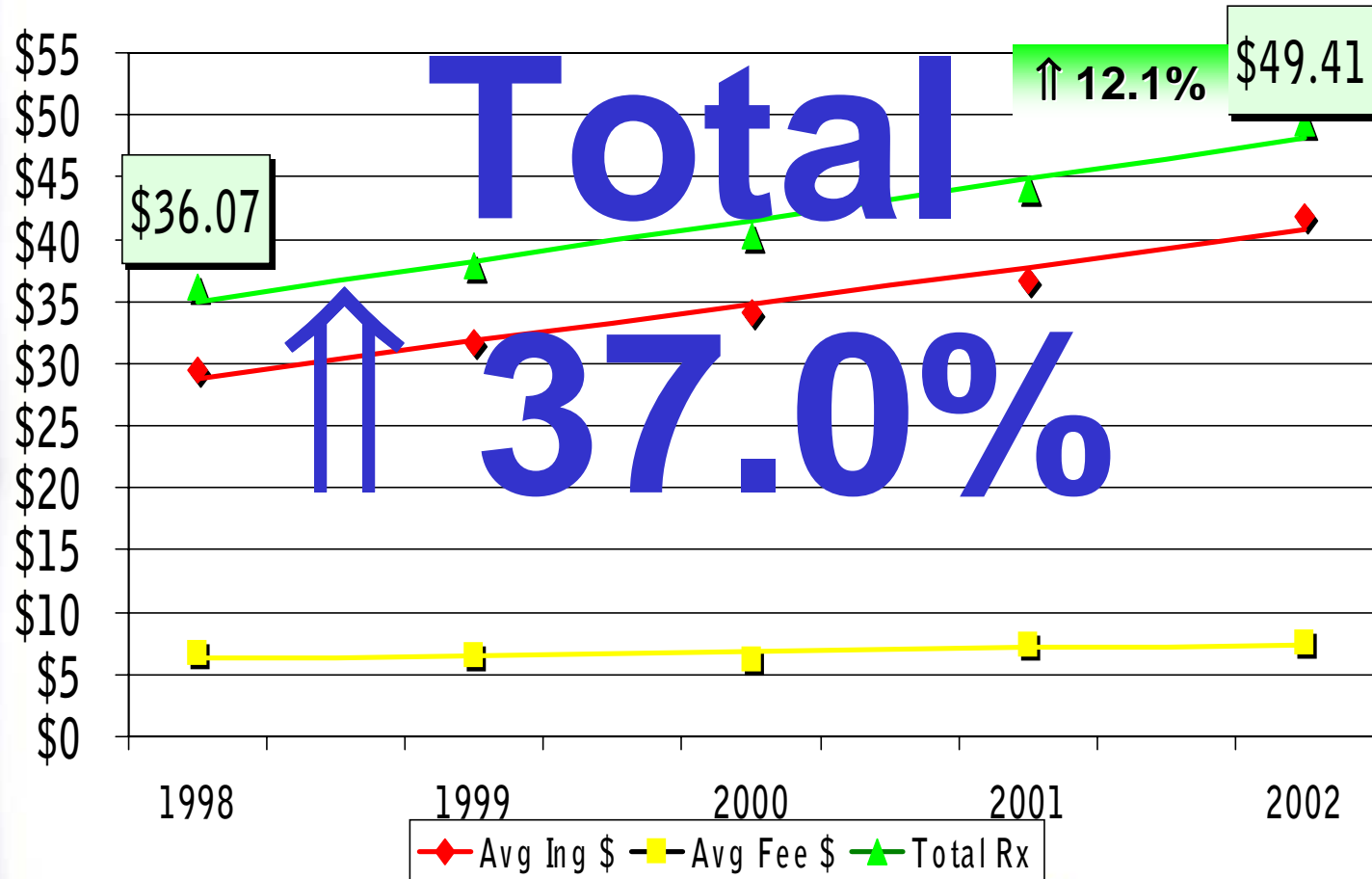


# Average Allowable Ingredient Cost Per Prescription 1998 - 2002



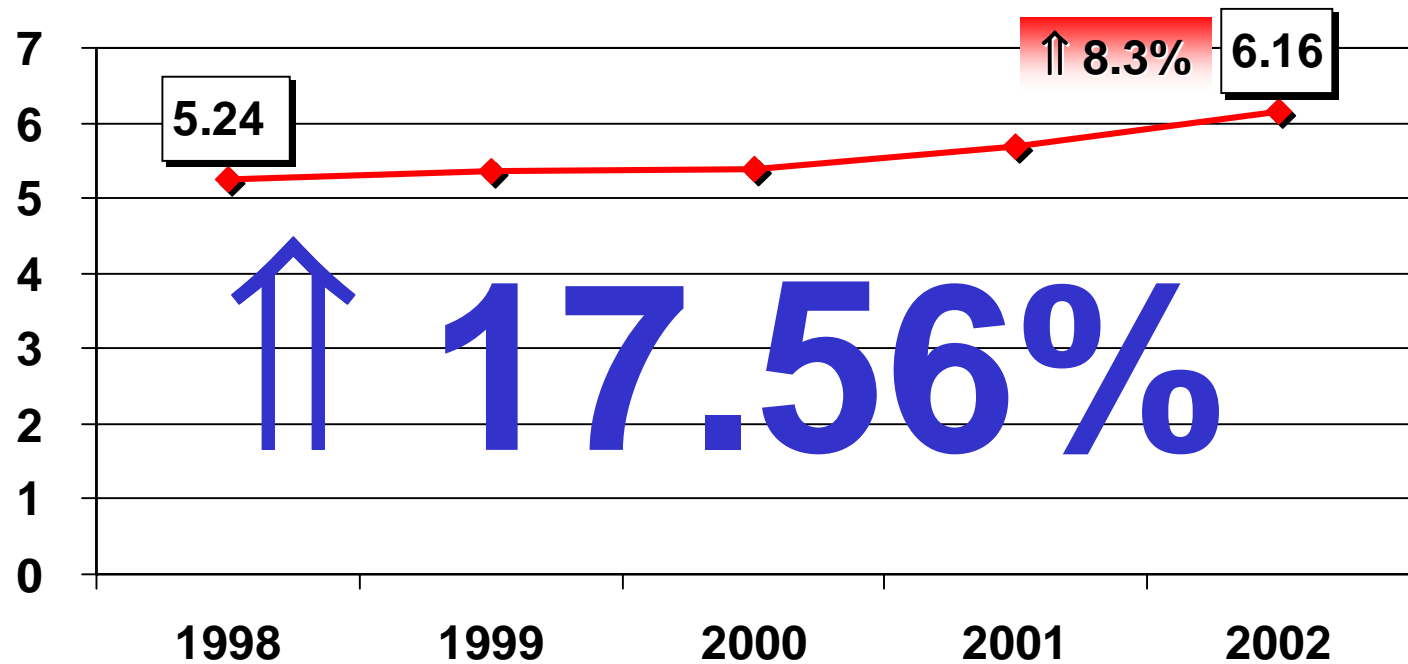


## Average Allowable Cost Per Prescription 1998 - 2002





