



# Prescription Drug Trends

a chartbook update

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# Prescription Drug Trends

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Sonderegger Research Center  
School of Pharmacy  
University of Wisconsin – Madison  
David H. Kreling, PHD  
David A. Mott, PHD  
Joseph B. Wiederholt, PHD

The Kaiser Family Foundation  
Janet Lundy  
Larry Levitt, MPP

November 2001



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## Introduction

*Prescription Drug Trends – A Chartbook Update*, November 2001, provides information about recent trends in prescription drug coverage, expenditures and prices, utilization, prescription drug promotion, and the pharmaceutical industry. The Chartbook also contains a Glossary and a list of Sources for Additional Information.

This Chartbook provides updated data for about half of the exhibits included in an earlier chartbook released last year by the Foundation, *Prescription Drug Trends – A Chartbook*, July 2000. The November 2001 Chartbook Update also includes several exhibits not in the 2000 Chartbook and a narrative description of each exhibit's data in the Highlights section.

Last year's chartbook, *Prescription Drug Trends – A Chartbook*, July 2000 (#3019), is available on the Foundation's web site at [www.kff.org](http://www.kff.org) or by calling the Foundation's Publication Request Line at 1-800-656-4533.



## Highlights

### Insurance Coverage for Prescription Drugs

- ▶ About 23% of the non-elderly population (those under age 65) lacked insurance coverage for prescription drugs in 1996, consisting mostly of those without any health insurance at all.
- Most non-elderly Americans have coverage primarily through employers (61%), followed by Medicaid (11%), and private non-group and other private coverage (4%) (Exhibit 1).
- Prescription drug coverage is typically a standard benefit for workers with employer-sponsored health insurance — 98% of covered workers had such coverage in 2001 (Kaiser Family Foundation/Health Research and Educational Trust). Rising costs have increasingly lead firms to provide financial incentives to encourage use of generic drugs and certain categories of preferred brand name drugs.
- The percent of the non-elderly population with prescription drug coverage is unlikely to have changed dramatically since 1996, since the percentage of uninsured people is similar to what it was then, and the vast majority of employer-provided health insurance plans continue to include drug coverage.

- ▶ The Medicare program does not cover outpatient prescription drugs. Among elderly and disabled Medicare beneficiaries, 27% lacked such coverage in 1998 (Exhibit 1).
  - Drug coverage for Medicare beneficiaries is obtained primarily through supplementary insurance from employers (i.e., retiree health benefits, 33%), followed by Medicare Risk HMOs (15%), Medicaid (12%), and individually purchased plans (10%) (Exhibit 1).
  - Prescription drug coverage of Medicare beneficiaries has likely declined somewhat since 1998 because existing sources of drug coverage are eroding. The share of Medicare+Choice (Medicare HMO) enrollees with prescription drug coverage declined from 84% in 1999 to 67% in 2001 (Centers for Medicare and Medicaid Services). Premiums for individually purchased Medicare supplemental policies (Medigap) that include some drug coverage increased 37% from 1998–2000 (Weiss Ratings, Inc.), making such policies increasingly unaffordable. Further, the percent of large employers offering retiree health benefits to those eligible for Medicare dropped from 30% in 1998 to 23% in 2001 (though employers may not eliminate coverage for current retirees) (Kaiser Family Foundation/Health Research and Educational Trust). Also, state Medicaid programs are seeking ways to control their prescription drug costs.
- ▶ The proportion of national prescription drug expenditures paid by insurance increased during the 1990s, shifting the burden of drug expenditures away from consumers to private and government insurance programs.
  - The proportion of prescription drug expenditures paid out-of-pocket by consumers declined during the 1990s from nearly two-thirds (59%) in 1990 to a projected one-third (34%) of all prescription spending for 2000. The decline in out-of-pocket spending represents a shift primarily to private insurance, which grew from 25% of expenditures in 1990 to a projected 44% of expenditures in 2000 (Exhibit 2).

- ▶ Insurance coverage not only influences what individuals pay for prescription drugs, but also may improve their access to drugs. Medicare beneficiaries with prescription drug coverage used an average of 24 prescriptions in 1998, compared to 17 for those without such coverage. For beneficiaries in poor health, the difference was greater (42 prescriptions with drug coverage compared to 27 without). For beneficiaries under the poverty threshold (in 1998, \$7,818 for singles 65+), those with coverage used twice as many drugs as those without (29 prescriptions compared to 15). Differences in use between covered and non-covered individuals may reflect increased access to drugs for those with insurance and/or may reflect adverse selection, where those with greater health care needs are more likely to obtain coverage (Exhibit 3).

### Expenditures for Prescription Drugs

- ▶ Overall health care expenditures for prescription drugs continue to escalate more rapidly than spending for hospital care and physician and clinical services.
  - Spending for prescription drugs was \$99.6 billion in 1999 and was projected to reach \$116.9 billion in 2000. The projection for 2000 is nearly double the amount spent in 1995, compared to about a one-third increase in expenditures for physician and clinical services, and about a one-fifth increase in hospital care (Exhibit 4).
  - The annual percent increases in spending for prescription drugs have been more than double those for hospital care and physician/clinical services since 1995. Except for 1996, the percent increase in expenditures for prescription drugs has grown each year since 1993, reaching a projected 17% increase in 2000 (Exhibit 5).
- ▶ Despite the growth in expenditures, prescription drugs remain a relatively small proportion of total personal health care expenditures, 10% projected for 2000, compared to 36% for hospital care and 25% for physician/clinical services (Exhibit 6).

- ▶ Although prescription drugs comprise a small proportion of total personal health care expenditures, increased spending for drugs has contributed significantly to changes in total health spending in recent years. The proportion of the change in total annual personal health care expenditures attributable to prescription drugs grew from 9% in 1990 to 26% in 1999 (dropping to a projected 20% in 2000) (Exhibit 7).
- ▶ Spending for prescription drugs by the Medicaid program (the federal-state health coverage program for certain low-income Americans) has been growing faster than Medicaid spending for other services (14.8% average annual growth during the 1990–1998 period, compared to 11.1% for other acute care, and 9.1% for long-term care). During the most recent period for which data are available (1995–1998), the average annual growth for prescription drugs (14.8%) was 6 times that for other acute care (2.4%) and more than twice that for long-term care (6.5%) (Exhibit 8).
  - The average drug expenditure per Medicaid enrollee was \$358 in 1998. More than three-quarters of Medicaid prescription drug expenditures were spent for the blind and disabled (55%; \$1,133 per enrollee) and for the aged (25%; \$893 per enrollee). Smaller proportions were spent on children (12%; \$81 per enrollee) and adults (8%; \$142 per enrollee) (Exhibit 9).
- ▶ Overall spending by and for Medicare beneficiaries is estimated to more than triple over the next decade, rising from \$71 billion in 2001 to \$228 billion in 2011 (Exhibit 10).
- ▶ Employers often point to prescription drug spending as a major factor driving growth in health plan premiums. For companies that cover prescription drugs in a separate plan (“carve-out”), the cost of prescription drug coverage rose an average of 15.5% in 2001, a rate substantially higher than the overall employer health plan premium increase of 11.0% (Kaiser Family Foundation/Health Research and Educational Trust).



### Consumer Spending for Drugs

- ▶ Prescription drugs represent a relatively small part of total consumer household spending — 1% in 1999, in part because three-quarters of the population has insurance coverage for drugs (Exhibit 11).
- ▶ However, the amount and percent of total household consumer spending for prescription drugs increases with age. In 1999, seniors (age 65+) spent an average of \$706 for prescription drugs (2.7% of their household spending), which was nearly double the \$370 average spent by all consumers (1.0% of household spending) (Exhibit 12).

### Prescription Drug Prices

- ▶ The average price of a prescription continues to increase, fueled by increases in manufacturer prices for existing drugs and by proportionately higher prices for newer, brand name drugs. Manufacturer price increases in recent years have been higher than in the mid-1990s.
- The overall average retail prescription price was \$45.79 in 2000, more than double the average price in 1990 (\$22.06) (Exhibit 13). Increases in average retail prices reflect both price increases for existing drugs and shifts in use to newer, more expensive medicines.
- The average retail price of a prescription for a brand name drug was more than 3 times that of a generic drug in 2000 (\$65.29 compared to \$19.33). This price differential between average brand and generic prescription prices has increased over time, from slightly less than 2.9 times in 1996 to 3.4 times in 2000 (Exhibit 13).

- ▶ The average retail prescription price increased more than 3 times the rate of general inflation (CPI-all items) and more than twice the CPI for medical care from 1998 to 2000 (9.2% compared to 2.8% and 3.8%, respectively). The average annual percent increase in retail prescription prices from 1998 to 2000 was 30% higher than the increase from 1991 to 1998 (Exhibit 14).
- ▶ Price inflation in the form of manufacturer price increases for existing drugs decreased in the mid-1990s, but recently increased from 1.6% in 1996 to 3.9% in 2000 (Exhibit 15). However, since 1993, manufacturer price inflation for existing drugs has remained low relative to increases in prescription expenditures overall (17.4% in 2000, Exhibit 5) or average retail prescription prices (7.9% in 2000, Exhibit 23), which reflects shifts in use to newer, more expensive drugs.

### Prescription Utilization

- ▶ Prescription use continues to show steady growth. A variety of factors influence this growth, including increased availability of and dependence on medications for treatments, increases in promotion of prescription drugs by pharmaceutical manufacturers, improved access to drugs through insurance coverage for prescriptions, and an aging population.
  - The number of prescriptions dispensed in retail pharmacies has grown at an average annual rate of 6.0% since 1992, reaching almost 3.0 billion prescriptions in 2000 (Exhibit 16). This compares to only a 1.4% growth in the population for the same time period.
  - Prescriptions dispensed per capita have increased by almost half in the past 8 years, from 7.3 prescriptions per capita in 1992 to 10.8 in 2000 (Exhibit 16).

## Prescription Drug Promotion

- ▶ Promotion for prescription drugs by pharmaceutical manufacturers has continued to grow, reaching nearly \$16 billion in 2000. Spending on traditional forms of promotion, such as “detailing” (the personal selling activities of pharmaceutical manufacturer sales representatives, directed mainly at office-based physicians) and “sampling” (leaving drug samples at sales visits), both continue to increase. But growth has been most rapid for a more recent form of promotion, direct-to-consumer (DTC) advertising.
  - Total promotional spending by pharmaceutical manufacturers for prescription drugs grew at an average annual rate of 14% from 1996 to 2000, more than a 70% increase in total promotional spending since 1996 (Exhibit 17).
  - The average annual growth rate in DTC advertising spending was 33% between 1996 and 2000, compared to a 14% growth rate for total promotional spending during the same period. In 2000, spending for DTC advertising (\$2.5 billion) comprised 16% of total promotional spending, up from 9% in 1996. However, the major expenditures for promoting prescription drugs continue to be detailing (with spending approximately twice that for DTC promotion) and sampling (which, when valued at retail value, is more than triple the amount of DTC spending) (Exhibit 17).
- ▶ Spending for television advertising (nearly \$1.6 billion in 2000) has been an increasing proportion of DTC advertising, rising from 13% in 1994 to 64% of total DTC spending in 2000. TV advertising has grown more rapidly than other forms of DTC advertising: the average annual percent increase in TV advertising spending was 88% from 1994–2000, compared to 25% for print and other forms of DTC promotion (Exhibit 18).
- ▶ The top 10 drugs ranked by DTC advertising spending accounted for about 38% of all DTC spending in 2000. Six of the top 10 DTC spending products also were among the top 20 drugs ranked by number of prescriptions dispensed (Exhibit 19).

### Types of Drugs Used

- ▶ Newer, typically more expensive brand name drugs are continually replacing older, less costly drugs as new products are adopted for use. Some products achieve sales and prescription volume dominance relatively rapidly after they are introduced. And, some drugs retain considerable prescription volume market position even after patent expiration, generally as the generic version of the drug.
  - All of the top 20 drugs ranked by dollar sales in 2000 were brand name drugs; two were brand name drugs where generic versions were also available. These top 20 prescription drugs represented 29.2% of total sales for the year. Two drugs in the same therapeutic category, Celebrex and Vioxx (anti-inflammatory drugs, often used for arthritis), were among the top 20 drugs ranked by sales in 2000 although they had been on the market only since 1999. Eight of the top 20 drugs had been on the market 6 or fewer years (since 1995) (Exhibit 20).
  - Most of the top 20 drugs ranked by number of prescriptions dispensed in 2000 were brand name drugs as well; 3 were generic drugs. The top 20 prescription drugs represented 19.3% of total prescriptions dispensed (Exhibit 21).
- ▶ Despite efforts by policymakers and health plans to expand use of generic drugs, the share of prescriptions dispensed as generic drugs has remained relatively steady since 1996 (at about 42%). And, the share of annual retail prescription sales (in dollars) for generic drugs has declined from 20.5% in 1996 to 17.8% in 2000 (Exhibit 22). This trend is consistent with the faster growing average retail price of prescriptions for brand name drugs compared to generic drugs (Exhibit 14).

- ▶ Since 1994, increases in the average price of a prescription have been due more to changes in the types of drugs used than price increases by manufacturers for existing drugs. The higher annual increases in average retail prescription prices (which include both new and existing drugs) compared to manufacturer price increases for existing drugs (7.9% compared to 3.9% in 2000) reflect the impact of changes in use to newer, more expensive drugs (Exhibit 23).
- ▶ New drugs become available through research and development (R&D) activities. Expenditures by U.S. pharmaceutical manufacturers for prescription drug R&D are expected to more than triple from \$8.4 billion in 1990 to a projected \$30.5 billion in 2001 (Exhibit 24). However, as a percent of sales of prescription drugs by manufacturers, R&D has fluctuated somewhat but has remained relatively stable (14.4% in 1990 compared to a projected 17.1% for 2001) (Exhibit 25).

### **Factors Contributing to Prescription Expenditure Growth**

- ▶ Increased utilization (the number of prescriptions dispensed), changes in the types of drugs used (from older, less expensive drugs to newer, higher cost drugs), and manufacturer price inflation for existing drugs all contribute to increased expenditures for prescription drugs. Though price increases for existing drugs are not the dominant factor, their effect has grown in recent years.
  - Increased utilization was the major contributor to the growth in prescription expenditures, responsible for about half (48%) of the increase in prescription drug expenditures for both the 1993-1997 and 1997-2000 periods. Changes in the types of prescriptions used made a lesser contribution, with its impact declining in the more recent period from 33% in 1993-1997 to 28% in 1997-2000. Manufacturer price increases for existing drugs played the smallest role, though its contribution rose in the more recent period from 19% in 1993-1997 to 24% in 1997-2000 (Exhibit 26).

- The average annual percent increases in each of these 3 factors (utilization, types of prescriptions, and price inflation) were higher in the latter period (1997–2000 compared to 1993–1997) (Exhibit 26).
- ▶ Top-selling products consistently contribute to overall expenditure increases, and some products contribute to increases for multiple years.
- New drugs contributed markedly to the growth in sales between 1999 and 2000. For example, in their first full year on the market, Vioxx and Celebrex provided nearly 10% of the growth in total prescription sales during 2000 (Exhibit 27). Their success in achieving sales likely is due in part to their relatively high prices (the average cost of a Celebrex and Vioxx prescription was \$87 and \$74, respectively, compared to the \$65 average retail price for a brand name prescription in 2000) and also to heavy promotion (Exhibit 19).
- A small number of drugs often contribute the bulk of sales growth in a year. For example, the top 5 drugs have contributed a combined total of between 19% and 34% to overall prescription sales growth since 1996. Several products have been among the top 5 contributors to sales growth for several years, notably Prilosec, Lipitor, and Prevacid (Exhibit 28).

### **The Pharmaceutical Industry**

- ▶ Mergers and acquisitions have contributed to changes recently in the rankings of top pharmaceutical firms and concentration in the industry.
- The top 20 major pharmaceutical firms by sales of prescription drugs represented approximately 82% of all prescription sales in 2000, and the top 10 alone contributed 61%. The biggest changes in the ranking of firms by sales are related to recent mergers/acquisitions in the industry, notably Pfizer (Pfizer acquired Warner-Lambert), GlaxoSmithKline (Glaxo Wellcome merged with SmithKlineBeecham), and Pharmacia (Pharmacia & Upjohn merged with Searle/Monsanto) (Exhibit 29).

- ▶ When examined on the basis of their overall business (e.g., including prescription drug, veterinary, diagnostic, health care supplies, etc.), major pharmaceutical manufacturers spent more than twice as much on marketing and administrative activities as on research and development (R&D) (34% compared to 14%). Profits also exceeded R&D (24% compared to 14%), and the cost of producing drugs were one-quarter of total revenues in 2000 (Exhibit 30).
- ▶ Comparing generic pharmaceutical manufacturers to the major pharmaceutical manufacturers, the generic firms spent proportionally less of their revenues on R&D (6% compared to 14%), achieved lower profits (17% compared to 24%), and they spent twice as much of their revenues on the costs of production (50% compared to 25%) (Exhibit 30).
- ▶ Between 1990 and 2000, the percent of overall revenues that major pharmaceutical manufacturers spent on production costs declined somewhat from 29.6% to 24.9%, and the percent for R&D increased from 10.9% to 13.7%. The proportion of revenues for marketing and administrative expenses remained nearly constant (about 34%), while profits fluctuated but with little net change over the decade (from 24.8% to 23.6%) (Exhibit 31).
- ▶ Compared to other industries, the pharmaceutical sector continues to earn the highest profit rates. Profits as a percent of revenues for the pharmaceutical industry have been more than four times the median rate for all Fortune 500 firms in the late 1990s (18.6% of revenues compared to 4.5% for all Fortune 500 firms in 2000) (Exhibit 32).