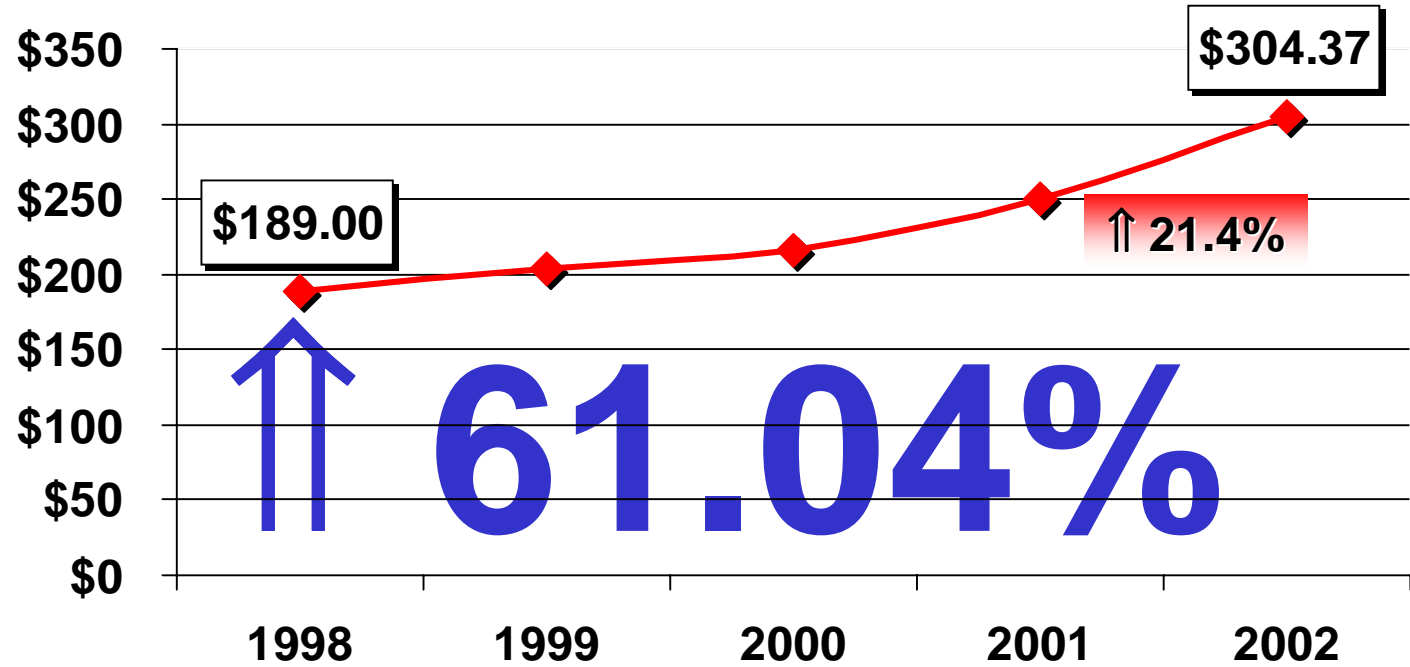
## Average Annual Prescriptions (Utilization)\* 1998 - 2002



\* Per eligible life



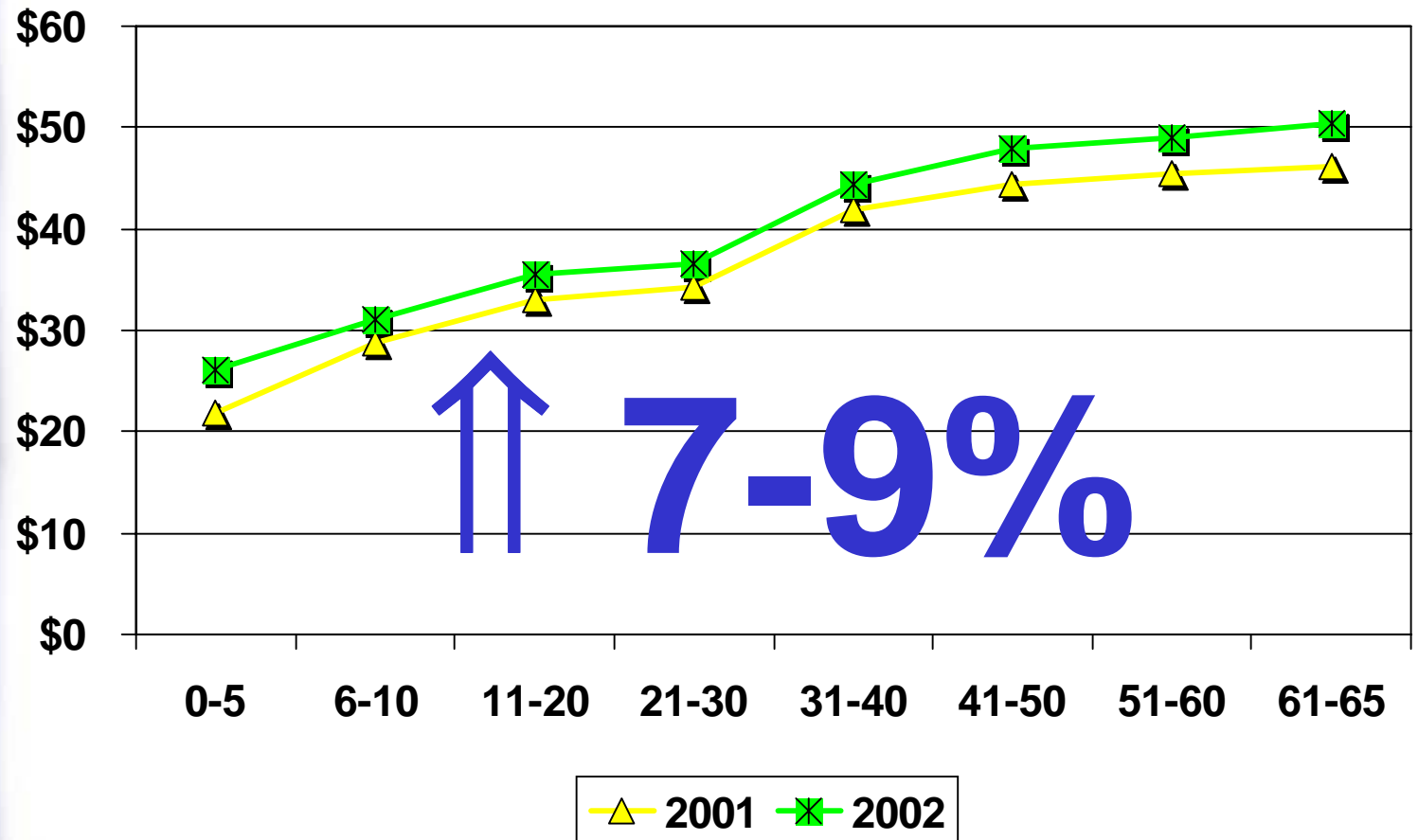
## Average Annual Prescription Cost\* 1998 - 2002



\* Per eligible life

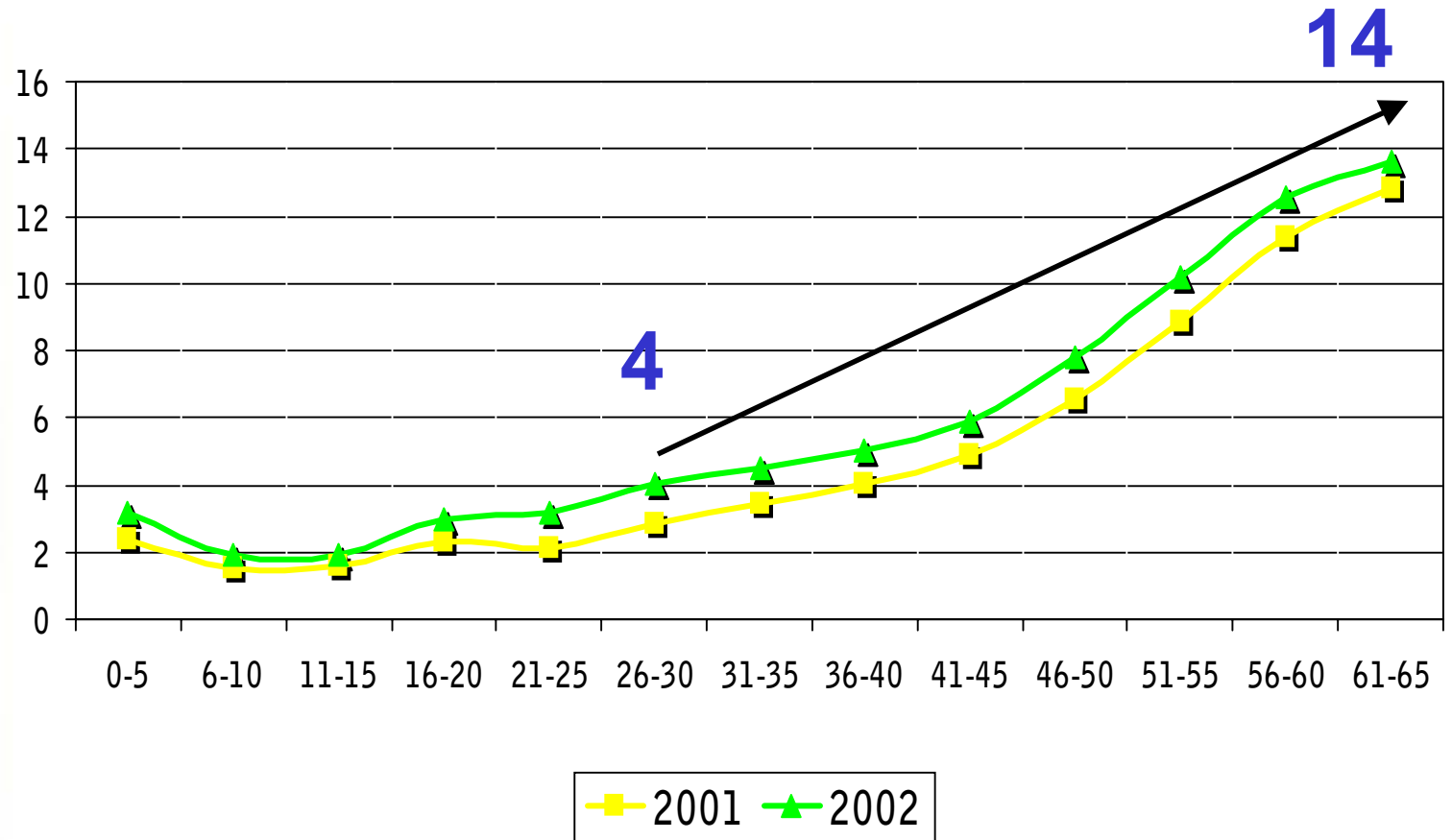


## Average Prescription Cost by Age Group 2001 - 2002





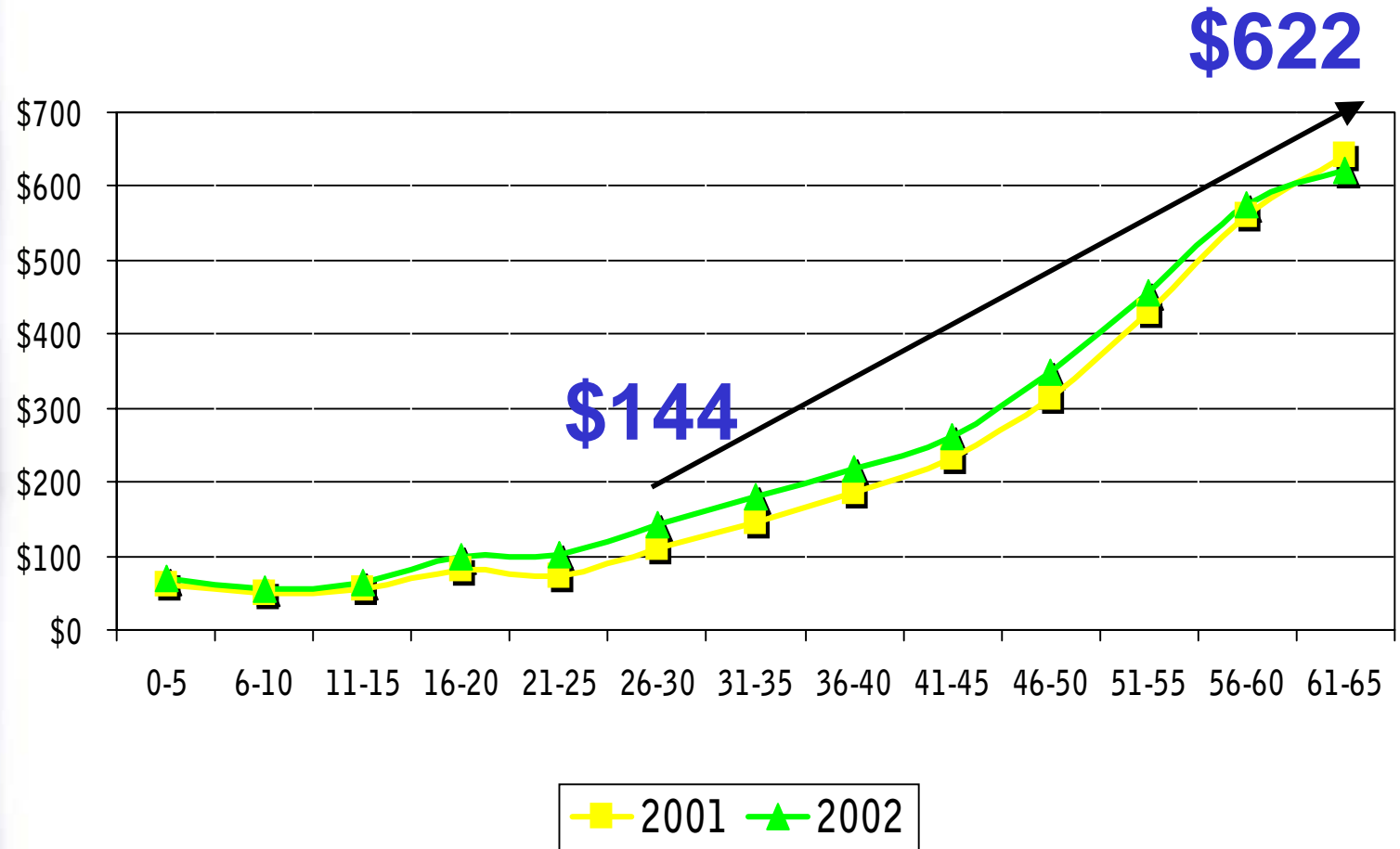
## Average Prescriptions by Age\* 2001 and 2002