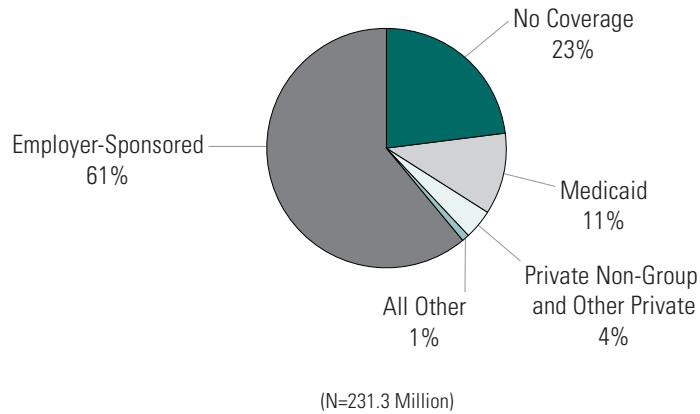




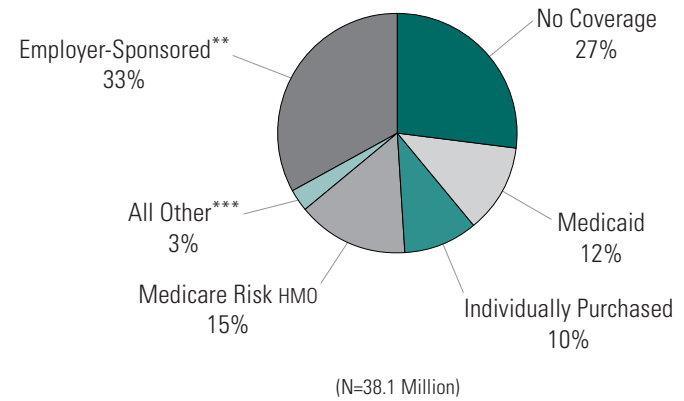
exhibit **Insurance Coverage for Prescription Drugs**

**1**

Non-Elderly Population, 1996



Medicare Population, 1998\*



**notes**

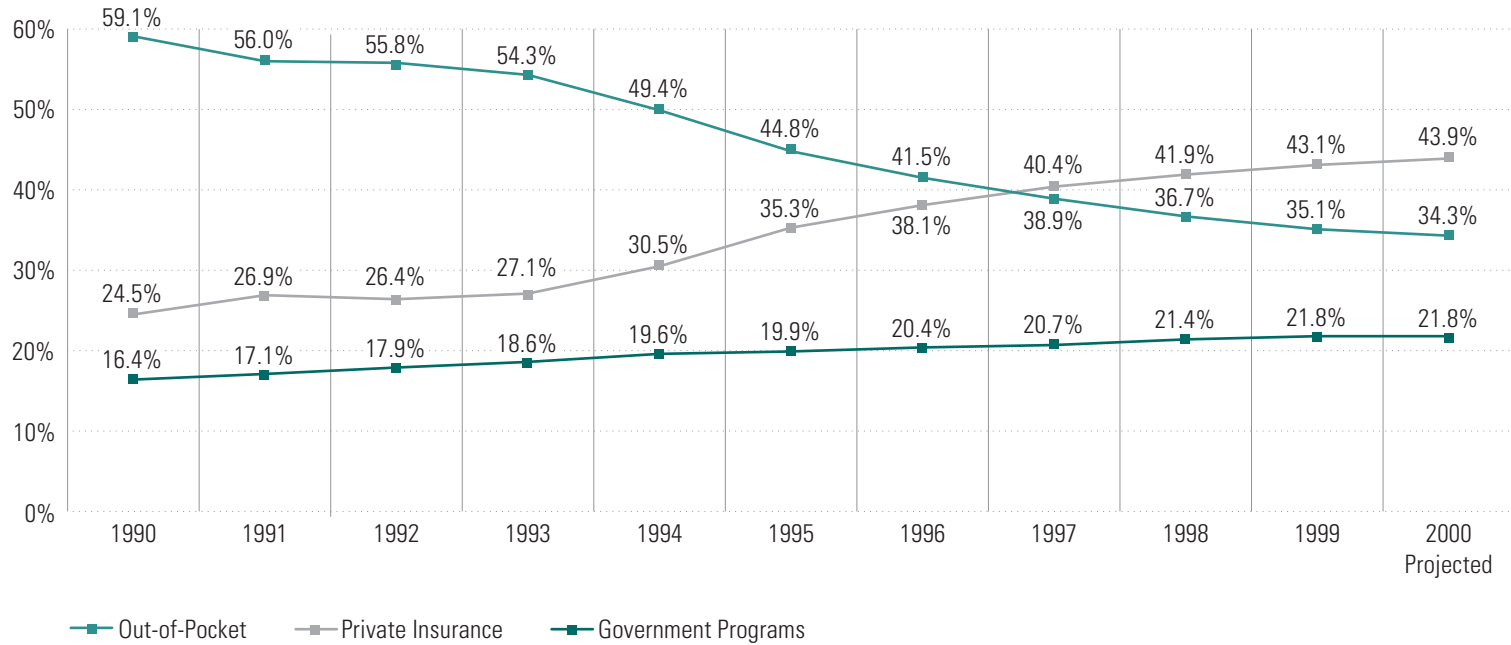
- \* Medicare Population data are based on the non-institutionalized population and include those who were enrolled in Medicare at some point during the year.
- \*\* Employer-Sponsored within the Medicare Population = beneficiaries who had only employer-sponsored supplemental insurance and those who had both employer-sponsored and individually purchased supplemental insurance.
- \*\*\* All Other within the Medicare Population = other public programs such as Veterans Affairs, Department of Defense, State Pharmaceutical Assistance Programs for low-income elderly, and non-risk HMOs.

**sources**

Non-elderly coverage from U.S. Department of Health and Human Services, Agency for Healthcare Research and Quality, Medical Expenditure Panel Survey Household Component. Total non-elderly population from the U.S. Census Bureau at [www.census.gov](http://www.census.gov).

Medicare coverage and population from Poisal, J.A. and Murray, L. "Growing Differences Between Medicare Beneficiaries With and Without Drug Coverage," *Health Affairs*, 20 (Mar/Apr 2001): 74-85, based on the 1998 Medicare Current Beneficiary Survey.

exhibit **2** Percent of Total National Prescription Drug Expenditures by Type of Payor, 1990–2000



**notes**

Out-of-Pocket Expenditures = all direct spending by consumers for prescription drugs, such as copayments, coinsurance amounts, deductibles, and amounts not covered by an insurer. Does not include out-of-pocket premiums for health insurance.

Private Insurance = payments made by private insurers for prescription drugs for covered beneficiaries.

Government Programs = federal, state, and local spending for prescription drugs including Medicaid, Medicare, Department of Defense, Veterans Administration, Indian Health Service, state and local hospitals, and public assistance programs.

2000 figures are projected amounts.

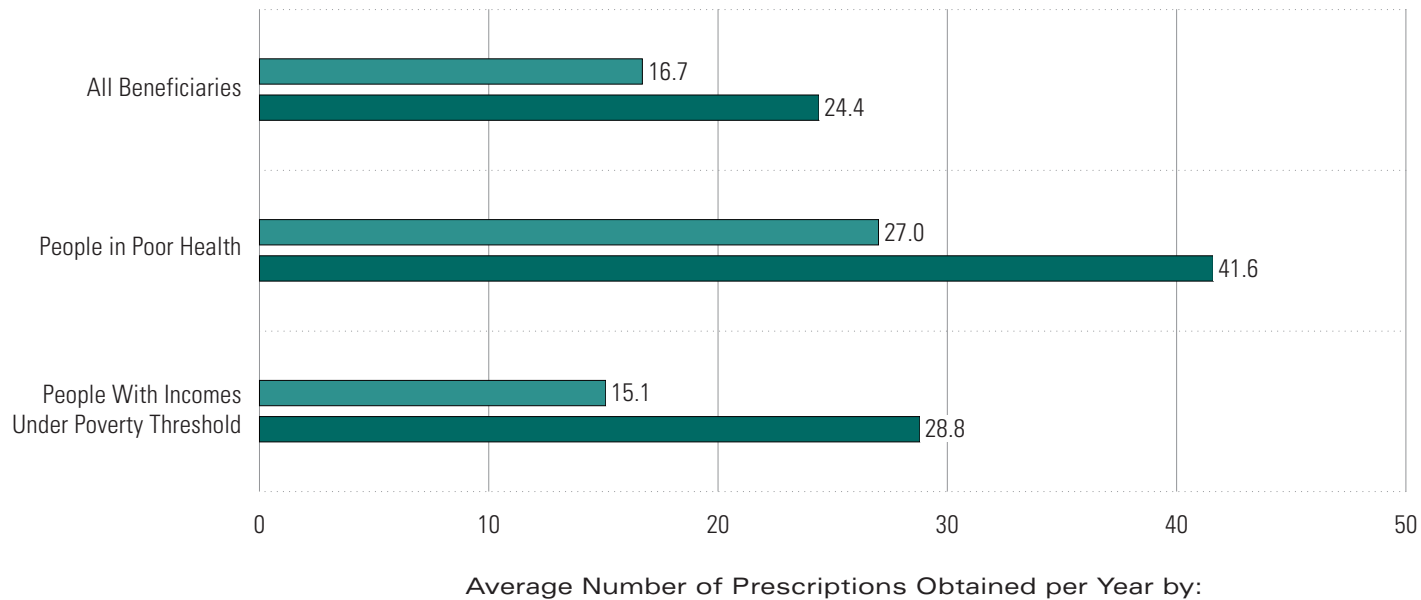
**source**

Centers for Medicare and Medicaid Services (CMS), Office of the Actuary, National Health Statistics Group, CMS web site: [www.hcfa.gov](http://www.hcfa.gov), March 2001.

## Average Number of Prescriptions Obtained by Medicare Beneficiaries With and Without Drug Coverage, by Selected Characteristics, 1998

exhibit

3



■ Beneficiaries Without Drug Coverage    ■ Beneficiaries With Drug Coverage

### notes

Medicare Beneficiaries With Drug Coverage = beneficiaries with all types of supplemental coverage for prescription drugs (i.e., Medicare risk HMO, Medicaid, employer-sponsored, and individually purchased plans).

The 1998 poverty thresholds were Aged/Single, \$7,818; Aged/Family, \$9,862.

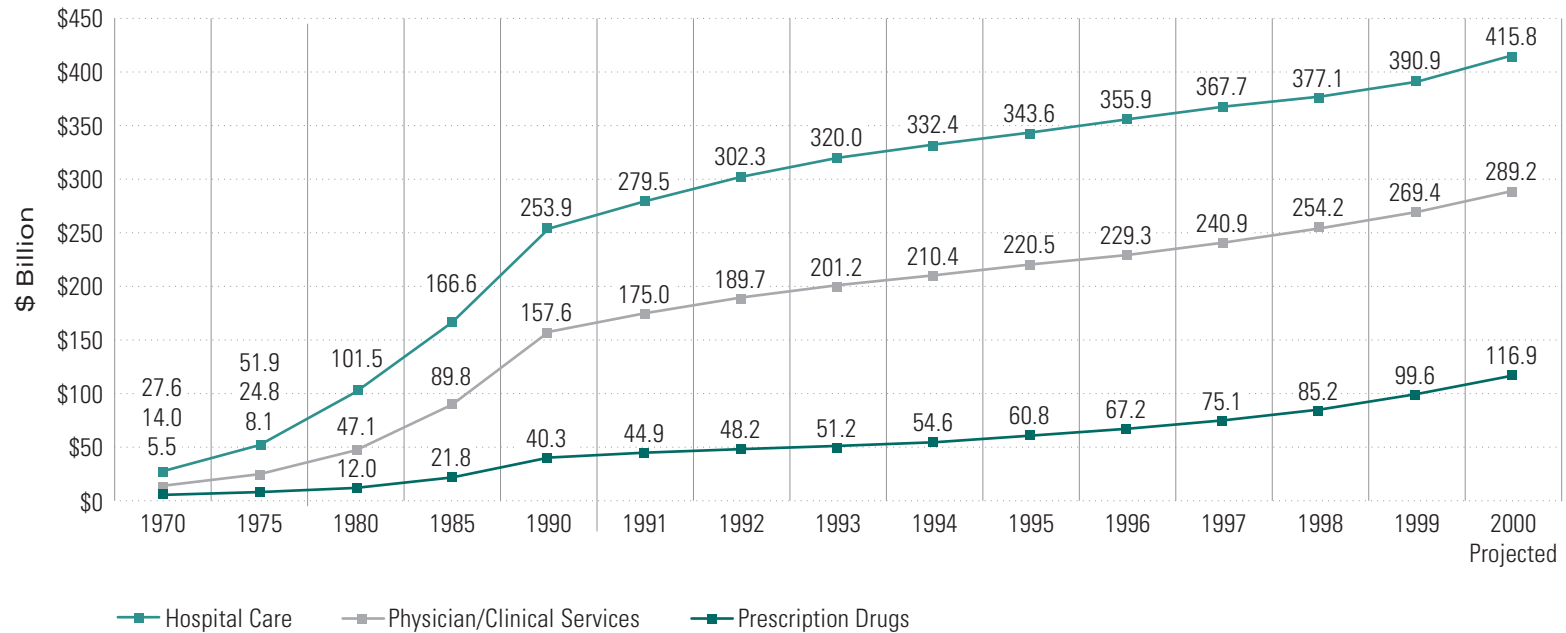
### source

Poissal, J.A. and Murray, L. "Growing Differences Between Medicare Beneficiaries With and Without Drug Coverage," *Health Affairs* (Mar/Apr 2001): 74–85, based on the 1998 Medicare Current Beneficiary Survey.

### National Health Expenditures for Prescription Drugs, Hospital Care, and Physician/Clinical Services, 1970–2000

exhibit

4



**notes**

Expenditures for prescription drugs are limited to those purchased from retail outlets such as community or HMO pharmacies, grocery store pharmacies, mail order pharmacies, etc. Spending for prescription drugs provided to patients by hospitals as part of a hospital stay, by nursing homes as part of care in a nursing home, or provided by physicians in their offices are not included in Prescription Drugs but are included in those respective expenditure categories. Consequently, the expenditures for Prescription Drugs shown here are underestimated and may differ from other estimates (e.g., prescription drug sales by manufacturers estimated by market research firms).

2000 figures are projected amounts.

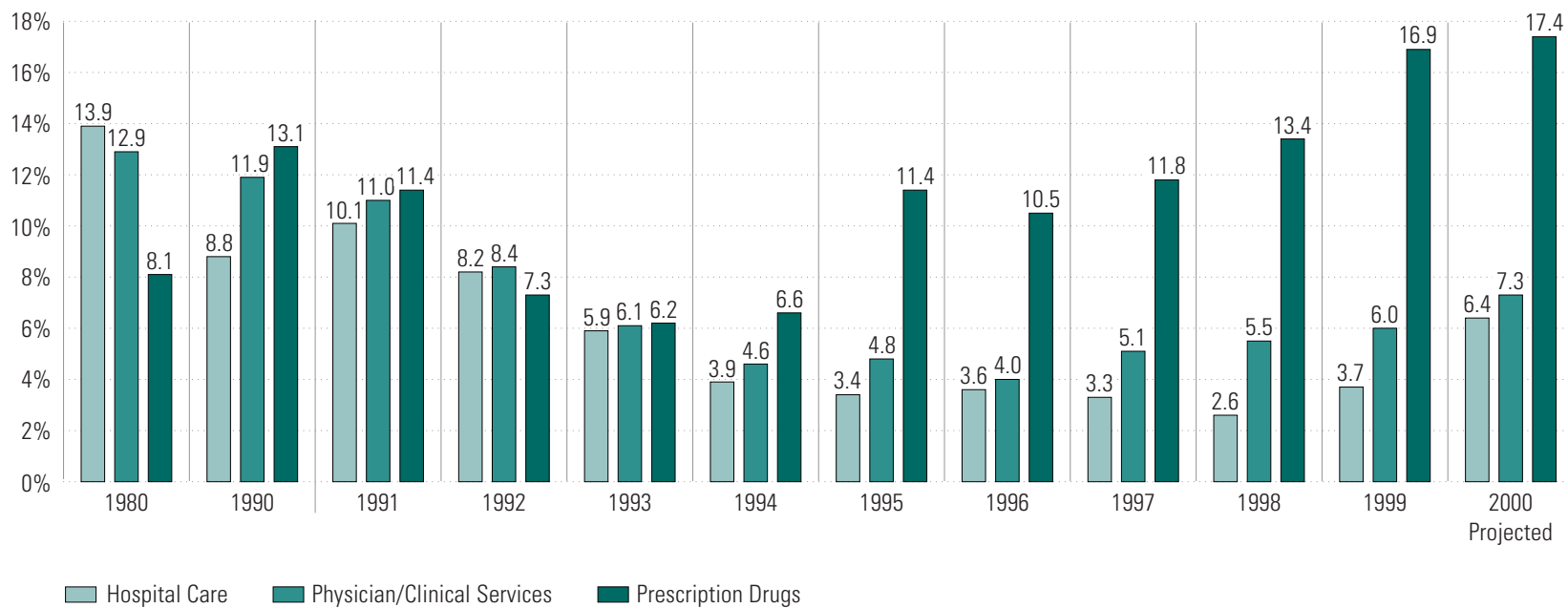
**source**

Centers for Medicare and Medicaid Services (CMS), Office of the Actuary, National Health Statistics Group, CMS web site: [www.hcfa.gov](http://www.hcfa.gov), 12 April 2001.

## Annual Percent Change in Selected National Health Expenditures, 1980–2000

exhibit

5



### notes

Percent calculated as percent change from the previous year's amount, except for 1980 and 1990 which are the average annual percent changes over the previous 10 years.

2000 figures are projected amounts.

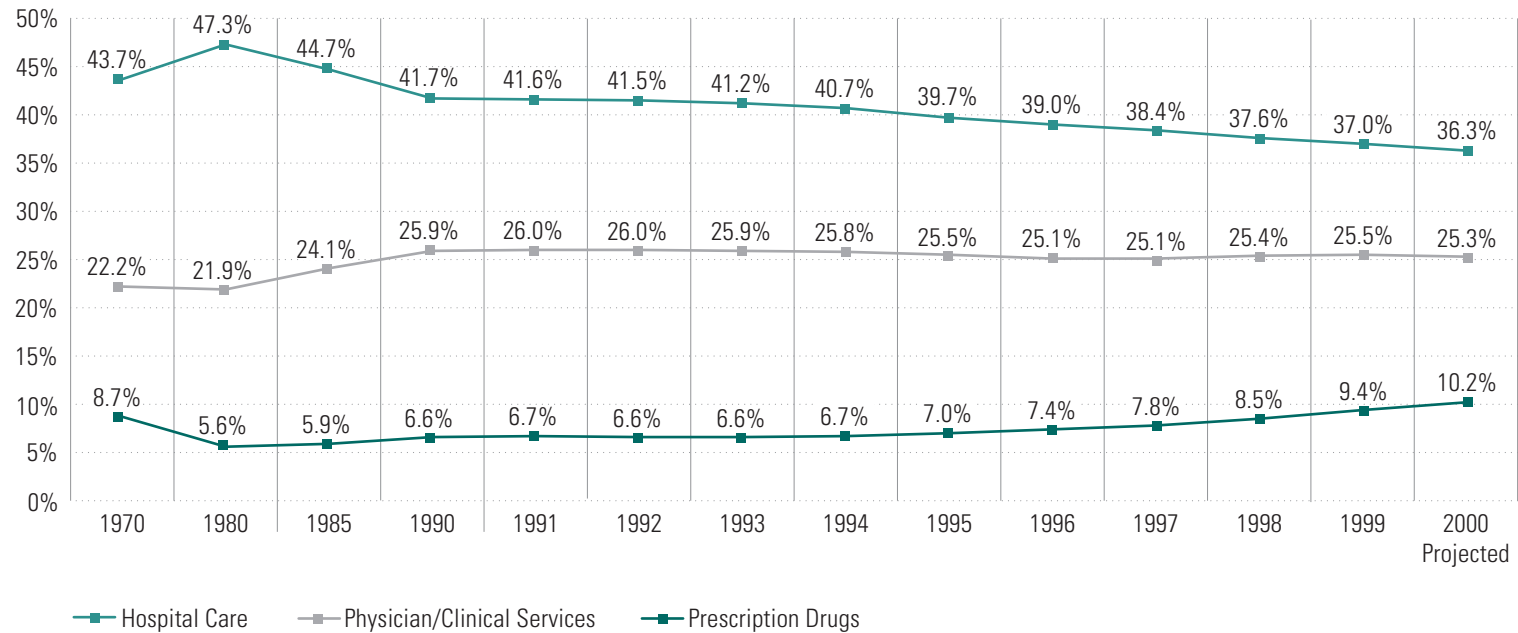
### source

Centers for Medicare and Medicaid Services (CMS), Office of the Actuary, National Health Statistics Group, CMS web site: [www.hcfa.gov](http://www.hcfa.gov), 12 April 2001.

### Prescription Drugs, Hospital Care, and Physician/Clinical Services as a Percent of Total Personal Health Care Expenditures, 1970–2000

exhibit

6



**notes**

Expenditures for prescription drugs are limited to those purchased from retail outlets such as community or HMO pharmacies, grocery store pharmacies, mail order pharmacies, etc. Spending for prescription drugs provided to patients by hospitals as part of a hospital stay, by nursing homes as part of care in a nursing home, or provided by physicians in their offices are not included in Prescription Drugs but are included in those respective expenditure categories. Consequently, the expenditures for Prescription Drugs shown here are underestimated and may differ from other estimates (e.g., prescription drug sales by manufacturers estimated by market research firms).

2000 figures are projected amounts.

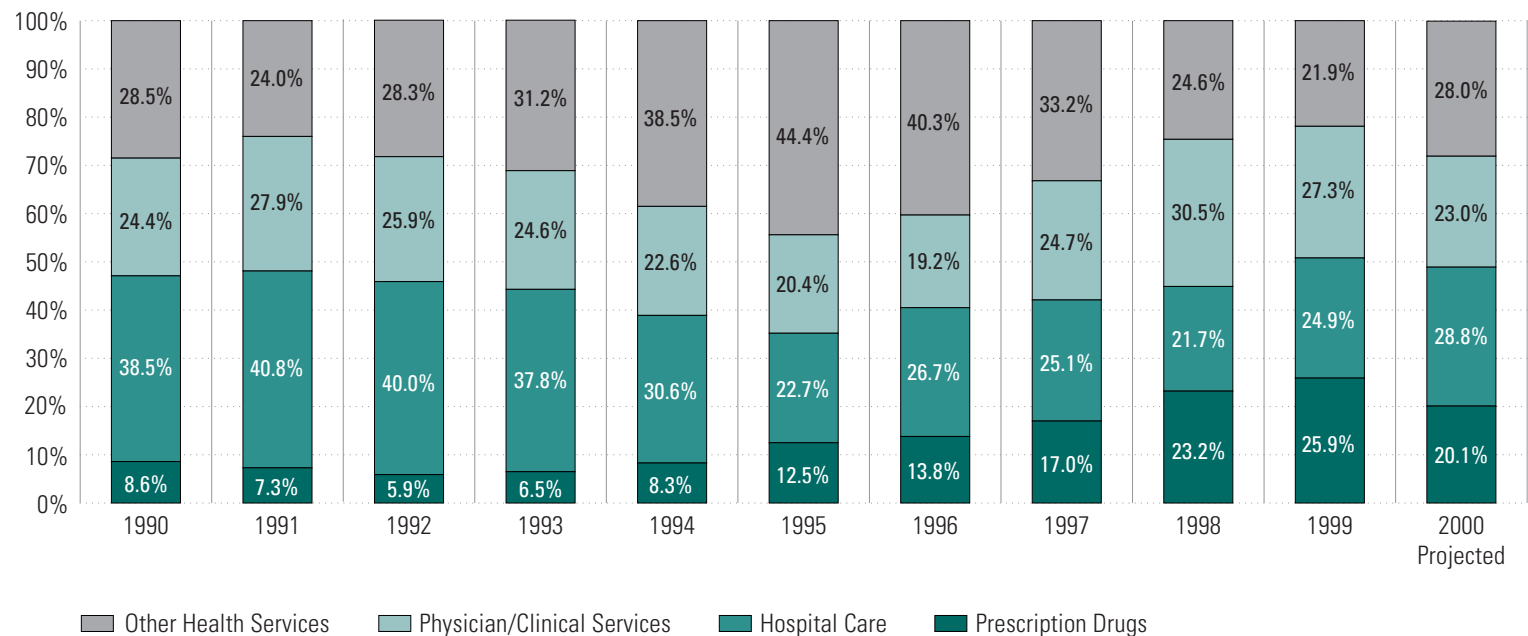
**source**

Centers for Medicare and Medicaid Services (CMS), Office of the Actuary, National Health Statistics Group, CMS web site: [www.hcfa.gov](http://www.hcfa.gov), 12 April 2001.

## Contribution of Prescription Drugs and Other Health Services to Change in Total Personal Health Care Expenditures, 1990–2000

exhibit

7



Other Health Services    Physician/Clinical Services    Hospital Care    Prescription Drugs

### notes

The percents represent the proportion of the total change in personal health care expenditures accounted for by the change in expenditures for the respective category of spending.

Other Health Services = all other expenditure categories, such as nursing home care, home health care, dental and other professional services, vision products, etc.

2000 figures are projected amounts.

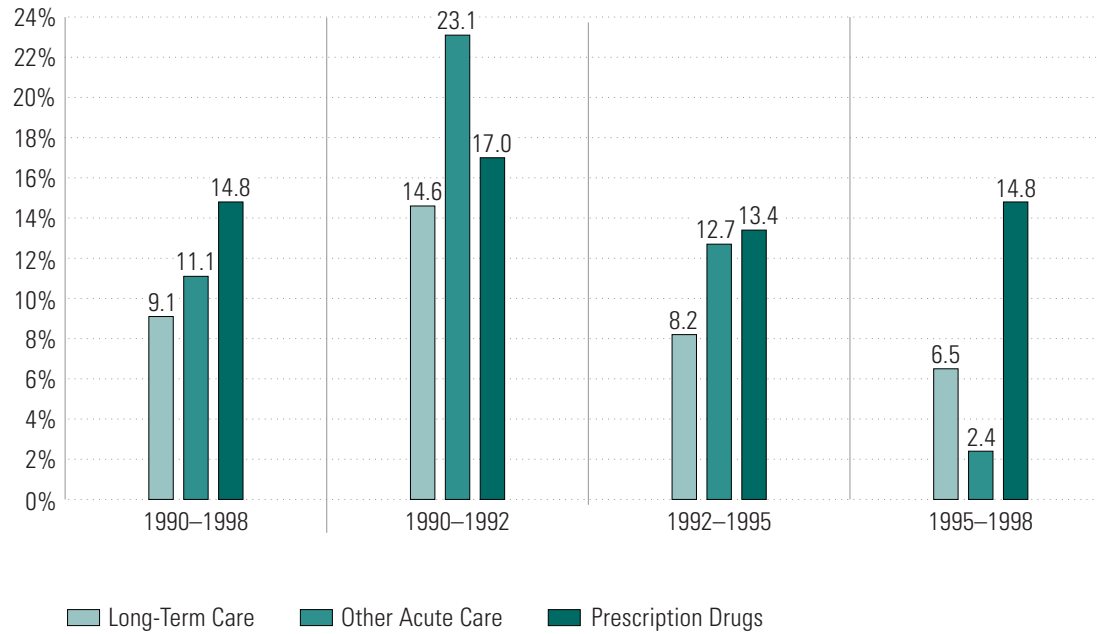
### source

Sonderegger Research Center analysis based on expenditure data from: Centers for Medicare and Medicaid Services (CMS), Office of the Actuary, National Health Statistics Group, CMS web site: [www.hcfa.gov](http://www.hcfa.gov), 12 April 2001.

### Average Annual Growth in Medicaid Spending for Prescription Drugs and Other Selected Services, 1990–1998

exhibit

8



**note**  
Includes both fee-for-service expenditures and estimated drug spending by managed care organizations.

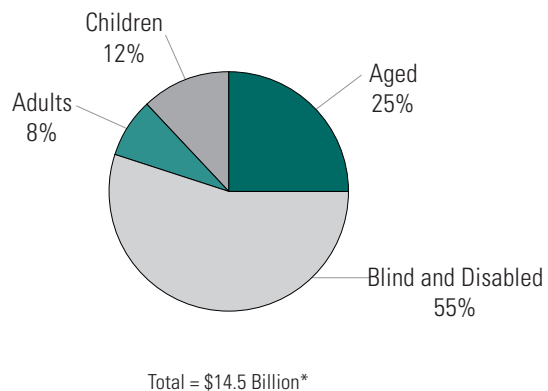
**source**  
Urban Institute estimates, based on HCFA–2082 and HCFA–64 reports, for the Kaiser Commission on Medicaid and the Uninsured.



## Medicaid Prescription Drug Spending, 1998

### 9

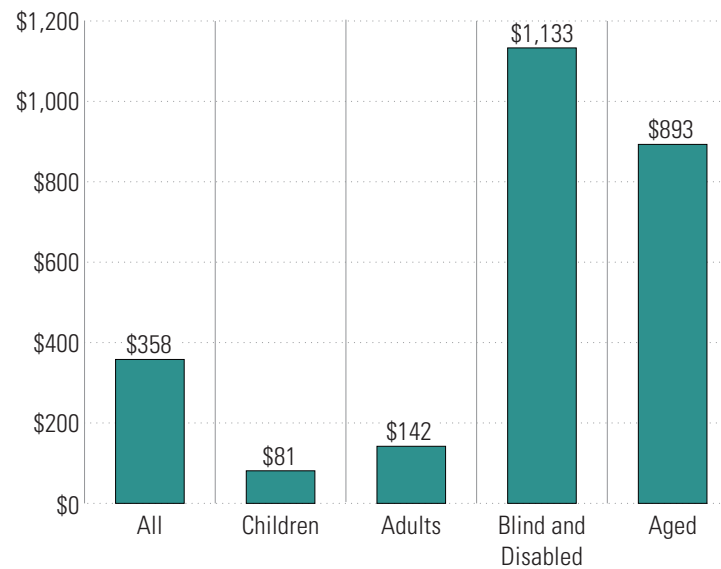
Percent of Expenditures by Eligibility Group



**note**

\*Total prescription drug spending = 8.2% of total Medicaid spending on services.

Expenditures per Enrollee



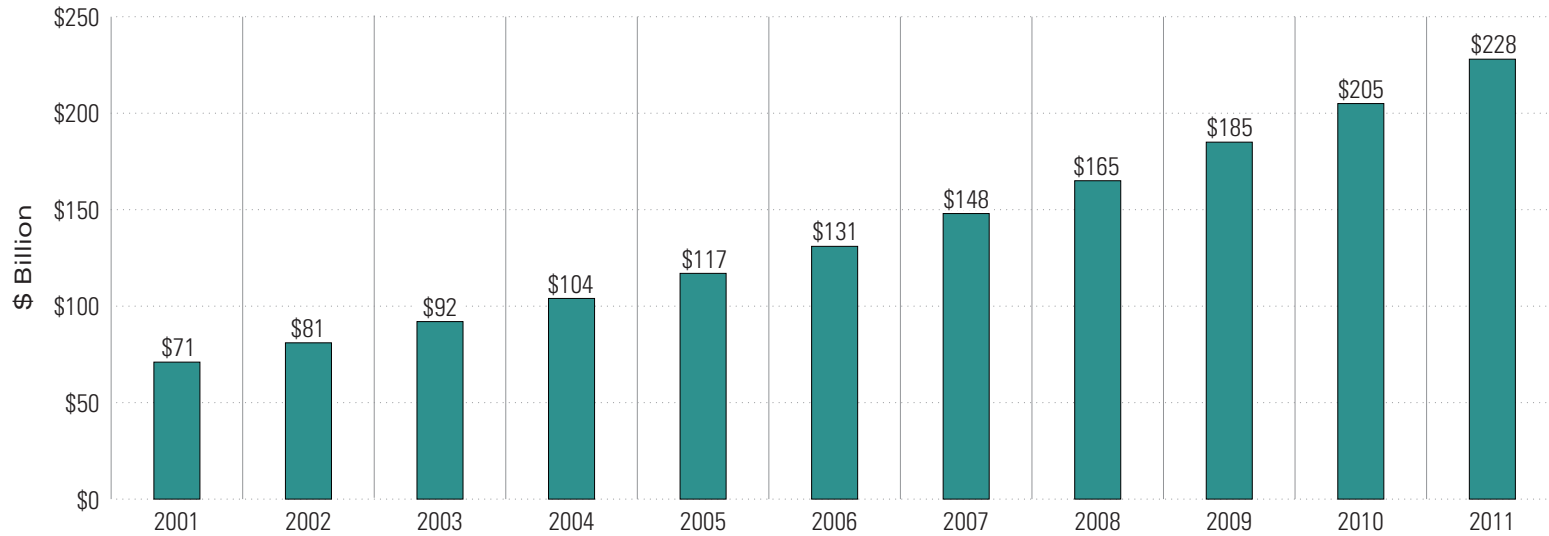
**source**

Urban Institute estimates, 2000, for the Kaiser Commission on Medicaid and the Uninsured.

### Projected Prescription Drug Spending By and For the Medicare Population, 2001-2011

exhibit

10



**note**

Projections based on Congressional Budget Office adjustments to data from the Medicare Current Beneficiary Survey. Includes spending by and for both the non-institutionalized and institutionalized Medicare population for prescription drugs not currently covered by the Medicare program (e.g., most outpatient prescription drugs). Includes spending from all payment sources, including out-of-pocket spending and private and public health coverage payments.

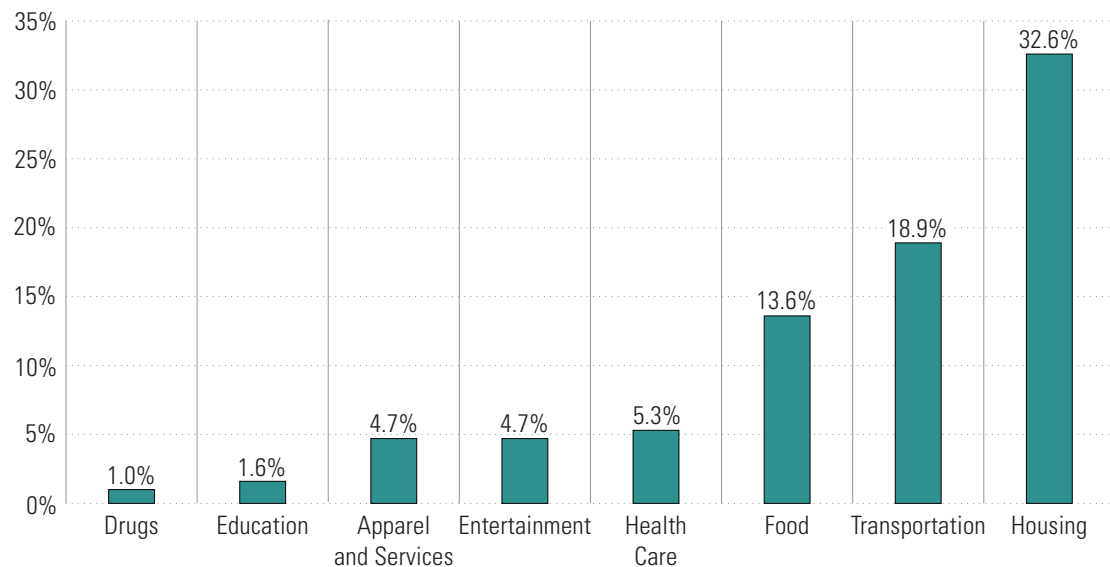
**source**

Congressional Budget Office, January 2001 baseline.

## Percent of Total Consumer Expenditures for Selected Categories of Household Goods Purchased, 1999

exhibit

11



### notes

Expenditures consist of the transaction costs of goods and services acquired; includes both prescription and non-prescription drug out-of-pocket expenses, but excludes insurance premiums for drug coverage programs.

Percents are proportions of total household expenditures (spending) for all goods and services.

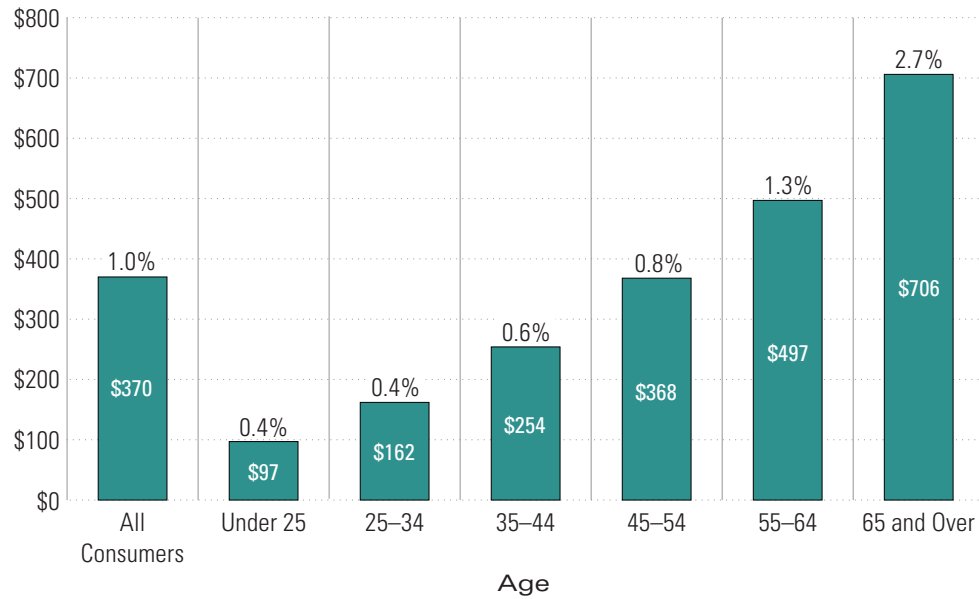
### source

Bureau of Labor Statistics (BLS), Consumer Expenditure Surveys 1999, BLS web site: [www.bls.gov](http://www.bls.gov), 7 February 2001.