\* Per eligible life



# Average Annual Prescription Cost by Age\* 2001 and 2002

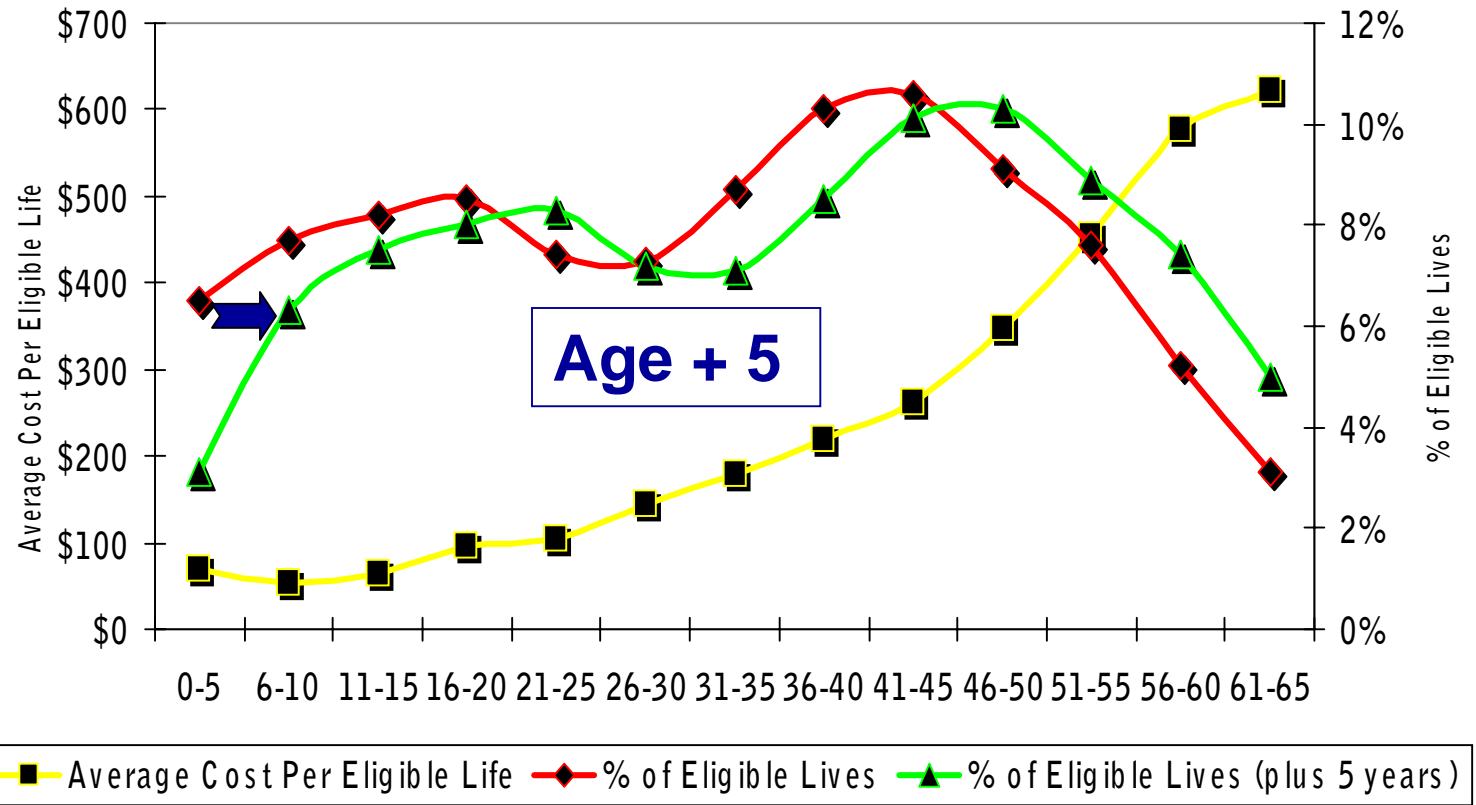


\* Per eligible life



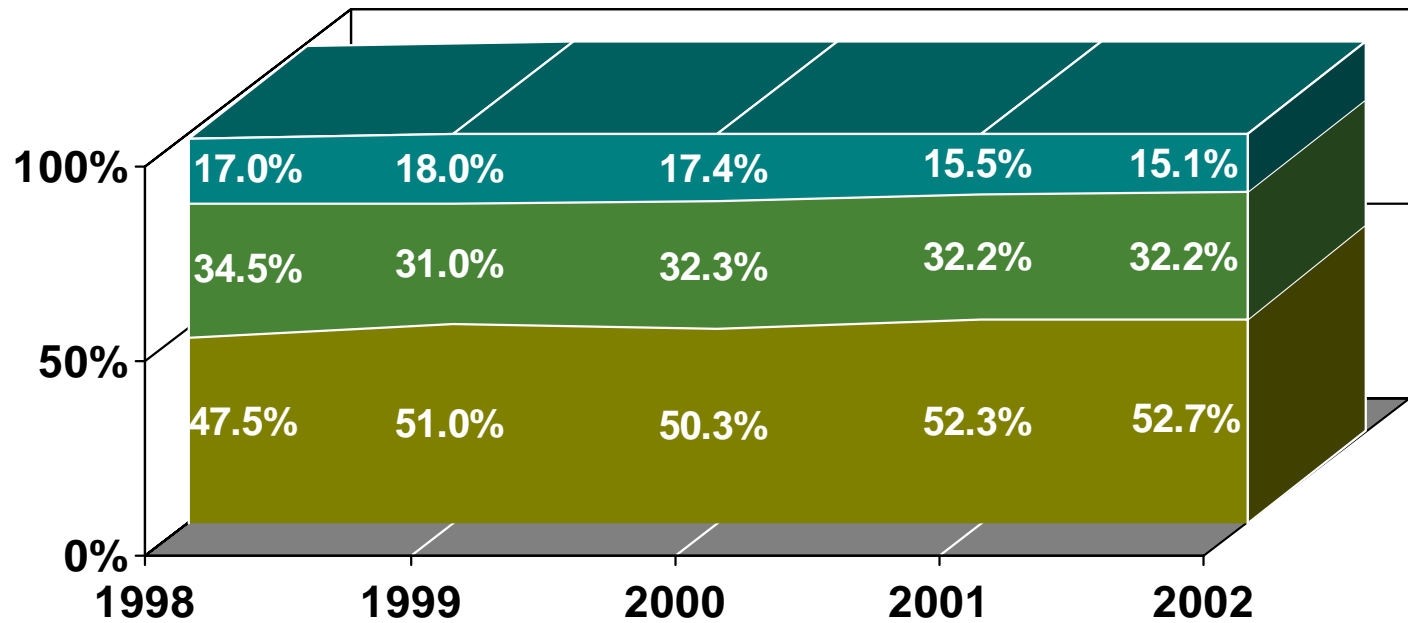
# Effect of Age on Drug Trend (2002)

## Total = ↑ 13.6%





## Utilization of Generic & Brand Drugs 1998 - 2002



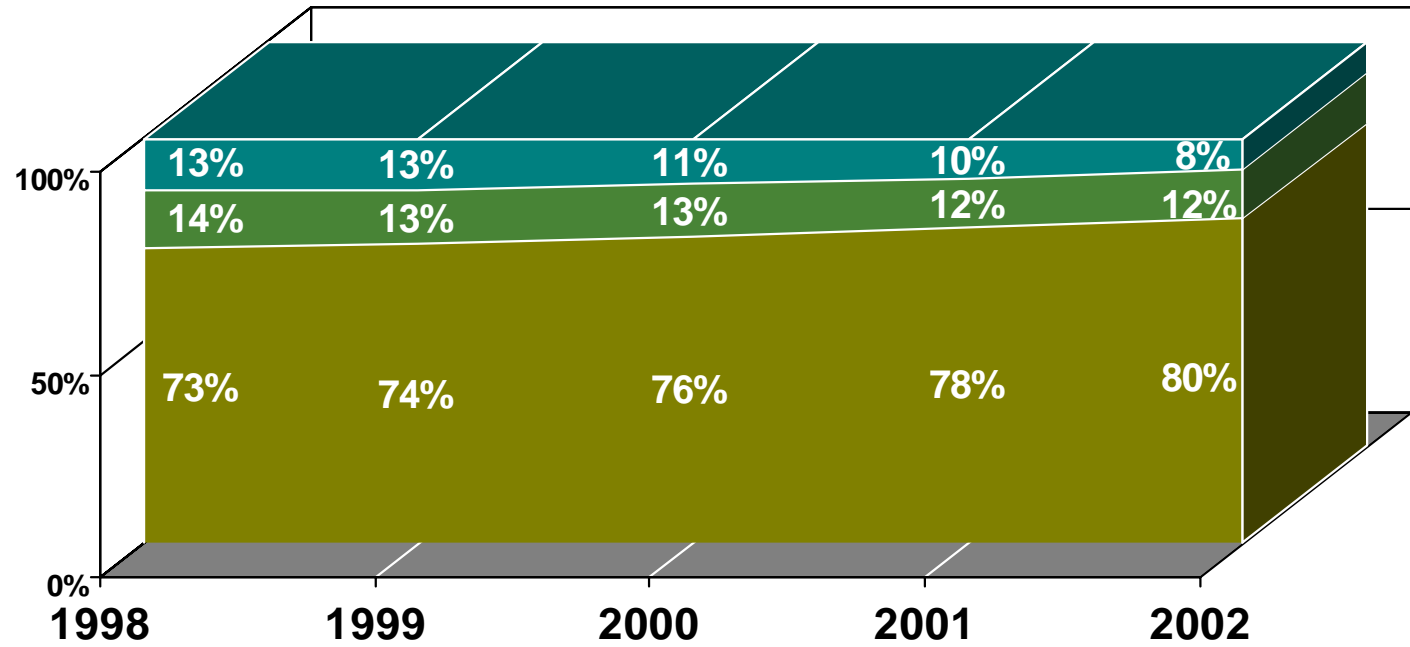
■ Single Source ■ Generic ■ Multisource



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# Ingredient Cost of Generic & Brand Drugs 1998 - 2002

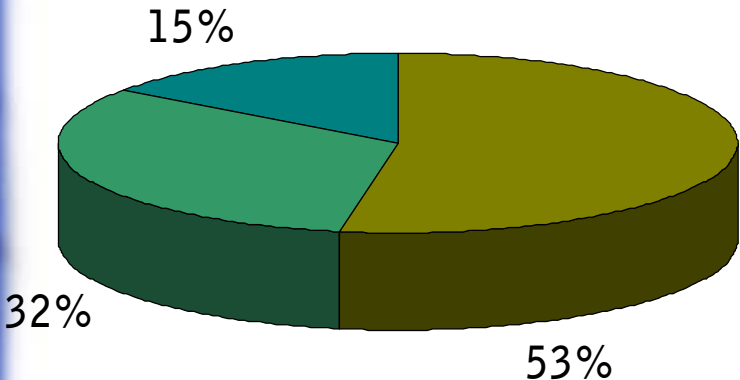


■ Single Source ■ Generic ■ Multisource

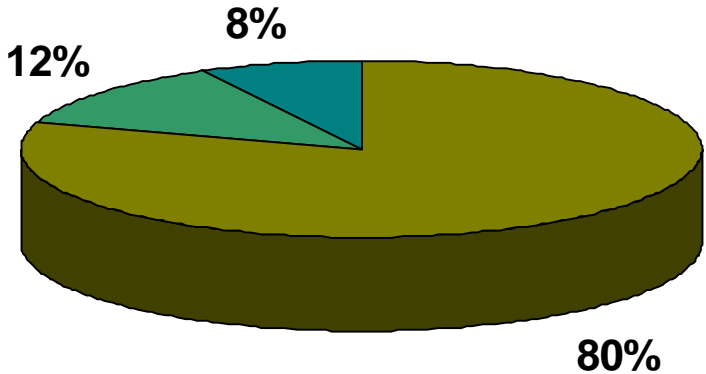
# Generic & Brand Drugs 2002



### Utilization



### Ingredient Cost



■ Single Source ■ Generic ■ Multisource

# Impact of New Drugs



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# New Drugs Approved by Health Canada 1998 - 2002

**Total = 145**

## New Drug Entities

2002

**25**

2001

**26**

2000

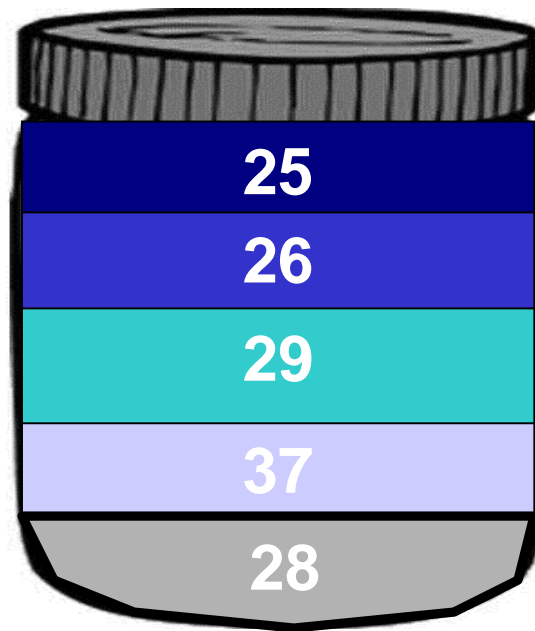
**29**

1999

**37**

1998

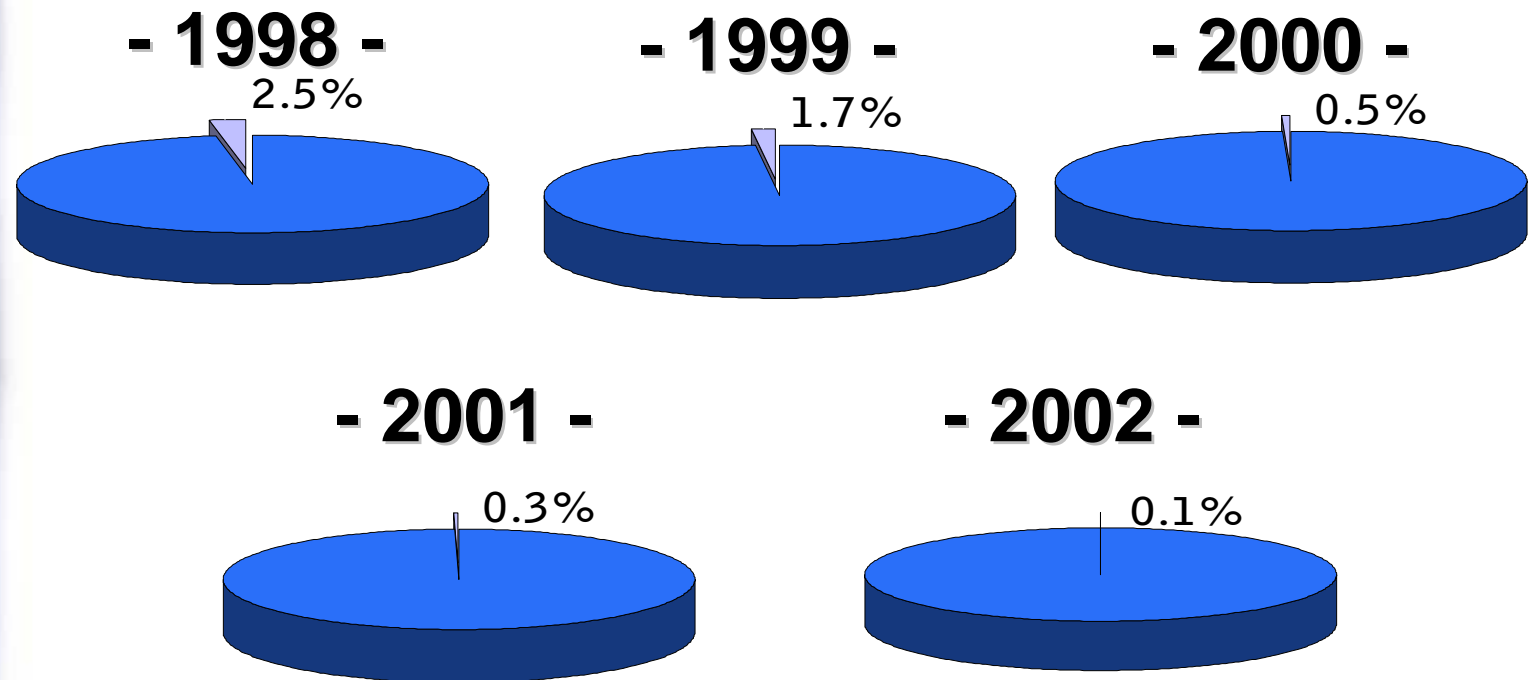
**28**



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## Share of Expenditures by Drug Type