### Average Annual Consumer Expenditures for Drugs in Dollars and as a Percent of Total Household Expenditures, by Age, 1999

exhibit

## 12



**notes**

Expenditures consist of the transaction costs of goods and services acquired; includes both prescription and non-prescription drug out-of-pocket expenses, but excludes insurance premiums for drug coverage programs.

Percents are proportions of total household expenditures (spending) for all goods and services.

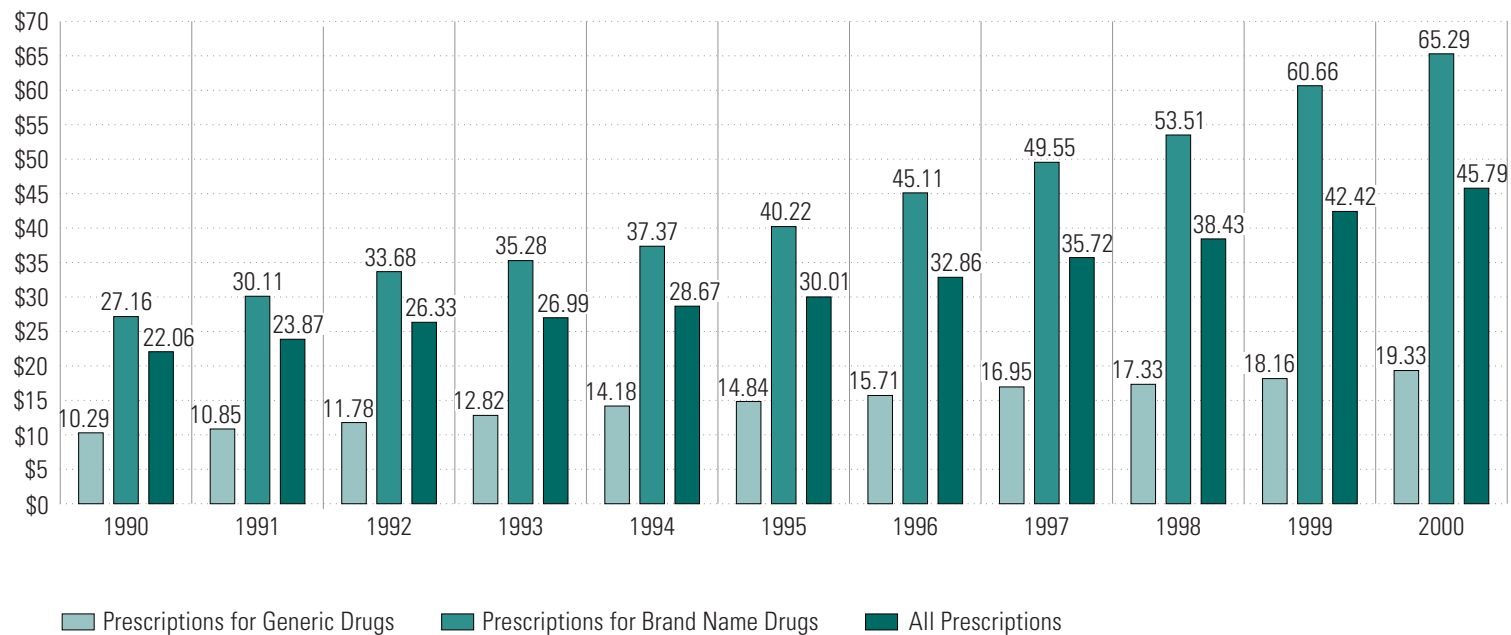
**source**

Bureau of Labor Statistics (BLS), Consumer Expenditure Surveys 1999, BLS web site: [www.bls.gov](http://www.bls.gov), 7 February 2001.

## Average Retail Prescription Prices, 1990-2000

exhibit

13



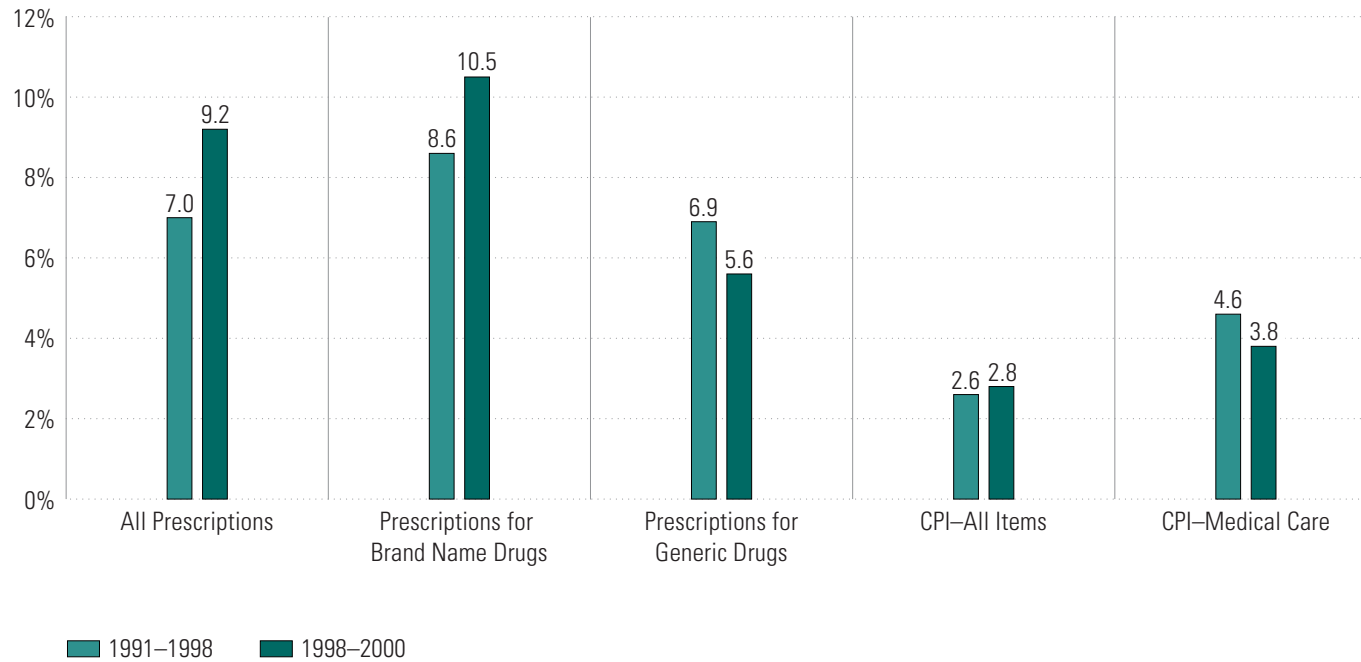
source

IMS Health, Inc., National Prescription Audit Plus, April 2001.

### Average Annual Percent Change in Retail Prescription Prices vs. CPI, 1991–1998 and 1998–2000

exhibit

14



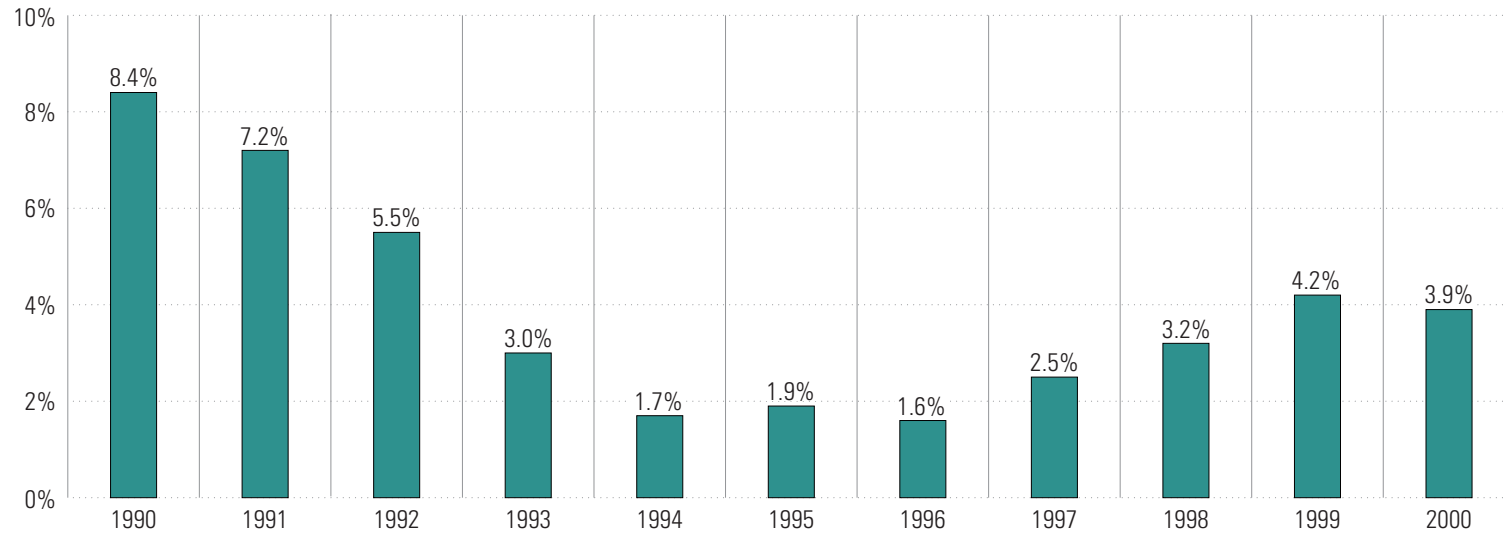
**note**  
CPI = Consumer Price Index for all urban consumers

**source**  
Sonderegger Research Center analysis, based on: Average Prescription Prices from IMS Health, Inc., National Prescription Audit *Plus*, April 2001. CPIs from Bureau of Labor Statistics (BLS), BLS web site: [www.stats.bls.gov](http://www.stats.bls.gov), April 2001.

## Pharmaceutical Manufacturer Price Inflation for Existing Prescription Drugs, 1990-2000

exhibit

15



Percent Change in Drug Prices from the Previous Year

### notes

These percents reflect pharmaceutical manufacturer price increases for existing prescription drugs from year to year.

Data reflect sales of prescription drugs in 6 audited channels: retail pharmacies, non-federal hospitals, staff-model HMOs, clinics, long-term care, and federal facilities.

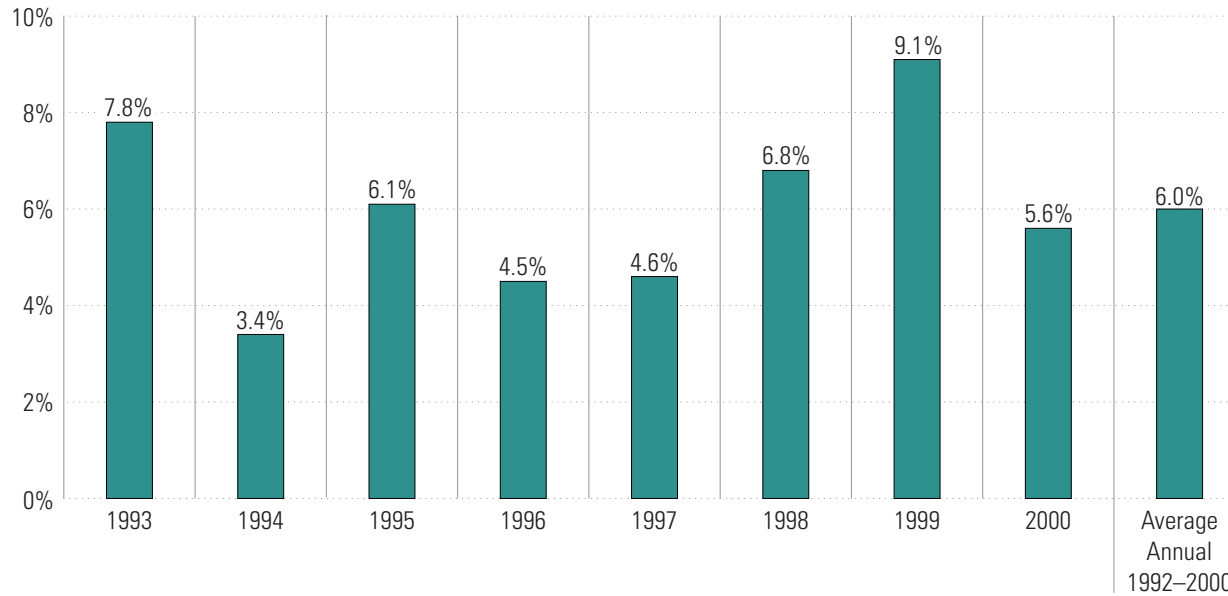
### source

IMS Health, Inc., *Pharmaceutical Pricing UPDATE*, April 2001.

**Percent Change in the Number of Prescriptions Dispensed per Year, 1993–2000**

exhibit

**16**



|   | 1992    | 1993    | 1994    | 1995    | 1996    | 1997    | 1998    | 1999    | 2000    |
|---|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Total Dispensed Prescriptions (Million) | 1,873.4 | 2,020.2 | 2,088.3 | 2,216.2 | 2,315.6 | 2,423.2 | 2,587.6 | 2,822.6 | 2,979.9 |
| Prescriptions per Capita                | 7.3     | 7.8     | 8.0     | 8.4     | 8.7     | 9.0     | 9.6     | 10.4    | 10.8    |

**notes**

These percents reflect the increase in the number of prescriptions dispensed in retail pharmacies from the previous year. Retail pharmacies include chain, independent, food store, long-term care, and mail order pharmacies.

Average Annual 1992–2000 is the average annual percentage change between 1992–2000.

**source**

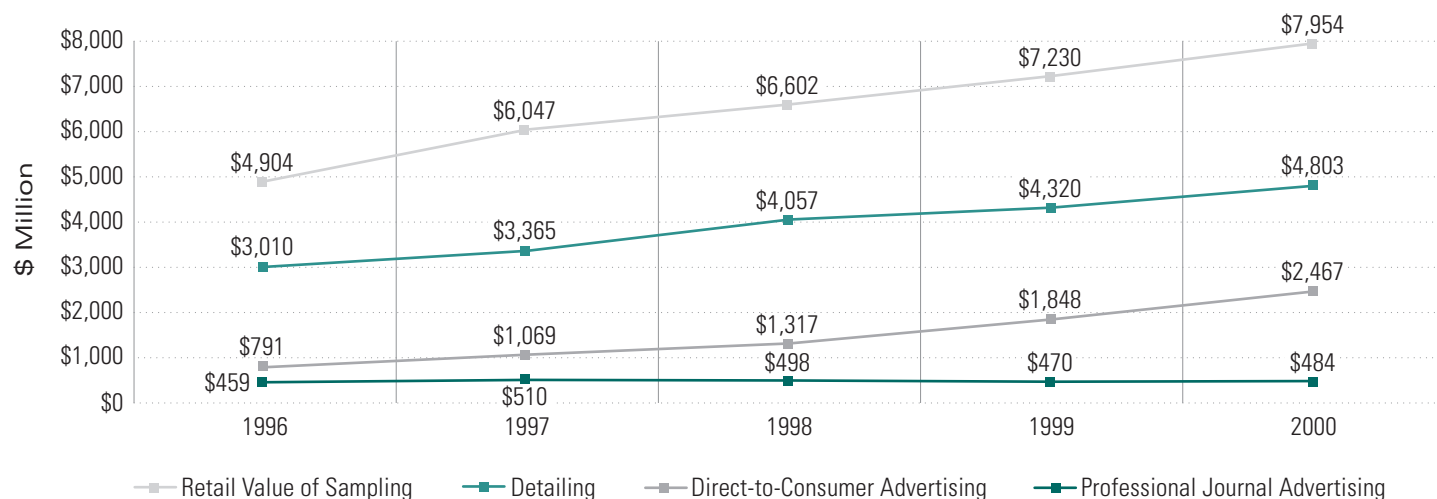
Sonderegger Research Center analysis, based on: Number of Dispensed Prescriptions data from IMS Health, Inc., National Prescription Audit Plus, 1992–2000. U.S. population data from U.S. Census Bureau, *Statistical Abstract of the United States*, 2000, using 1990 census estimates.



## Promotional Spending by Pharmaceutical Manufacturers, 1996–2000

exhibit

17



| Promotional Activity                  | Average Annual Percent Change | Percent of Total Promotion |            |            |            |            |
|---------------------------------------|-------------------------------|----------------------------|------------|------------|------------|------------|
|                                       | 1996–2000                     | 1996                       | 1997       | 1998       | 1999       | 2000       |
| Sampling                              | 12.8%                         | 53.5%                      | 55.0%      | 52.9%      | 52.1%      | 50.6%      |
| Detailing                             | 12.4%                         | 32.8%                      | 30.6%      | 32.5%      | 31.1%      | 30.6%      |
| Direct-to-Consumer Advertising        | 32.9%                         | 8.6%                       | 9.7%       | 10.6%      | 13.3%      | 15.7%      |
| Professional Journal Advertising      | 1.4%                          | 5.0%                       | 4.6%       | 4.0%       | 3.4%       | 3.1%       |
| Total Promotion                       | 14.4%                         | 100.0%                     | 100.0%     | 100.0%     | 100.0%     | 100.0%     |
| Total Promotion Spending (\$ Million) |                               | \$9,164.3                  | \$10,990.6 | \$12,473.8 | \$13,867.6 | \$15,708.2 |

### notes

Sampling = the value of samples left at sales visits to office-based physicians. The samples are valued at the price they would be sold in retail pharmacies.

Detailing = expenses for sales activity of pharmaceutical representatives directed to office-based and hospital-based physicians. Approximately 83% of this spending is for office-based sales visits.