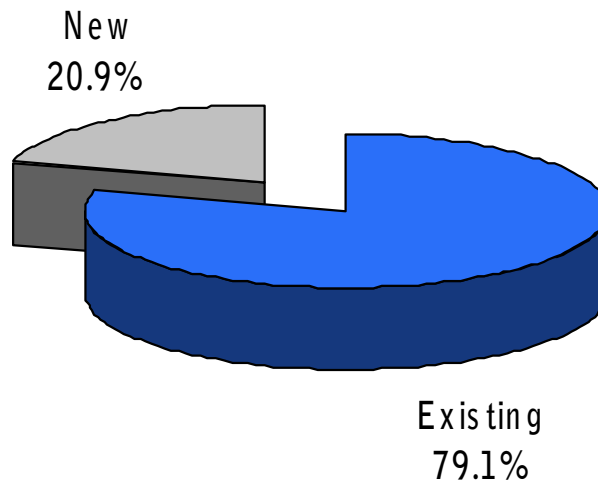


 New  Existing

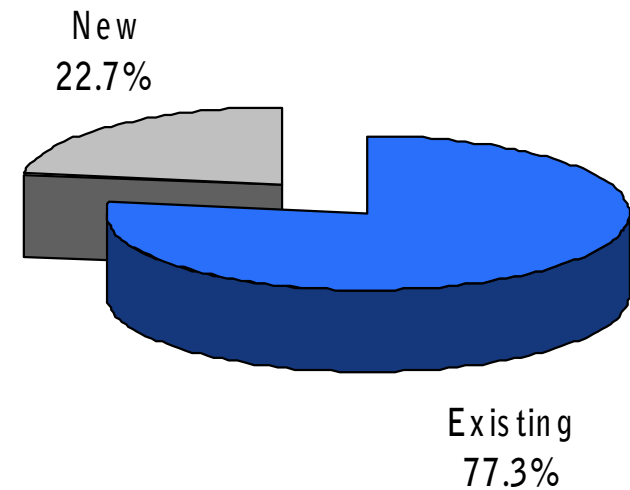


## Share of Expenditures of Drugs Introduced from 1997 - 2002

- 1997 to 2001 -



- 1997 to 2002 -





## Impact of Selected New Drugs Approved Since 1997 in 2002

Drug Approval Year	Primary Treatment	% of Rx's in Class	% of Cost in Class	% Drug Cost
Lipitor-1997	High Cholesterol	55%	59%	4.5%
Vioxx & Celebrex-1999	Arthritis & Pain	68%	70%	4.1%
Xenical-1999	Obesity & Diabetes	69%	79%	1.2%



## New Impact Drugs Receiving Health Canada Approval in 2002

### Drug

### Treatment

**New!**

- Zelnorm → IBS-Constipation
- Kineret → Rheumatoid arthritis

**Me Too!**

- Amaryl → Diabetes
- Androgel → Hypogonadism
- Starlix → Diabetes (new indication)
- Arixtra → Blood clots
- Aranesp → Chronic renal failure-anemia
- Evra → Contraception



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## Pipeline Drugs to Watch in the Next 24 Months

	<u>Drug</u>	<u>Treatment</u>
New!	• Zetia*	→ Cholesterol
	• Iressa	→ Cancer (solid tumours)
	• Ketek	→ Respiratory infections
	• Forteo*	→ Osteoporosis
	• Fuzeon	→ HIV/AIDS
Me Too!	• Cymbalta	→ Depression
	• Humira	→ Rheumatoid arthritis
	• Cialis, Levetra, Uprima	→ Erectile dysfunction