### notes (continued)

Direct-to-Consumer Advertising = expenditures for magazine, newspaper, radio, and television advertising targeted toward consumers.

Professional Journal Advertising = expenditures for advertising prescription products in medical journals.

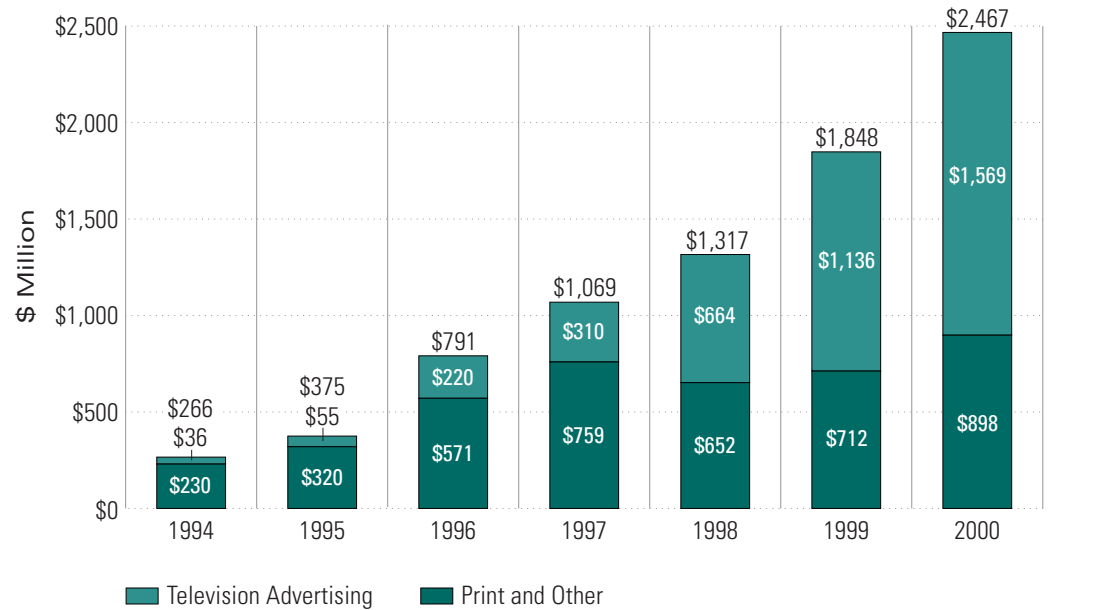
### source

IMS Health, Inc., *Integrated Promotion Service*, and Competitive Media Reporting, 1996–2001.

### Direct-to-Consumer (DTC) Promotional Activity Spending by Pharmaceutical Manufacturers, 1994–2000

exhibit

18



|                        | Average Annual Percent Change |        | Percent of Total Direct-to-Consumer Advertising Spending |        |        |        |        |        |  |
|------------------------|-------------------------------|--------|--|--------|--------|--------|--------|--------|--|
|                        | 1994–2000                     | 1994   | 1995   | 1996   | 1997   | 1998   | 1999   | 2000   |  |
| Print and Other        | 25.4%                         | 86.6%  | 85.4%  | 72.2%  | 71.0%  | 49.5%  | 38.5%  | 36.4%  |  |
| Television Advertising | 87.9%                         | 13.4%  | 14.6%  | 27.8%  | 29.0%  | 50.5%  | 61.5%  | 63.6%  |  |
| Total DTC Advertising  | 44.9%                         | 100.0% | 100.0%   | 100.0% | 100.0% | 100.0% | 100.0% | 100.0% |  |

**notes**

Proportions of DTC advertising components for 2000 were projected from spending for January through June 2000 reported by IMS Health, Inc., (news release, 19 October 2000, www.IMSHealth.com).

Print Advertising = prescription products advertised in magazines and newspapers.

Other = radio and outdoor advertising for prescription products. It accounts for a very small part of total DTC advertising; from 1994 through 2000, Other Advertising accounted for less than 2% of total DTC spending.

**notes (continued)**

Television Advertising = network, cable, and spot and syndicated television.

**source**

Sonderegger Research Center analysis, based on data from IMS Health, Inc., *Integrated Promotion Service*, and Competitive Media Reporting, 1994–2001.

## Prescription Drugs With the Most Direct-to-Consumer Advertising, 2000

exhibit

19

| Rank                         | Drug     | Indication             | DTC Advertising<br>(\$ Million) | Top 200<br>Ranking |
|------------------------------|----------|------------------------|---------------------------------|--------------------|
| 1                            | Vioxx    | Anti-inflammatory      | \$160.8                         | 20                 |
| 2                            | Prilosec | Anti-ulcerant (PPI)    | \$107.9                         | 5                  |
| 3                            | Claritin | Antihistamine          | \$100.3                         | 9                  |
| 4                            | Paxil    | Anti-depressant (SSRI) | \$92.1                          | 14                 |
| 5                            | Zocor    | Cholesterol-lowering   | \$91.2                          | 17                 |
| 6                            | Viagra   | Erectile Dysfunction   | \$89.8                          | 45                 |
| 7                            | Celebrex | Anti-inflammatory      | \$78.8                          | 11                 |
| 8                            | Flonase  | Asthma                 | \$78.1                          | 50                 |
| 9                            | Allegra  | Antihistamine          | \$67.0                          | 31                 |
| 10                           | Meridia  | Weight-loss            | \$65.0                          | NR                 |
| Total DTC Promotion Spending |          |                        | \$2,467.1                       |                    |

### notes

Top 200 Ranking based on total prescriptions dispensed.

NR = not ranked in the Top 200

### sources

DTC advertising amounts from Competitive Media Reporting, *Strategy Report*, March 2001.

Top 200 rankings by number of prescriptions dispensed from IMS Health, Inc., National Prescription Audit Plus, published in *Pharmacy Times*, April 2001.

exhibit **Top 20 Prescription Drugs Ranked by Dollar Sales, 2000**

**20**

| Rank | Product                           | Indication                                 | 2000 Sales<br>(\$ Million) | Sales Increase<br>1999–2000 | Brand or<br>Generic? | Year First<br>Marketed |
|------|-----------------------------------|--|----------------------------|-----------------------------|----------------------|------------------------|
| 1    | Prilosec (Astra-Merck)            | Anti-ulcerant (PPI)                        | \$4,620                    | 10%                         | B                    | 1989                   |
| 2    | Lipitor (Pfizer/Warner Lambert)   | Cholesterol-lowering                       | \$4,147                    | 38%                         | B                    | 1997                   |
| 3    | Prevacid (TAP/Abbott)             | Anti-ulcerant (PPI)                        | \$3,147                    | 34%                         | B                    | 1995                   |
| 4    | Zocor (Merck)                     | Cholesterol-lowering                       | \$2,789                    | 21%                         | B                    | 1992                   |
| 5    | Prozac (Dista/Lilly)              | Anti-depressant (SSRI)                     | \$2,665                    | 4%                          | B                    | 1987                   |
| 6    | Celebrex (Pharmacia/Searle)       | Anti-inflammatory                          | \$2,154                    | 53%                         | B                    | 1999                   |
| 7    | Epogen (Amgen)                    | Blood Cell Stimulating Factor (for Anemia) | \$2,060                    | 12%                         | B                    | 1989                   |
| 8    | Zoloft (Roerig/Pfizer)            | Anti-depressant (SSRI)                     | \$1,980                    | 14%                         | B                    | 1992                   |
| 9    | Zyprexa (Lilly)                   | Anti-psychotic                             | \$1,905                    | 27%                         | B                    | 1996                   |
| 10   | Procrit (OrthoBiotechDivision)    | Blood Cell Stimulating Factor (for Anemia) | \$1,864                    | 55%                         | B                    | 1991                   |
| 11   | Paxil (GlaxoSmithKline)           | Anti-depressant (SSRI)                     | \$1,844                    | 22%                         | B                    | 1993                   |
| 12   | Glucophage (Bristol-Myers Squibb) | Anti-diabetic Agent                        | \$1,803                    | 38%                         | B                    | 1995                   |
| 13   | Norvasc (Pfizer)                  | Calcium Channel Blocker (for Hypertension) | \$1,713                    | 16%                         | B                    | 1992                   |
| 14   | Claritin (Schering)               | Antihistamine                              | \$1,686                    | 10%                         | B                    | 1993                   |
| 15   | Vioxx (Merck)                     | Anti-inflammatory                          | \$1,518                    | 309%                        | B                    | 1999                   |
| 16   | Augmentin (GlaxoSmithKline)       | Antibiotic                                 | \$1,360                    | 17%                         | B/G                  | 1984                   |
| 17   | Pravachol (Bristol-Myers Squibb)  | Cholesterol-lowering                       | \$1,309                    | 11%                         | B                    | 1991                   |
| 18   | Risperdal (Janssen)               | Anti-psychotic                             | \$1,307                    | 26%                         | B                    | 1994                   |
| 19   | Neurontin (Parke-Davis)           | Anti-epileptic                             | \$1,280                    | 18%                         | B                    | 1998                   |
| 20   | Premarin (Wyeth-Ayerst)           | Hormone Replacement                        | \$1,174                    | 38%                         | B/G                  | 1964                   |

**notes**

B = Brand name (drug has remaining patent life; no generic versions available)

B/G = Brand name product but generics available

G = Generic

Sales represent prescription drug purchases, in millions of dollars, at pharmacy acquisition cost, by independent, chain, foodstore, non-federal and federal hospital, clinic, HMO, and long-term care pharmacies. Does not include purchases by mail order pharmacies.

Sales Increase is the percent change in sales from 1999 to 2000.

**source**

Sonderregger Research Center analysis, based on: Sales and Sales Increase data from IMS Health, Inc., *Retail Perspective* and *Provider Perspective*, March 2001. Year First Marketed from Top 200 listing published in *Pharmacy Times*, April 1999; IMS Health, Inc., *Year in Review* articles published in *Medical Marketing & Media*, May 2000 and 2001; and the Food and Drug Administration, [www.fda.gov](http://www.fda.gov).

## Top 20 Prescription Drugs Ranked by Number of Dispensed Prescriptions, 2000

### 21

| Rank | Product                           | Indication                                 | Dispensed Prescriptions<br>(Million) | Brand or<br>Generic? | Year First<br>Marketed |
|------|-----------------------------------|--|--------------------------------------|----------------------|------------------------|
| 1    | Lipitor (Pfizer/Warner Lambert)   | Cholesterol-lowering                       | 48.8                                 | B                    | 1997                   |
| 2    | Premarin (Wyeth-Ayerst)           | Hormone Replacement                        | 46.8                                 | B/G                  | 1964                   |
| 3    | Synthroid (Knoll)                 | Thyroid Replacement                        | 43.5                                 | B/G                  | 1963                   |
| 4    | Hydrocodone w/APAP (Watson)       | Narcotic Analgesic                         | 36.5                                 | G                    | 1977                   |
| 5    | Prilosec (Astra-Merck)            | Anti-ulcerant (PPI)                        | 32.1                                 | B                    | 1989                   |
| 6    | Norvasc (Pfizer)                  | Calcium Channel Blocker (for Hypertension) | 30.8                                 | B                    | 1992                   |
| 7    | Glucophage (Bristol-Myers Squibb) | Anti-diabetic Agent                        | 27.4                                 | B                    | 1995                   |
| 8    | Albuterol (Warrick)               | Bronchodilator                             | 27.4                                 | G                    | 1982                   |
| 9    | Claritin (Schering)               | Antihistamine                              | 26.5                                 | B                    | 1993                   |
| 10   | Zoloft (Roerig/Pfizer)            | Anti-depressant (SSRI)                     | 25.2                                 | B                    | 1992                   |
| 11   | Celebrex (Searle/Pharmacia)       | Anti-inflammatory                          | 24.7                                 | B                    | 1999                   |
| 12   | Prevacid (TAP)                    | Anti-ulcerant (PPI)                        | 24.4                                 | B                    | 1995                   |
| 13   | Prozac (Dista/Lilly)              | Anti-depressant (SSRI)                     | 24.1                                 | B                    | 1987                   |
| 14   | Paxil (GlaxoSmithKline)           | Anti-depressant (SSRI)                     | 24.0                                 | B                    | 1993                   |
| 15   | Trimox (Apothecon)                | Antibiotic                                 | 23.4                                 | G                    | 1977                   |
| 16   | Zestril (AstraZeneca)             | ACE Inhibitor (for Hypertension)           | 22.6                                 | B                    | 1988                   |
| 17   | Zocor (Merck)                     | Cholesterol-lowering                       | 22.4                                 | B                    | 1992                   |
| 18   | Prempro (Wyeth-Ayerst)            | Hormone Replacement                        | 22.3                                 | B                    | 1995                   |
| 19   | Zithromax (Pfizer)                | Antibiotic                                 | 22.0                                 | B                    | 1986                   |
| 20   | Vioxx (Merck)                     | Anti-inflammatory                          | 20.5                                 | B                    | 1999                   |

#### notes

B = Brand name (drug has remaining patent life; no generic versions available)

B/G = Brand name product but generics available

G = Generic

Rankings and number of prescriptions represent total prescriptions dispensed through independent, chain, foodstore, long-term care, and mail order pharmacies.

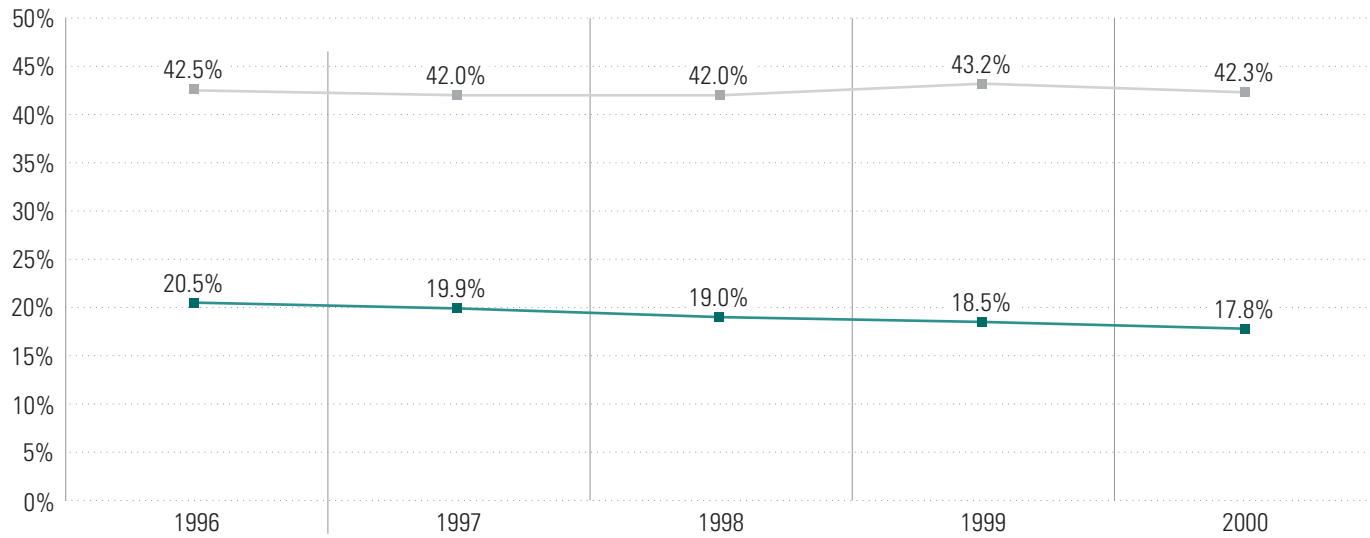
#### source

Sonderregger Research Center analysis, based on: Dispensed Prescriptions from IMS Health, Inc., National Prescription Audit *Plus*, March 2001. Year First Marketed from Top 200 listing published in *Pharmacy Times*, April 1999, and the Food and Drug Administration, [www.fda.gov](http://www.fda.gov).

### Generic Drugs as a Percent of Total Prescriptions Dispensed and Percent of Total Annual Retail Prescription Sales in Dollars, 1996–2000

exhibit

22



■ Percent of Total Prescriptions Dispensed    ■ Percent of Total Annual Retail Prescription Sales

**note**

Total Annual Retail Prescription Sales calculated based on total number of prescriptions dispensed annually, brand and generic prescription market shares, and average brand and retail prescription prices.

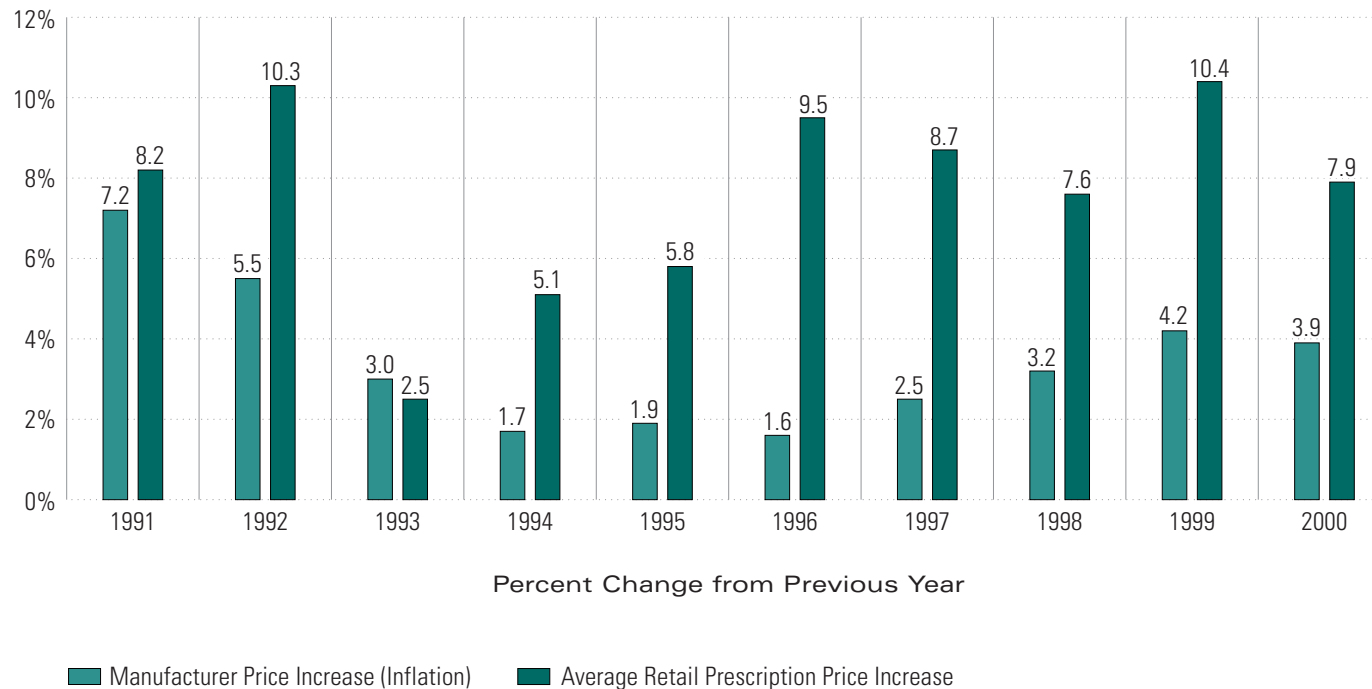
**source**

Sonderegger Research Center analysis, based on data from IMS Health, Inc., National Prescription Audit *Plus*, 1996–2000.

## Manufacturer Price Increases for Existing Drugs vs. Retail Prescription Price Increases Reflecting the Use of Newer Drugs, 1991–2000

exhibit

23



### note

The difference between the Retail Prescription Price Increase and the Manufacturer Price Increase for existing drugs reveals the additional impact, over drug cost inflation, of newer, more expensive drugs being used.

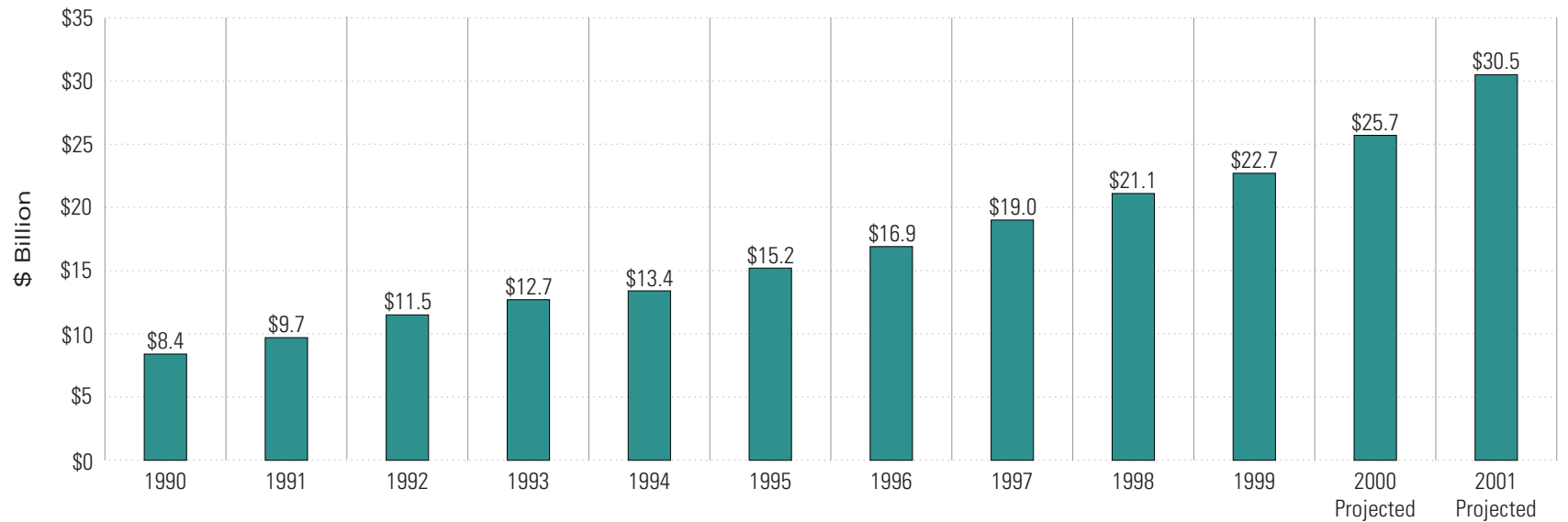
### source

Sonderegger Research Center analysis, based on: Manufacturer Price Increases from IMS Health, Inc., *Pharmaceutical Pricing UPDATE*, April 2001. Data reflect sales of prescription drugs in 6 audited channels: retail pharmacies, non-federal hospitals, staff-model HMOs, clinics, long-term care, and federal facilities. Average Retail Prescription Prices from IMS Health, Inc., *National Prescription Audit Plus*, April 2001.

### Research and Development Expenditures for Prescription Drugs by U.S. Pharmaceutical Manufacturers (Domestic and Foreign), 1990–2001

exhibit

24



**note**

Research and Development (R&D) expenditures for prescription pharmaceuticals only. Includes total expenditures (within the U.S. and abroad) by U.S.-owned research-based pharmaceutical companies (major pharmaceutical firms). Since 1990, foreign expenditures have comprised approximately 18% of total R&D expenditures.

**source**

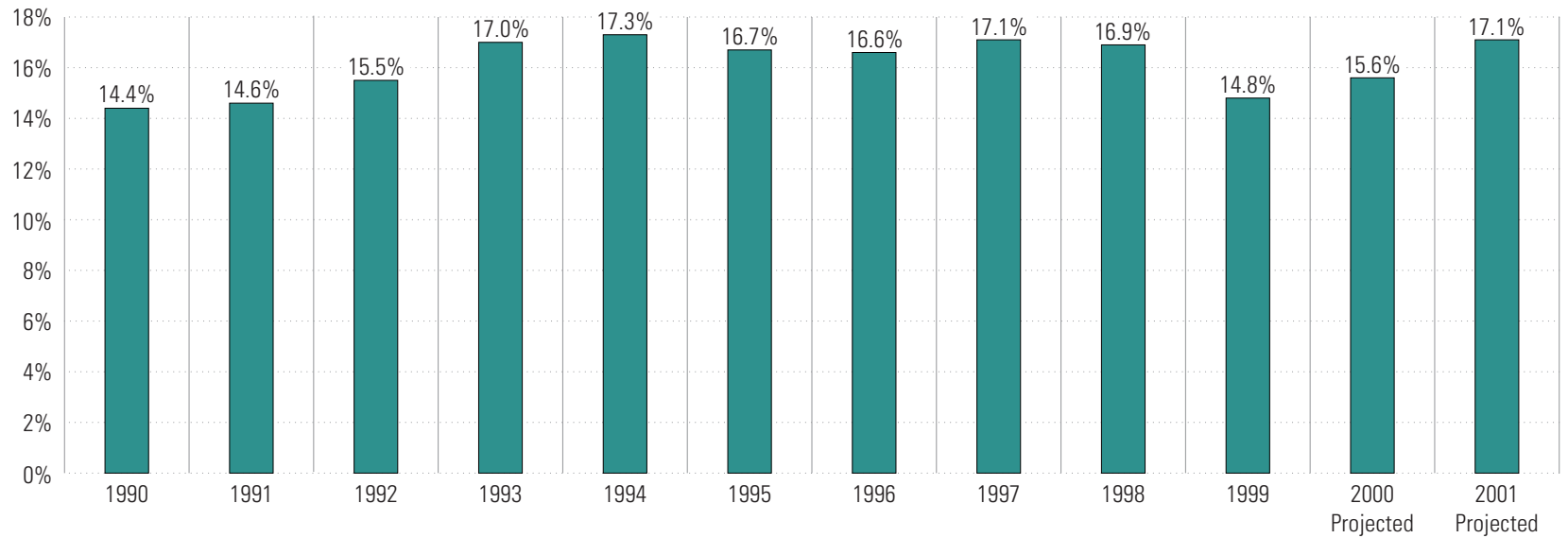
Pharmaceutical Research and Manufacturers of America, *PhRMA Pharmaceutical Industry Profile*, 2001.



## Research and Development Expenditures for Prescription Drugs by U.S. Pharmaceutical Manufacturers as a Percent of Prescription Drug Sales, 1990–2001

exhibit

25



**note**

Based on the total amount of domestic and foreign R&D expenditures and sales only for prescription drugs by U.S.-owned research-based pharmaceutical companies (major pharmaceutical firms).

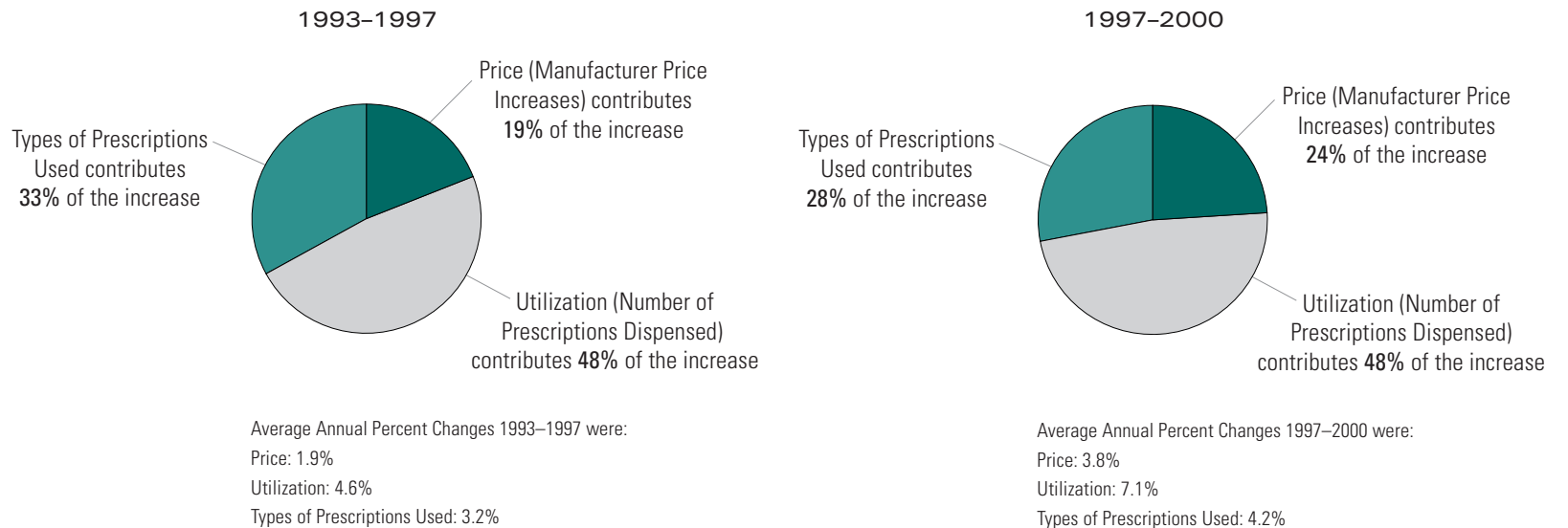
**source**

Sonderegger Research Center analysis based on data from Pharmaceutical Research and Manufacturers of America, *PhRMA Pharmaceutical Industry Profile*, 2001.

## The Relative Contributions of Price, Utilization, and Types of Prescription Drugs Used to Rising Prescription Drug Expenditures, 1993–1997 vs. 1997–2000

exhibit

26



**notes**

Price = the annual increases in manufacturer prices for existing drugs, and is used to represent price increases at all levels of prescription drug distribution since there is little evidence that wholesaler or retail pharmacy prices are increasing faster than manufacturer price increases.

Utilization = the percent change in the total number of prescriptions dispensed in the U.S.

Types of Prescriptions Used = the residual after subtracting price and utilization changes from total prescription drug expenditure growth. It represents the shift from older, lower cost drugs to newer, higher cost drugs.

The cumulative increases in prescription drug expenditures were 46.7% for 1993–1997 and 55.7% for 1997–2000.

**source**

Sonderegger Research Center analysis, based on: Number of Prescriptions Dispensed from IMS Health, Inc., National Prescription Audit *Plus*, various years. Manufacturer Price Increases from IMS Health, Inc., *Pharmaceutical Pricing UPDATE*, various years. Prescription expenditure data from Centers for Medicare and Medicaid Services (CMS), Office of the Actuary, National Health Statistics Group, CMS web site: [www.hcfa.gov](http://www.hcfa.gov), 12 April 2001.

### Contributions to Dollar Sales Growth by the Top 20 Selling Prescription Drugs, 2000

| Product    | Indication                                 | Percent of Total Market Sales Growth 1999–2000 | 1999–2000 Sales Growth (\$ Million) | Top 200 Sales Rank | Year First Marketed |
|------------|--|--|-------------------------------------|--------------------|---------------------|
| Vioxx      | Anti-inflammatory                          | 5.7%   | \$1,147                             | 15                 | 1999                |
| Lipitor    | Cholesterol-lowering                       | 5.7%   | \$1,145                             | 2                  | 1997                |
| Prevacid   | Anti-ulcerant (PPI)                        | 3.9%   | \$790                               | 3                  | 1995                |
| Celebrex   | Anti-inflammatory                          | 3.7%   | \$745                               | 6                  | 1999                |
| Procrit    | Blood Cell Stimulating Factor (for Anemia) | 3.3%   | \$661                               | 10                 | 1991                |
| Glucophage | Anti-diabetic Agent                        | 2.4%   | \$492                               | 12                 | 1995                |
| Zocor      | Cholesterol-lowering                       | 2.4%   | \$484                               | 4                  | 1992                |
| Prilosec   | Anti-ulcerant (PPI)                        | 2.1%   | \$433                               | 1                  | 1989                |
| Zyprexa    | Anti-psychotic                             | 2.0%   | \$410                               | 9                  | 1996                |
| Paxil      | Anti-depressant (SSRI)                     | 1.6%   | \$328                               | 11                 | 1993                |
| Neurontin  | Anti-epileptic                             | 1.6%   | \$323                               | 20                 | 1994                |
| Risperdal  | Anti-psychotic                             | 1.3%   | \$273                               | 18                 | 1994                |
| Zoloft     | Anti-depressant (SSRI)                     | 1.2%   | \$243                               | 8                  | 1992                |
| Norvasc    | Calcium Channel Blocker (for Hypertension) | 1.1%   | \$230                               | 13                 | 1992                |
| Epogen     | Blood Cell Stimulating Factor (for Anemia) | 1.1%   | \$219                               | 7                  | 1989                |
| Augmentin  | Antibiotic                                 | 1.0%   | \$196                               | 16                 | 1984                |
| Premarin   | Hormone Replacement                        | 1.0%   | \$193                               | 19                 | 1964                |
| Claritin   | Antihistamine                              | 0.8%   | \$153                               | 14                 | 1993                |
| Pravachol  | Cholesterol-lowering                       | 0.6%   | \$130                               | 17                 | 1991                |
| Prozac     | Anti-depressant (SSRI)                     | 0.5%   | \$94                                | 5                  | 1987                |

**notes**

Top 200 Sales Rank based on dollar sales in 2000.

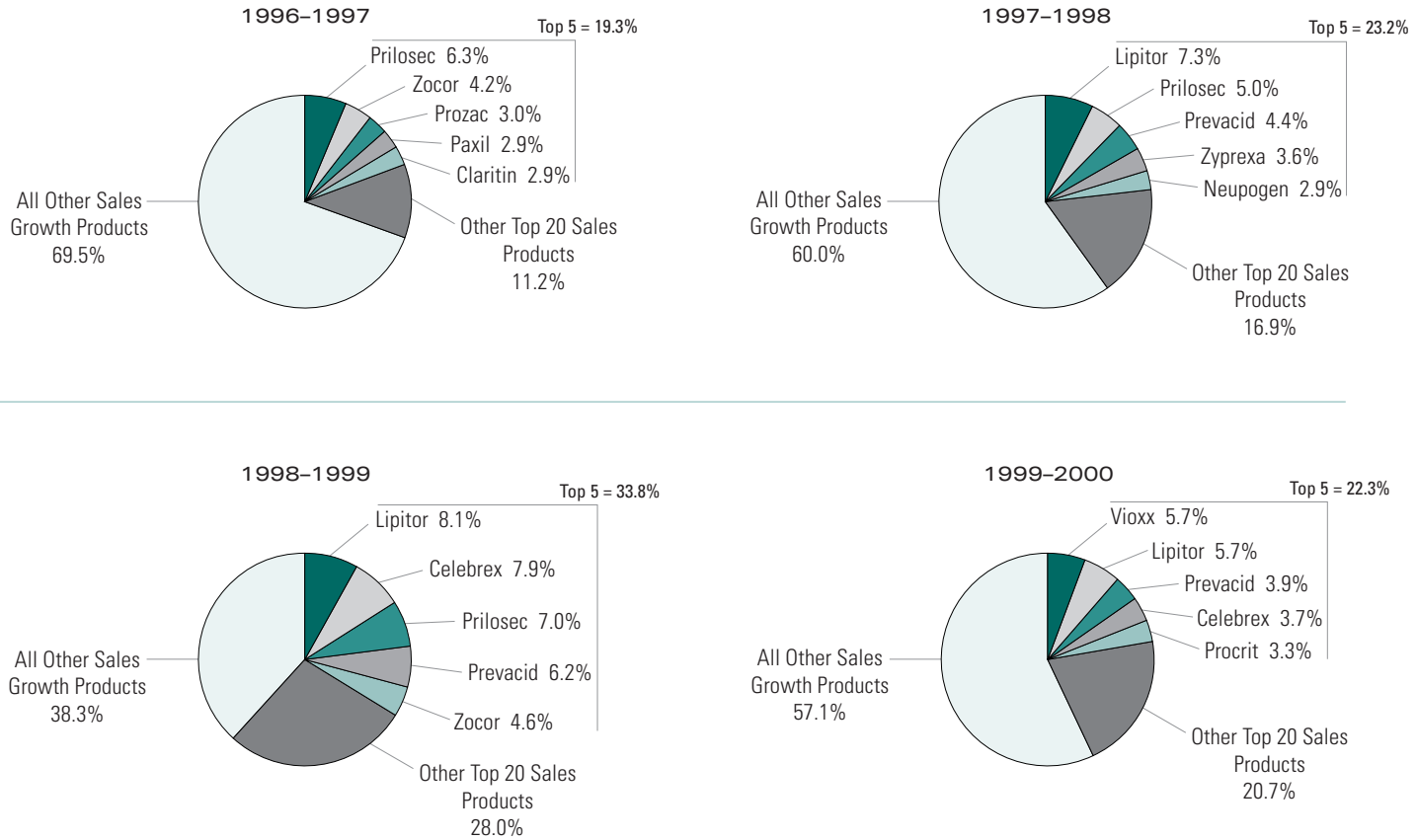
Sales represent prescription drug purchases, in millions of dollars, at pharmacy acquisition cost, by independent, chain, foodstore, non-federal and federal hospital, clinic, HMO, and long-term care pharmacies. Does not include purchases by mail order pharmacies.