\* Approved in US-2002

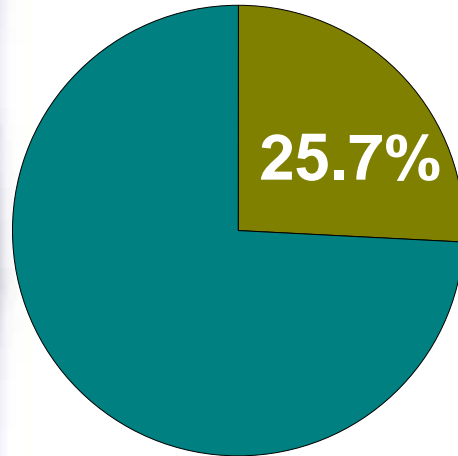
# Impact of Changes in Therapeutic Mix



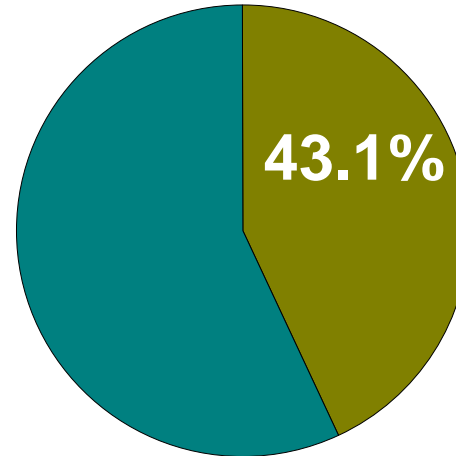


# Top 5 Therapeutic Classes by Percent of Total Drug Costs 1997-2004E

**1997**



**2002**



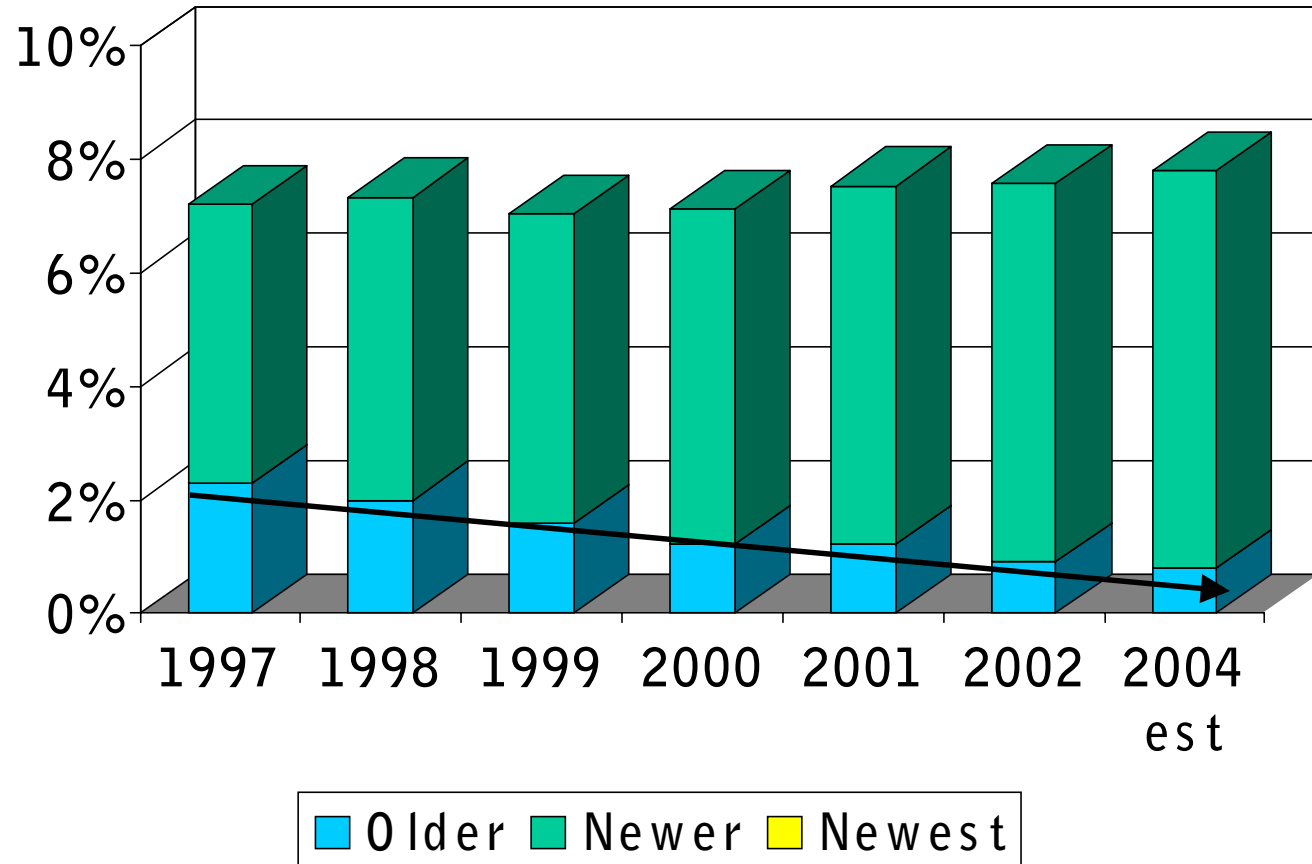
**2004E**

## Top 5 Therapy Classes

- Cholesterol lowering
- Ulcer/reflux
- Depression
- High blood pressure
- Arthritis



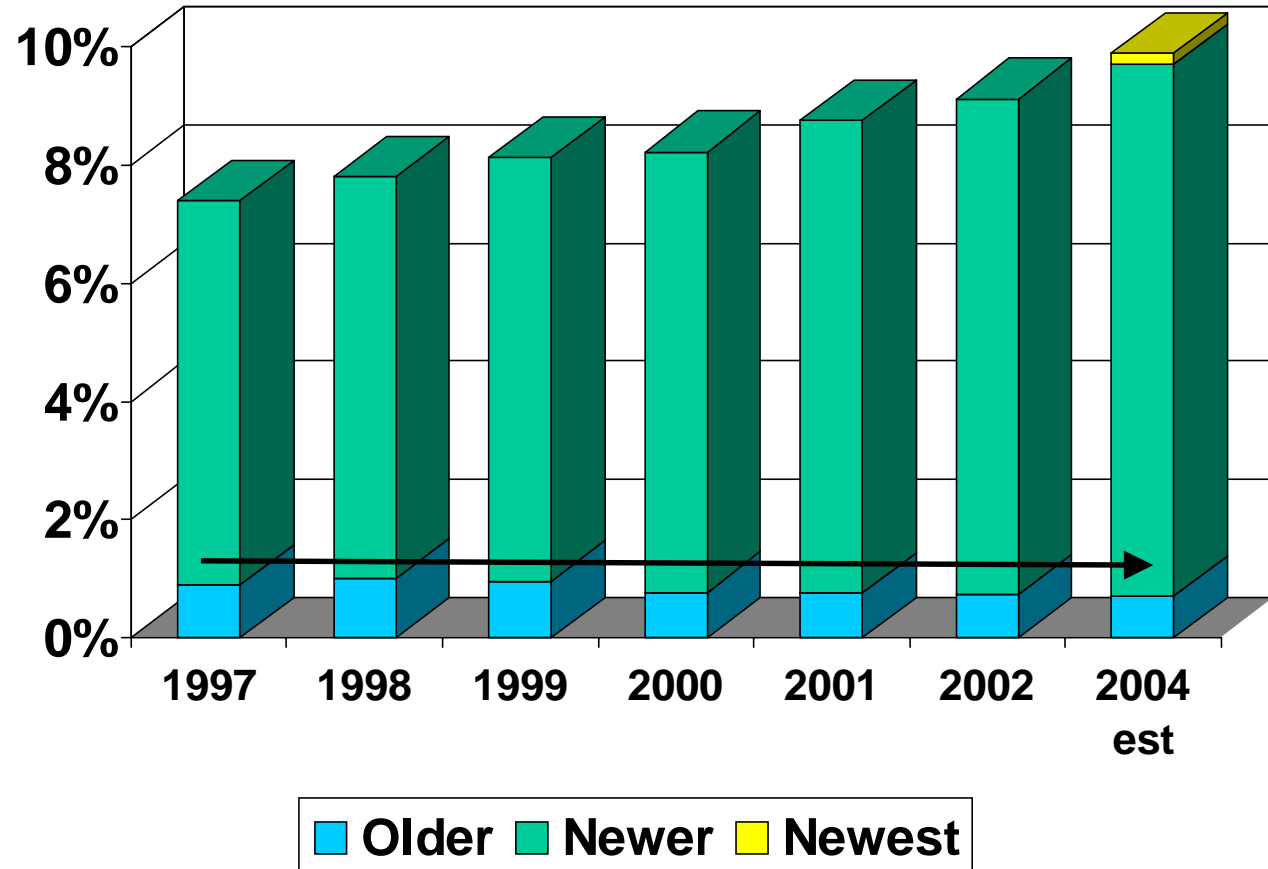
## Ulcer and Reflux Drugs by Percent of Total Drug Costs 1997-2004E



7.2% ⇒ 7.6% ⇒ 7.8%  
1997            2002            2004E



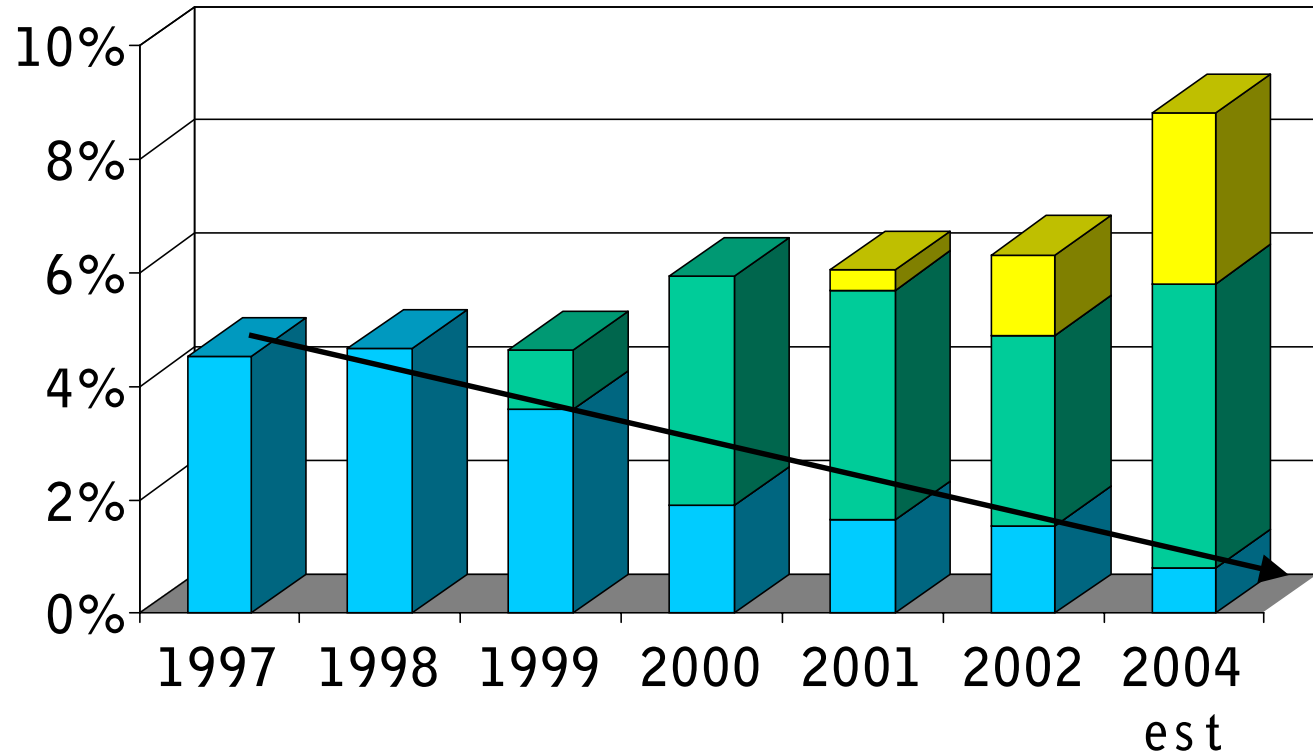
## Cholesterol Lowering Drugs by Percent of Total Drug Costs 1997-2004E