**source**

Sonderregger Research Center analysis, based on: Sales and Sales Growth data from IMS Health, Inc., *Retail Perspective* and *Provider Perspective*, March 2001. Year First Marketed from Top 200 listing published in *Pharmacy Times*, April 1999, and from IMS Health, Inc., *Year in Review* articles published in *Medical Marketing & Media*, May 2000 and 2001.

### Comparison of Growth Contributions by Top-Selling Prescription Drugs, 1996–2000

exhibit  
28



**notes**

Sales growth represents changes in prescription drug purchases, in millions of dollars, at pharmacy acquisition cost, by independent, chain, foodstore, non-federal and federal hospital, clinic, HMO, and long-term care pharmacies. Does not include purchases by mail order pharmacies.

Products with sales declines were omitted from the contributions to growth. In 1996–97, 6 products experienced sales declines, with 1 product losing over \$650 million in sales; in 1997–98, 1 product experienced a sales decline.

**source**

Sonderegger Research Center analysis, based on sales data and rankings from IMS Health, Inc., *Retail Perspective and Provider Perspective* published in *Medical Marketing & Media*, May issues, various years.

## Top 20 Major Pharmaceutical Manufacturers Ranked by Dollar Sales, 1999 and 2000

29

| Ranking by Sales                    |      | Company                      | 2000 Prescription Sales<br>(\$ Million) | 2000 Market Share<br>(Percent of Total<br>Prescription Sales Market) |
|-------------------------------------|------|------------------------------|---|--|
| 2000                                | 1999 |                              |   |  |
| 1                                   | 3    | Pfizer, Inc.                 | \$14,922                                | 10.3%  |
| 2                                   | 5    | GlaxoSmithKline, Plc.        | \$12,981                                | 8.9%   |
| 3                                   | 1    | Merck & Company, Inc.        | \$10,790                                | 7.4%   |
| 4                                   | 2    | Bristol-Myers Squibb Co.     | \$8,999                                 | 6.2%   |
| 5                                   | 4    | AstraZeneca Corp.            | \$8,552                                 | 5.9%   |
| 6                                   | 6    | Johnson & Johnson            | \$7,897                                 | 5.4%   |
| 7                                   | 19   | Pharmacia Corp.              | \$6,277                                 | 4.3%   |
| 8                                   | 9    | Eli Lilly and Company        | \$6,133                                 | 4.2%   |
| 9                                   | 7    | American Home Products Corp. | \$6,023                                 | 4.2%   |
| 10                                  | 10   | Schering-Plough Corp.        | \$5,773                                 | 4.0%   |
| 11                                  | 11   | Novartis AG                  | \$5,552                                 | 3.8%   |
| 12                                  | 16   | TAP Pharmaceuticals          | \$4,019                                 | 2.8%   |
| 13                                  | 13   | Aventis Corp.                | \$3,829                                 | 2.6%   |
| 14                                  | 15   | Hoffman-La Roche, Ltd.       | \$3,689                                 | 2.5%   |
| 15                                  | 14   | Abbott Laboratories          | \$3,335                                 | 2.3%   |
| 16                                  | 18   | Amgen, Inc.                  | \$3,136                                 | 2.2%   |
| 17                                  | 20   | Bayer AG                     | \$2,166                                 | 1.5%   |
| 18                                  | NA   | Boehringer Ingelheim, Inc.   | \$1,686                                 | 1.2%   |
| 19                                  | NA   | Mylan Pharmaceuticals, Inc.  | \$1,401                                 | 1.0%   |
| 20                                  | NA   | Forest Labs                  | \$1,292                                 | 0.9%   |
| Total Market Share for Top 20 Firms |      |                              |   | 81.6%  |

**notes**

NA = Not among Top 20 firms ranked by sales in 1999

Sales Rank and Market Share represent prescription drug purchases, in millions of dollars, at pharmacy acquisition cost by independent, chain, foodstore, non-federal and federal hospital, clinic, HMO, and long-term care pharmacies. Sales data do not include mail order data.

Ranks for GlaxoSmithKline, Pfizer, and Pharmacia for 1999 are as individual companies, before mergers. In 2000, Pfizer acquired Warner-Lambert (ranked 8 in 1999), Glaxo Wellcome acquired SmithKlineBeecham (ranked 12 in 1999), and Pharmacia & Upjohn merged with Searle/Monsanto (ranked 17 in 1999).

**source**

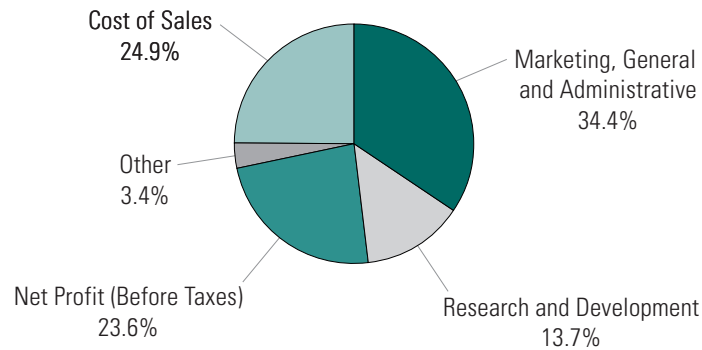
IMS Health, Inc., *Retail Perspective and Provider Perspective*, March 2001.

## Financial Operations Summary for Top 10 Major Pharmaceutical Manufacturers and Top 10 Generic Pharmaceutical Manufacturers, 2000

exhibit

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Top 10 Major Pharmaceutical Manufacturers, 2000



Percent of Revenues for Various Operating Functions

**notes**

Data represent financial statements and overall operations for the Top 10 Major Pharmaceutical Manufacturers ranked by sales of prescription drugs and for the Top 10 Generic Manufacturers ranked by overall revenues. Percents shown are the averages across firms, based on the amounts from the firms' consolidated financial statements, including expenses and revenues in total for prescription drugs and other products (e.g., diagnostic, veterinary, and health care supplies) that the firms manufacture.

Cost of Sales = cost of raw materials and production costs for manufacturing the finished goods to be sold.

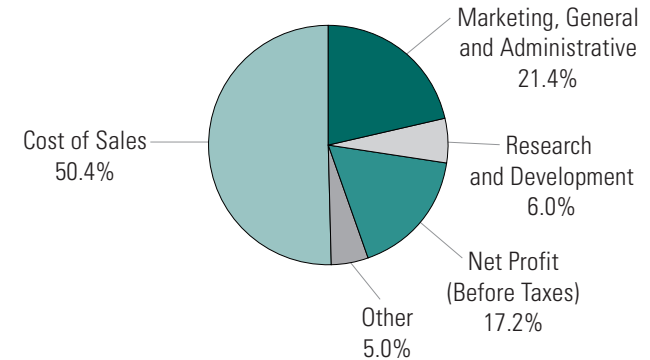
Marketing, General and Administrative = the costs of promoting and selling the goods, plus general business expenses.

Research and Development = the costs of identifying new drugs and products, and developing them for market, including testing and approval.

Net Profit (Before Taxes) = the residual from revenues after deducting all expenses (i.e., Marketing, General and Administrative; Cost of Sales; Research and Development; and Other).

Other = other costs, special charges, unusual items, restructuring charges, etc.

Top 10 Generic Pharmaceutical Manufacturers, 2000



Percent of Revenues for Various Operating Functions

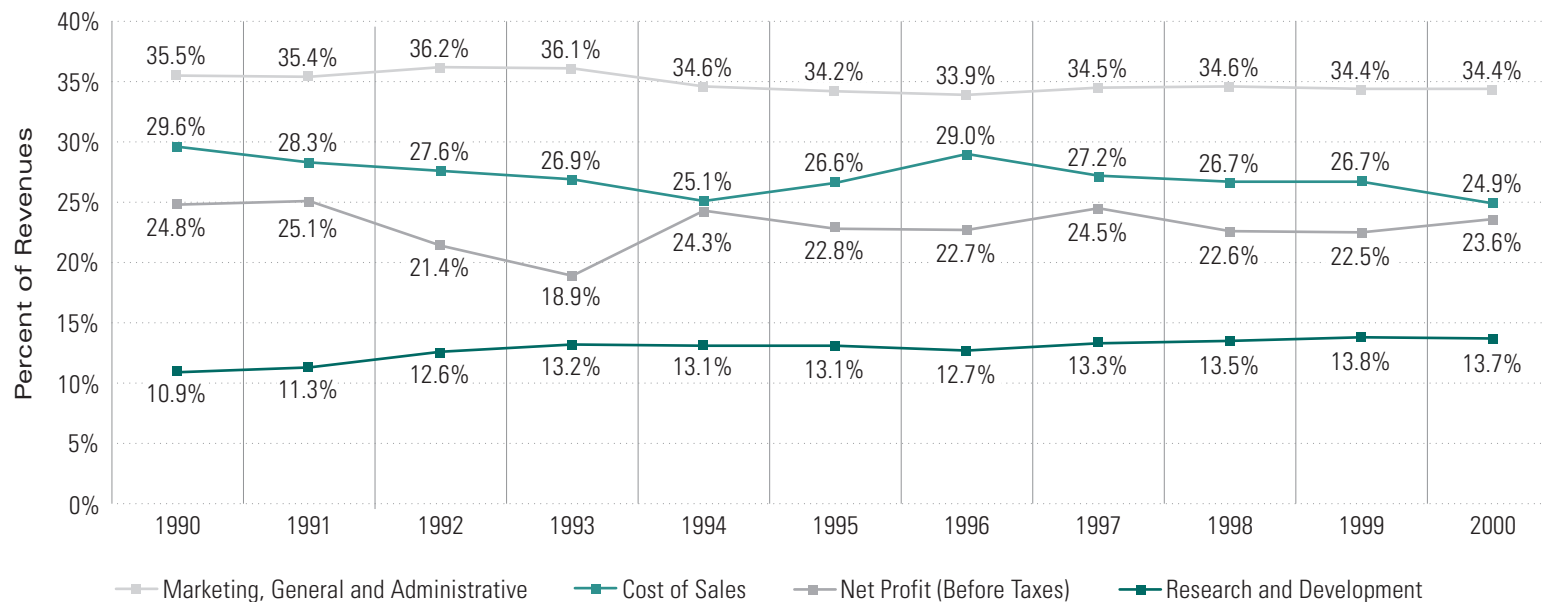
**source**

Sonderegger Research Center analysis, based on: Top 10 Pharmaceutical Manufacturers' consolidated financial statements in their Annual Reports for 2000 (from the firms' web sites or annual reports). Top 10 Major Pharmaceutical Manufacturers included are American Home Products, AstraZeneca, Bristol-Myers Squibb, GlaxoSmithKline, Johnson & Johnson, Lilly, Novartis, Pharmacia, Pfizer, Schering-Plough. Merck is not included to avoid the confounding influence of pharmacy operations of the Merck-Medco mail order pharmacy subsidiary on the consolidated Merck pharmaceutical manufacturing financial statements. Top 10 Generic Pharmaceutical Manufacturers selected based on 1999 sales ranking reported in *Med Ad News*, October 2000. Firms included are Alpharma, Andrx, Barr, Faulding, Forest, IVAX, Mylan, Perrigo, Teva, Watson. Includes only Research and Development (R&D) and profit values for Faulding. Alpharma reported zero R&D expense in 2000.

## Trends in Major Pharmaceutical Manufacturer Financial Statements, Top 10 Firms, 1990-2000

exhibit

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### notes

Data represent financial statements and overall operations for the Top 10 Major Pharmaceutical Manufacturers ranked by sales of prescription drugs. Percents shown are the averages across firms, based on the amounts from the firms' consolidated financial statements, including expenses and revenues in total for prescription drugs and other products (e.g., diagnostic, veterinary, and health care supplies) that the firms manufacture.

Marketing, General and Administrative = the costs of promoting and selling the goods, plus general business expenses.

Cost of Sales = cost of raw materials and production costs for manufacturing the finished goods to be sold.

Net Profit (Before Taxes) = the residual from revenues after deducting all expenses (i.e., Marketing, General and Administrative; Cost of Sales; Research and Development; and Other).

### notes (continued)

Research and Development = the costs of identifying new drugs and products, and developing them for market, including testing and approval.

Other expenses (3.4% of total revenues in 2000, including other costs, special charges, unusual items, restructuring charges, etc.) are not shown.

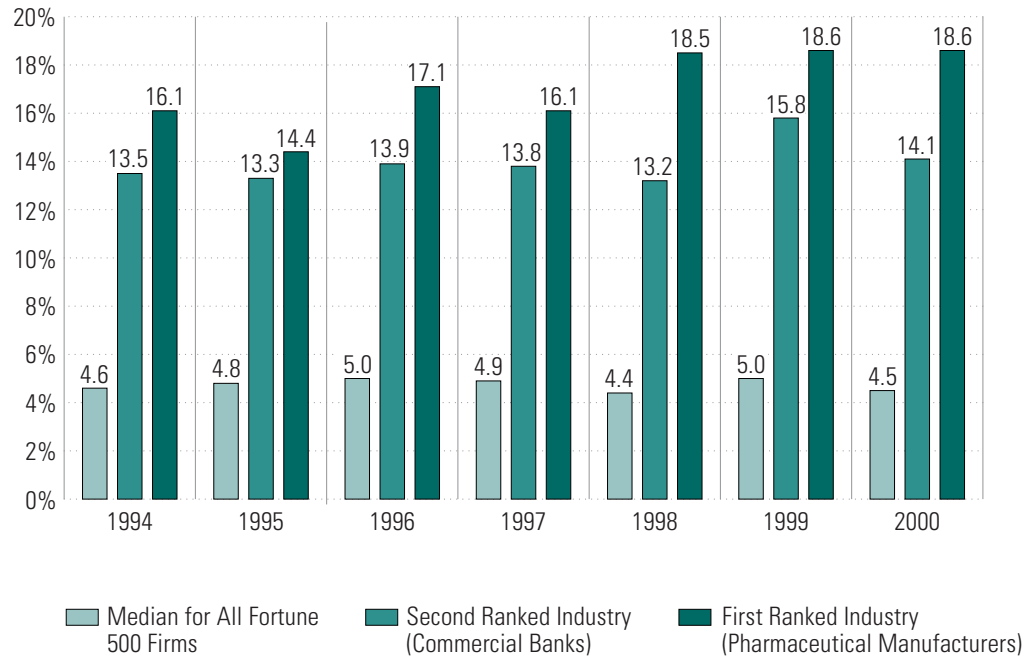
### source

Sonderegger Research Center analysis, based on financial statements of Top 10 Ranked (by Sales) Pharmaceutical Manufacturers. Firms included are American Home Products, AstraZeneca, Bristol-Myers Squibb, GlaxoSmithKline, Johnson & Johnson, Lilly, Novartis, Pharmacia, Pfizer, Schering-Plough. Merck is not included to avoid the confounding influence of pharmacy operations of the Merck-Medco mail order pharmacy subsidiary on the consolidated Merck pharmaceutical manufacturing financial statements.

### Profitability Among Pharmaceutical Manufacturers Compared to Other Industries, 1994–2000

exhibit

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**note**

Percent shown is the median percent net profit after taxes as a percent of firm revenues for all firms in the industry. The second ranked industry each year was commercial banks.

**source**

Fortune 500 Industry Rankings, *Fortune*, April issues, various years.







## Glossary

**Actual Acquisition Cost (AAC):** the net cost at which the pharmacy acquires a drug. It varies with the size of container purchased (e.g., ten bottles of 100 tablets typically cost more than one bottle of 1,000 tablets) and the source of purchase (manufacturer or wholesaler).

**Average Manufacturer Price (AMP):** the price at which drugs are sold by the manufacturer to purchasers. For sales to wholesalers, AMP represents the Wholesaler Acquisition Cost (WAC) after all discounts; for sales directly to pharmacies, AMP represents the net “direct” price after discounts.

**Average Wholesale Price (AWP):** a national average of list prices charged by wholesalers to pharmacies. With few exceptions, the AWP is the manufacturer’s suggested list price for a wholesaler to charge a pharmacy for a drug. It typically is higher than the pharmacy’s actual acquisition cost (in 1997, the Office of Inspector General, Department of Health and Human Services, reported that pharmacies paid 18.3% less than AWP for brand name drugs and 42.5% less than AWP for generic drugs).

**Brand Name Drug:** generally, a drug product that is covered by a patent and thus is manufactured and sold exclusively by one firm. Cross licensing occasionally occurs, allowing an additional firm(s) to market the drug. After the patent expires, multiple firms can produce the drug product, but the brand name remains with the original manufacturer’s product.

**Chain Pharmacy:** a corporate organization with multiple pharmacy store outlets under common ownership. Traditional chain pharmacies (such as Walgreens, Eckerd, Rite Aid, CVS) have approximately 50% of their sales as prescriptions and the remaining mix of sales in other merchandise. Mass Merchandiser chain pharmacies (such as Wal-Mart, KMart, ShopKo) and Food Store chain pharmacies (such as Kroger, Albertsons) have a small proportion (5–10%) of their total sales for prescriptions.

**Coinsurance:** a cost-sharing requirement under a health insurance policy that requires the patient to pay a percentage of costs for covered services/prescriptions (e.g., 20% of the prescription price).

**Copayment:** a cost-sharing requirement under a health insurance policy that requires the patient to pay a specified dollar amount for each unit of service (e.g., \$10.00 for each prescription dispensed).

**Cost of Sales:** within manufacturing industries, the cost of raw materials and production costs for manufacturing finished goods for sale. Cost of sales typically does not include the manufacturer's expenses involved in selling, distribution, research, or general administration. A parallel within wholesaling or retailing industries would be the cost of goods sold.

**Detailing:** personal selling activities by pharmaceutical manufacturer sales representatives. The representatives inform prescribers, pharmacists, and others about the specifics or details of their firms' products, thus the label "detailing." Sales representatives often leave samples of products for prescribers for trial use among their patients, to stimulate future prescribing.

**Direct Pay Insured Prescription:** a prescription covered under a service benefit drug coverage insurance plan (i.e., a private or public insured prescription program). Service benefit plans provide direct payment to the pharmacy for the prescription; consumers are required to pay only a copayment or coinsurance when obtaining each prescription.

**Direct-to-Consumer Advertising/Promotion:** advertising for prescription drugs in print, radio, and television media targeted directly to consumers by pharmaceutical manufacturers. Consumers are the targeted audience, even though prescription drugs require a prescription order from a prescriber in order to be dispensed.