7.4 % ⇒ 9.1 % ⇒ 9.9%  
1997            2002            2004E



# Arthritis Drugs by Percent of Total Drug Costs 1997-2004E



Older Newer Newest

4.5 % ⇒ 6.3 % ⇒ 8.8%  
1997 2002 2004E

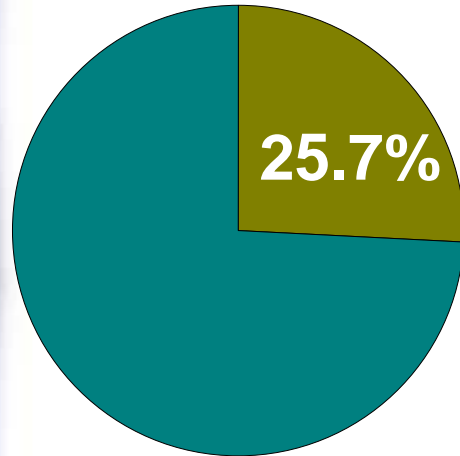


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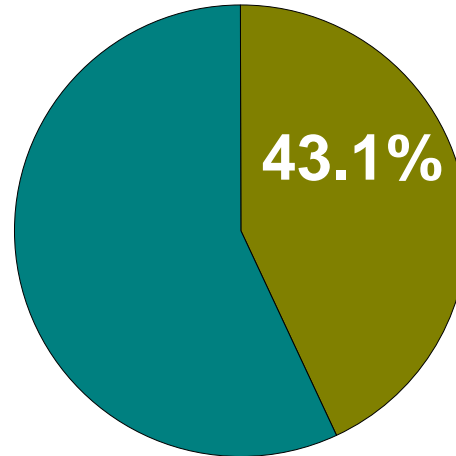


# Top 5 Therapeutic Classes by Percent of Total Drug Costs 1997-2004E

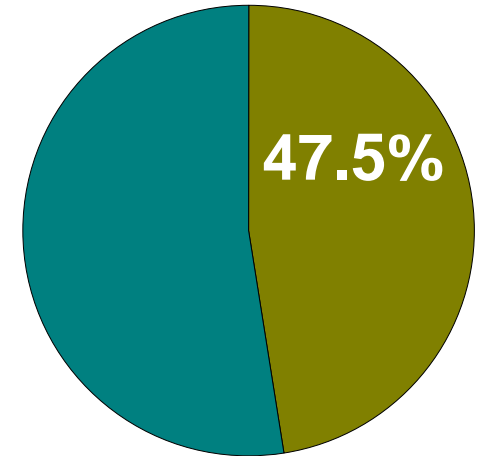
1997



2002



2004E



## Top 5 Therapy Classes

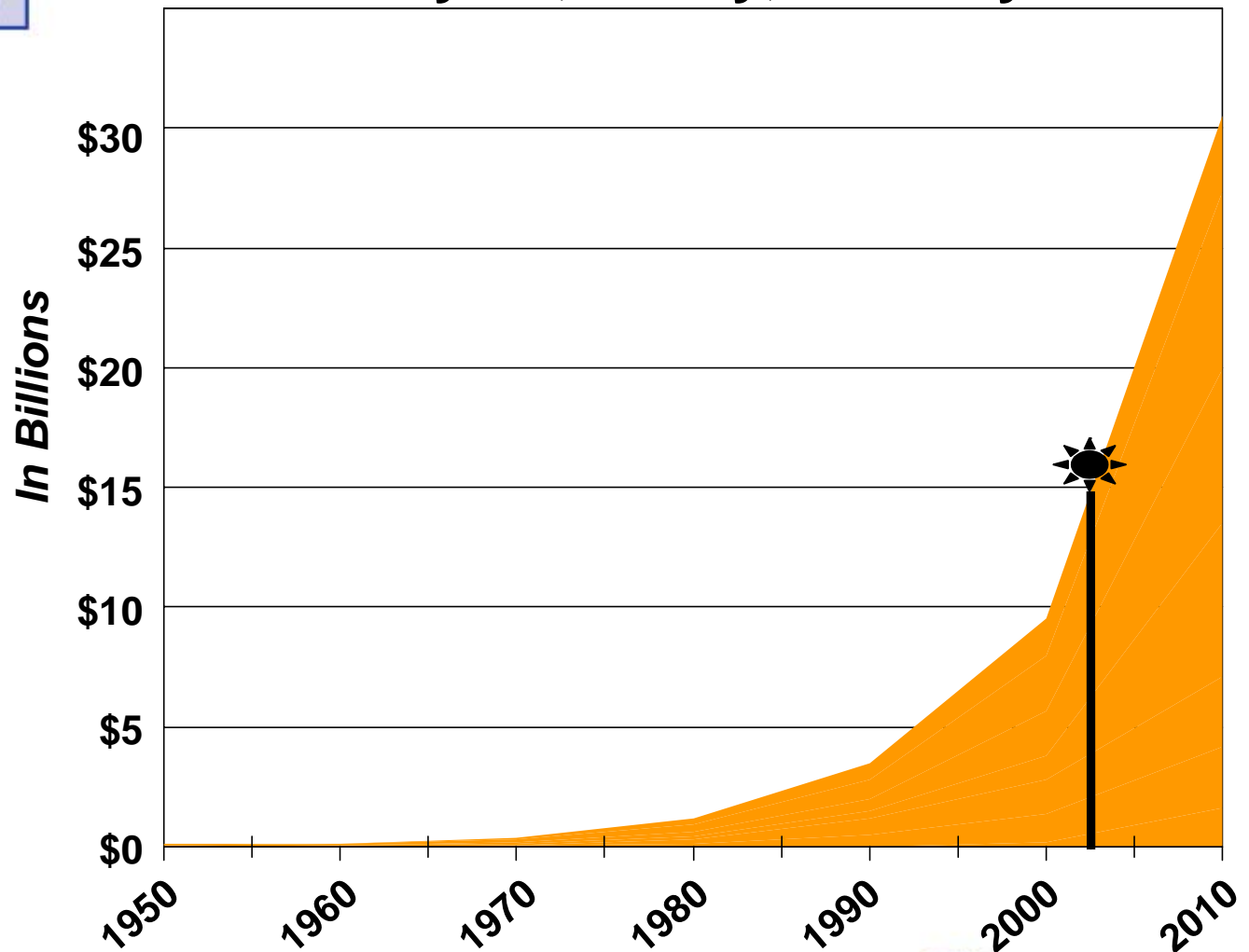
- Cholesterol lowering
- Ulcer/reflux
- Depression
- High blood pressure
- Arthritis



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# Drug Cost Growth Yesteryear, Today, and Beyond



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## How Does the Future Look?

- **Prescription drug costs are rising**
- **Utilization is a major factor in driving cost of drug plans**
- **New drugs will continue to increase cost of drug plans**



**Questions?**