**Dispensing Fee:** an amount added to the prescription ingredient cost by a pharmacy to determine a prescription price. The dispensing fee represents the charge for the professional services provided by the pharmacist when dispensing a prescription (including overhead expenses and profit). Most direct pay insured prescription programs use dispensing fees to establish pharmacy payment for prescriptions.

**Drug:** a substance intended for use in the diagnosis, cure, mitigation, treatment, or prevention of a disease.

**Drug Wholesaler:** a firm involved in the logistics function (assembling, sorting, and redistributing) in the channel of distribution for pharmaceuticals. They purchase goods from manufacturers and redistribute them to pharmacies based on the needs and orders of the pharmacies.

**Food Store/Supermarket Pharmacies:** pharmacy departments within chain grocery store outlets. The prescription department generates a small proportion of total store sales, but is used to draw customers and build a "full service" image for the supermarket. Examples include Kroger, Albertsons, Sav-On/Tom Thumb, etc.

**Formulary:** a listing of drug products that may be dispensed or reimbursed (positive formulary) or that may not be dispensed or reimbursed (negative formulary). A government body, third-party insurer or health plan, or an institution may compile a formulary. Some institutions or health plans develop closed (i.e., restricted) formularies where only those drug products listed can be dispensed in that institution or reimbursed by the health plan. Other formularies may have no restrictions (open formulary) or may have certain restrictions such as higher patient cost-sharing requirements for off-formulary drugs.

**Generic Drug:** a drug product that is no longer covered by patent protection and thus may be produced and/or distributed by many firms.

**Indemnity Prescription Coverage:** an insurance plan where the insured pays for the covered prescription and then is reimbursed or indemnified by the plan. Often these plans first require the insured to pay a deductible and then the insurer covers a percent (e.g., 80%) of the cost of prescriptions used by the insured. The insured pays the full retail price (“usual and customary” charge) when obtaining the prescription. Only a small proportion of consumers (5-10%) has this kind of insurance for prescriptions; most insured consumers have service benefit coverage for prescriptions.

**Independent Pharmacy:** an independent entrepreneur or small chain (less than 10 units under one ownership) pharmacy, often viewed as the traditional “corner drug store.” These pharmacies range from prescription-dominated clinic and apothecary pharmacies to pharmacies with the traditional mix of prescriptions, over-the-counter drugs, sundries, and general merchandise. For most independent pharmacies, prescriptions are the dominant share of total store sales (typically, 70% to 80% of sales or more).

**Inflation:** a measure of price changes over time. “Pure” or “isolated” price inflation is determined using a fixed market basket of goods so that the measure reflects the changes in prices for a consistent set of products. Generally, inflation measures are adjusted to reflect a changing basket of consumption that is a more realistic reflection of consumption expenditures, particularly consumer inflation measures. The Consumer Price Index (CPI) attempts to reflect changes in the goods consumed so that the market basket of goods matches actual consumer spending.

**Ingredient Cost:** the cost of the drug product that is dispensed in a prescription. This can refer to the actual acquisition cost (AAC) or cost of goods sold for a pharmacy, or to the amount that an insurer would use in determining payment to a pharmacy for the drug dispensed in a covered prescription.

**Mail Order Pharmacy:** a pharmacy that dispenses prescriptions to consumers who contact the pharmacy by mailing or faxing their prescription orders and then the prescription is mailed to the consumer. This can be an advantage for homebound patients or other patients without ready access to traditional community pharmacies. Unlike traditional pharmacies, the pharmacies can serve more than the local market where the pharmacy is located. Since there typically is at least a short delay between ordering and receiving prescriptions, these pharmacies generally serve patients on long-term drug therapies and those without immediate drug needs. The average size of prescriptions (number of capsules or tablets) dispensed in mail order pharmacies is larger than in local community pharmacies. Consequently, although mail order pharmacies represent less than 5% of all prescriptions dispensed, they comprise approximately 13% of total retail prescription sales.

**Market Share:** the proportion of the total market that a firm or a product represents.

**National Health Expenditures (NHE):** amounts of spending for health care in the U.S. by type of service delivered and source of funding for those services. The Centers for Medicare and Medicaid Services (CMS) collects and publishes NHE data annually.

The following are definitions used by CMS in determining expenditures:

*Prescription Drugs:* includes spending for prescription drugs purchased in retail outlets. The value of prescription drugs used or provided by hospitals, nursing homes, or health professionals is not included in prescription drugs, but is included in spending for these providers' services. Research and development expenditures of drug companies are included in the prescription drug category and not in the overall research category (they are integral to the price manufacturers charge for their goods, and thus are incorporated into sales to and by pharmacies).

*Drugs and Non-Durables:* includes spending for prescription drugs, over-the-counter medicines, and sundries purchased in retail outlets.

*Physician/Clinical Services:* includes services provided in establishments operated by physicians (medical doctors and doctors of osteopathy), outpatient care centers, plus the portion of medical laboratories services that are billed independently by the laboratories. Also includes services rendered by a physician in a hospital if billed independently by the physician, and services provided in freestanding outpatient clinics operated by the U.S. Department of Veterans Affairs and the U.S. Indian Health Service.

*Hospital Care:* includes hospital revenues from all services provided by hospitals to patients, including room and board, ancillary charges, services of resident physicians, inpatient pharmacy, hospital-based nursing home and home health care, and any other services billed by hospitals.

*Personal Health Care:* includes spending for hospital care, physician services, dental services, other professional services, home health care, drugs and other medical non-durables, vision products and other medical durables, nursing home care, and other personal health care. Does not include program administration and net cost of private health insurance, government and public health activities, or research and construction.

**Non-Prescription Drug:** a drug product that can be purchased without a prescription order.

**Over-the-Counter (OTC) Drug:** a non-prescription drug.

**Patent/Patent Life:** a patent provides exclusivity in marketing a product. The patent life is the time during which a patent is in force and the product's manufacturer has exclusive marketing rights. The length of a patent for a drug is 20 years and is longer than for other products. The effective patent life for a drug may actually be shorter than 20 years depending on the time between discovery and market launch that is needed for safety and efficacy testing, clinical trials, and FDA approval for marketing.

**Pharmaceutical:** a prescription or non-prescription drug. General references to pharmaceuticals (such as industry or firm sales figures) sometimes include diagnostic agents and sterile solutions.

**Pharmaceutical Manufacturer:** a firm that produces drug products as finished goods for human or animal use. They generally are divided into 2 broad categories of firms, major pharmaceutical manufacturers and generic pharmaceutical manufacturers, as described below:

*Major Pharmaceutical Manufacturer:* manufacturers that identify and develop new prescription and/or non-prescription drugs through their research efforts. Typically these firms are large manufacturing companies. Sometimes they are referred to as "innovator" pharmaceutical firms, "brand name" pharmaceutical manufacturers, "research-based" pharmaceutical manufacturers, or generally as the "pharmaceutical industry." These firms invest in new product research and development and support their products with extensive promotional efforts. Their trade associations include Pharmaceutical Research and Manufacturers of America (PhRMA), the National Pharmaceutical Council (NPC), and the Consumer HealthCare Products Association (CHPA; formerly the NonPrescription Drug Manufacturers' Association, NDMA). Some major pharmaceutical manufacturers also have generic manufacturing divisions or generic pharmaceutical manufacturer subsidiaries.

*Generic Pharmaceutical Manufacturer:* a firm that produces and markets generic prescription and/or non-prescription drug products. Some generic firms both manufacture and distribute drug products while others only repackage or distribute products manufactured for them by contract manufacturing firms (sometimes even a major pharmaceutical firm). Although all drug products must have FDA approval for sale, independent clinical trials are not required for generic drugs; the innovator's evidence of safety and effectiveness are accepted. Generic firms must show that their products are bio-equivalent, often through laboratory studies and assurances. Since generic firms often produce identical drugs, they generally compete on price to establish or gain market share.

**Pharmacy Benefit Manager (PBM):** an organization that provides administrative services in processing and analyzing prescription claims for pharmacy benefit and coverage programs. Their services can include contracting with a network of pharmacies; establishing payment levels for provider pharmacies; negotiating rebate arrangements; developing and managing formularies, preferred drug lists, and prior authorization programs; maintaining patient compliance programs; and operating disease management programs. Many PBMs also operate mail order pharmacies or have arrangements to include prescription availability through mail order pharmacies.

**Preferred Drug:** a drug is designated "preferred" if the manufacturer agrees to make the drug available to a private insurer, health plan, or public program at a reduced price compared to other drugs that are considered therapeutic alternates. Health plan enrollees may pay lower cost-sharing amounts for preferred drugs, and pharmacists may be encouraged to dispense the preferred drug through higher reimbursement amounts (dispensing fees).

**Prescriber:** a health care provider licensed to prescribe drugs. Primary prescribers are physicians, but others may have prescriptive authority, depending on states' statutes and laws. For example dentists, physician assistants, nurse practitioners, optometrists, and others may have authority to prescribe, typically within limits.

**Prescription Drug:** a drug that is restricted to sale only after issuance of a prescription order by a licensed prescriber. Sometimes referred to as a "legend" drug because the label on the prescription package includes the legend, "Caution: Federal law prohibits dispensing without a prescription order."

**Prior Authorization:** the process of obtaining prior approval from a private or public third-party prescription insurer as to the appropriateness and coverage of a service or medication.

**Private Insured Prescription:** a prescription covered under a privately funded health insurance plan or program.



**Publicly Insured Prescription:** a prescription covered under a federal, state, or local publicly funded health program. Medicaid prescriptions dominate this category. Federal programs include prescriptions covered by the Department of Defense and Veterans Administration health care programs. Medicare has limited drug coverage provisions for outpatient drugs, primarily for drugs that are not self-administered (e.g., home infusion) and for recipients enrolled in managed care programs. Some state and local public welfare programs also exist.

**Promotion:** communication, education, and persuasion efforts intended to foster increased use of a company's products. Promotion includes advertising, coupons, personal selling, sales promotions and incentives, samples, etc.

**Rebate:** an amount that the manufacturer of a drug pays to an insurer or health plan for each unit of drug dispensed. Rebate arrangements exist between manufacturers and Medicaid agencies, HMOs, and other insurers or drug plans, and generally bypass the pharmacy. Rebates are referred to as "after market" arrangements because they do not affect the prices paid at the time of service, but are implemented later, ultimately reducing the payer's expenditures or program costs. The Omnibus Budget Reconciliation Act of 1990 (OBRA '90) requires pharmaceutical firms to give a rebate to the Centers for Medicare and Medicaid Services

(CMS) for distribution to the states for all drugs covered under state Medicaid drug programs. Within the private insurance market, rebates often are associated with preferred drugs, and the rebate or level of rebate is contingent upon achieving market share goals.

**Retail Prescription Price:** the price charged by a pharmacy for prescriptions and related services provided. For cash (self-pay), uninsured patrons (and usually for those with indemnity insurance), it also is referred to as the "usual and customary" charge, and is determined by the pricing policies of the pharmacy. For insured patients, it is the third-party payment or reimbursement amount determined by the insurance plan's payment formula and agreed to in the contract with the pharmacy. Third-party payment usually is established as an amount for the prescription ingredient (cost of drug dispensed) plus a professional dispensing fee (to cover dispensing and professional service costs of the pharmacist).

**Service Benefit:** insurance coverage where payment for services is made directly to the provider pharmacy via a claims process. The provider payment will be at a level or formula specified in the provider's contract, less any cost-sharing amounts required to be paid by the patient. Most consumers with prescription drug coverage are covered by service benefit plans.

**Third-Party Insurer:** an entity (a public or private program, health plan, or insurer) that pays or reimburses the patient or pharmacy for all or part of the cost of services provided.

**Third-Party Payment:** payment or reimbursement amounts established by third-party drug programs for prescriptions and services dispensed to beneficiaries. Payment formulas typically specify an amount for the prescription ingredients to which is added a dispensing fee (e.g., estimated acquisition cost (EAC) or maximum allowable cost (MAC) plus a dispensing fee) for calculating the total prescription price or payment from the third-party program.

**Third-Party Prescription:** a prescription covered under a public or private insurance drug program structured as a service benefit (the provider pharmacy submits a claim for services rendered and payment is made directly to the pharmacy, less any applicable copayment or coinsurance paid by the patient).

**Top 200 Drug:** a drug product ranked according to popularity among the top 200 drugs based on the number of prescriptions dispensed or among the top 200 drugs based on sales dollars. Top 200 drugs represent approximately half of all prescriptions dispensed.

**Traditional Chain Drug Store:** chain pharmacies usually are defined as having 10 or more units under the same ownership. Traditional chains are “freestanding” retail outlets with prescriptions, non-prescription drugs, sundries, and general merchandise departments. The prescription department usually contributes more to total store sales than the other merchandise departments (e.g., gifts, sundries, photos, magazines, etc.). Examples include Walgreens, Eckerd, CVS, Rite Aid, Longs, etc.

**Usual and Customary (U&C) Charge:** the amount a pharmacy or other provider charges self-pay (cash) patients. Some insurance programs dictate that a pharmacy’s claim may not exceed its “usual and customary” charge for the prescription dispensed.

**Wholesale Acquisition Cost (WAC):** the price paid by the wholesaler for drugs purchased from the wholesaler’s suppliers (manufacturers). On financial statements, the total of these amounts equals the wholesaler’s cost of goods sold. Publicly disclosed or listed WAC amounts may not reflect all available discounts.

## Sources for Additional Information

### *AdvancePCS*

5215 N. O'Connor Blvd, Suite 1600  
Irving, TX 75039  
(800) 749-6199  
www.advanceparadigm.com

### *The Chain Pharmacy Industry Profile — 2001*

National Association of Chain Drug Stores (NACDS)  
413 N. Lee Street  
Alexandria, VA 22314  
(703) 549-3001  
www.nacds.org

### *Competitive Media Reporting*

685 Third Avenue, 4th Floor  
New York, NY 10017  
(212) 991-6000  
www.cmr.com

### *Express Scripts — Value Rx Drug Trend Report*

Express Scripts, Inc.  
14000 Riverport Drive  
Maryland Heights, MO 63043  
www.express-scripts.com

### *Generic Pharmaceutical Association (GPhA)*

1620 I Street, NW, Suite 800  
Washington, DC 20006  
(202) 833-9070  
www.genericaccess.com

### *Health Affairs*

Poisal, J.A., and L. Murray, "Growing Differences Between Medicare Beneficiaries With and Without Drug Coverage," March/April 2001, pp. 74-85.

### *The Henry J. Kaiser Family Foundation*

2400 Sand Hill Road  
Menlo Park, CA 94025  
(650) 854-9400  
(reports are available at www.kff.org or by calling 1-800-656-4533):

*Prescription Drug Trends: A Chartbook*, prepared by the Sonderegger Research Center, School of Pharmacy, University of Wisconsin — Madison, July 2000

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Employer Perspectives on Future Benefits*,  
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**IMS Health Incorporated**

660 West Germantown Pike  
Plymouth Meeting, PA 19462  
(610) 834-5000  
www.imshealth.com

**Merck-Medco**

Merck & Co. Inc.  
One Merck Drive  
Whitehouse Station, NJ 08889  
(908) 423-1000  
www.merck-medco.com

**National Association of Boards of Pharmacy  
(NABP)**

700 Busse Highway  
Park Ridge, IL 60068  
(847) 698-6227  
www.nabp.net

**NCPA-Pharmacia Digest**

National Community Pharmacists Association  
(NCPA)  
205 Daingerfield Road  
Alexandria, VA 22314  
(703) 683-8200  
www.ncpanet.org

**Novartis Pharmacy Benefit Report — Trends  
and Forecasts**

Novartis Pharmaceuticals Corp.  
59 Route 10  
East Hanover, NJ 07936-1080  
www.novartisvin.com

**The 2000 NWDA Industry Profile and  
Healthcare Factbook**

Healthcare Distribution Management Association  
(HDMA)  
1821 Michael Faraday Drive, Suite 400  
Reston, VA 20190-5348  
(703) 787-0000  
www.healthcaredistribution.org

*Pharmaceutical Benefits Under State Medical Assistance Programs*

National Pharmaceutical Council  
1894 Preston White Drive  
Reston, VA 20191-5433  
[www.npcnow.org](http://www.npcnow.org)

*PhRMA Annual Survey*

Pharmaceutical Research and Manufacturers of America (PhRMA)  
1100 Fifteenth Street, NW  
Washington, DC 20005  
[www.phrma.org](http://www.phrma.org)

*Scott-Levin*

60 Blacksmith Road  
Newtown, PA 18940-1886  
(215) 860-0440  
[www.scottlevin.com](http://www.scottlevin.com)

*U.S. Department of Labor*

Bureau of Labor Statistics  
Division of Information Services  
2 Massachusetts Ave., NE  
Washington, DC 20212  
(202) 691-5200  
[www.bls.gov](http://www.bls.gov)

*U.S. Department of Health and Human Services (www.hhs.gov):*

Food and Drug Administration (FDA)  
Center for Drug Evaluation and Research (CDER)  
Rockville, MD 20857  
[www.fda.gov/cder](http://www.fda.gov/cder)

Medical Expenditure Panel Survey  
Agency for Healthcare Research and Quality,  
and the National Center for Health Statistics  
[www.meps.ahrq.gov](http://www.meps.ahrq.gov)

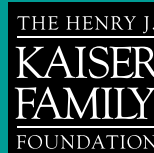
Medicare Current Beneficiary Survey  
Centers for Medicare and Medicaid Services (CMS)  
Office of Strategic Planning  
[www.hcfa.gov/mcbs](http://www.hcfa.gov/mcbs)

National Health Expenditures  
Centers for Medicare and Medicaid Services (CMS)  
Office of the Actuary  
1500 Security Boulevard  
Baltimore, MD 21244  
[www.hcfa.gov/stats/nhe-oact](http://www.hcfa.gov/stats/nhe-oact)

*Prescription Drug Coverage, Spending, Utilization, and Prices: Report to the President, April 2000, Office of the Assistant Secretary for Planning and Evaluation*  
[www.aspe.hhs.gov](http://www.aspe.hhs.gov)







The Henry J. Kaiser Family Foundation

2400 Sand Hill Road  
Menlo Park, CA 94025  
Phone: 650-854-9400  
Fax: 650-854-4800

Washington Office:  
1450 G Street NW, Suite 250  
Washington, DC 20005  
Phone: 202-347-5270  
Fax: 202-347-5274

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November 2001