

## STATISTICAL BRIEF #33

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### **Outpatient Prescribed Medicines: A Comparison of Use and Expenditures, 1987 and 2001**

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#### **Introduction**

An examination of trends in outpatient prescribed medicine use and expenditures is an essential component of studies that explore recent increases in health care spending. This Statistical Brief summarizes data that indicate a significant growth between 1987 and 2001 in the use (i.e., number of purchases) and expenditures for outpatient prescribed medicines in the U.S. civilian noninstitutionalized population.

The data used to estimate the proportion of the population that purchased a prescribed medicine and the expense associated with that purchase are derived from the 1987 National Medical Expenditure Survey (NMES) and the 2001 Medical Expenditure Panel Survey-Household Component (MEPS-HC). The estimates from the 1987 NMES were adjusted for inflation using data from the 1987 and 2001 Consumer Price Index for All Urban Consumers (CPI-U). All significance tests were done using the adjusted 1987 estimates and the 2001 estimates, and results discussed are statistically significant at the 0.05 level. Over-the-counter medicines and free samples are not included in outpatient prescribed medicine expenditures.

#### **Findings**

In 1987, approximately 57 percent of the 239.4 million persons in the U.S. civilian noninstitutionalized population purchased 1.2 billion prescribed medicines at a total expenditure of \$34.7 billion (in 2001 dollars), while in 2001 approximately 65 percent of 284.2 million persons purchased close to 2.5 billion prescribed medicines for \$134.1 billion. For those with a prescribed medicine expense, average total expenditures for prescribed medicines rose significantly from 1987 to 2001, from \$253 in 1987 (in 2001 dollars) to \$730 in 2001. Total out-of-pocket expenditures also dramatically increased from 1987 to 2001, from \$19.7 billion (in 2001 dollars) to \$59 billion. This trend remained consistent when comparing average total out-of-pocket expenditures for prescribed medicines for those with a prescribed medicine expense, going from \$144 in 1987 (in 2001 dollars) to \$321 in 2001 (figures 1 and 2).

#### **Highlights**

- In 1987, approximately 57 percent of the U.S. civilian noninstitutionalized population purchased 1.2 billion prescribed medicines at a total expenditure of \$34.7 billion (in 2001 dollars); in 2001, approximately 65 percent of the population purchased almost 2.5 billion prescribed medicines at a total expenditure of \$134.1 billion.
- For those with a prescribed medicine purchase, the average total expenditures for prescribed medicines increased from approximately \$253 in 1987 (in 2001 dollars) to \$730 in 2001.
- The total amount paid out of pocket towards the purchase of prescribed medicines increased from approximately \$19.7 billion in 1987 (in 2001 dollars) to \$59 billion in 2001.
- For those with a prescribed medicine purchase, the average total amount paid out of pocket for prescribed medicines more than doubled from 1987 to 2001 (from approximately \$144 in 1987 (in 2001 dollars) to \$321 in 2001).

The use of and expenditures for prescribed medicines varied by age and race/ethnicity in 1987 as well as in 2001:

For persons under the age of 65 who reported a prescribed medicine expense, the average number of prescribed medicines purchased increased from 6.9 in 1987 to 10.8 in 2001. For persons 65 and over who reported a prescribed medicine expense, the average number of prescribed medicines purchased increased from 18.4 in 1987 to 26.5 in 2001.

The average number of prescribed medicines for blacks who reported purchasing a prescribed medicine increased from 9.1 in 1987 to 12.8 in 2001; for Hispanics the average number of prescribed medicine purchases rose from 6.2 in 1987 to 9.0 in 2001; and for whites and others the average number of prescribed medicine purchases increased from 9.0 in 1987 to 14.3 in 2001.

For persons under the age of 65 who had a prescribed medicine expense, the average total expenditure for prescribed medicine increased from \$200 in 1987 (in 2001 dollars) to \$592 in 2001. Similarly, persons over the age of 65 with a prescribed medicine expense also saw a dramatic increase in their total prescribed medicine expense, \$517 in 1987 (in 2001 dollars) to \$1,377 in 2001.

The average total expenditure for prescribed medicine for blacks with a prescribed medicine expense increased from \$234 in 1987 (in 2001 dollars) to \$632 in 2001; the average expenditure for whites and others increased from \$260 in 1987 (in 2001 dollars) to \$778 in 2001; and the average expenditure for Hispanics increased from \$192 in 1987 (in 2001 dollars) to \$459 in 2001.

Out-of-pocket spending for prescribed medicines more than doubled between 1987 and 2001. Persons under the age of 65 who had a prescribed medicine expense spent an average of \$106 in 1987 (in 2001 dollars) as compared to \$227 in 2001. Similarly, persons 65 and over with a prescribed medicine expense saw a dramatic increase in their out-of-pocket spending on prescribed medicine, going from \$330 in 1987 (in 2001 dollars) to \$765 in 2001 (figure 3). Average total out-of-pocket expenditures for prescribed medicine for blacks (with a prescribed medicine expense) increased from \$117 in 1987 (in 2001 dollars) to \$269 in 2001; from \$150 in 1987 (in 2001 dollars) to \$344 in 2001 for whites and others; and from \$104 in 1987 (in 2001 dollars) to \$194 in 2001 for Hispanics (figure 4).

## Definitions

The 1987 NMES collected information on expenditures in terms of total charges while MEPS-HC measures this information in terms of total expense. NMES defined total charge as the amount charged for the medical service provided. MEPS-HC defines total expense as the sum of payments for prescribed medicine, including out-of-pocket payments and payments made by private insurance, Medicaid, Medicare, and other sources. No attempt was made to account for this change in measurement. Both NMES and MEPS-HC define out-of-pocket payments as payments made by self or family.

## About MEPS-HC

The Medical Expenditure Panel Survey (MEPS) is the third in a series of nationally representative surveys of medical care use and expenditures. MEPS is cosponsored by the Agency for Healthcare Research and Quality and the National Center for Health Statistics. MEPS collects nationally representative data on health care use, expenditures, sources of payment, and insurance coverage for the U.S. civilian noninstitutionalized population. The first survey, the National Medical Care Expenditure Survey (NMCES) was conducted in 1977; and the second survey, the National Medical Expenditure Survey (NMES), was carried out in 1987.

NMES and MEPS data are released to the public in public use data files. NMES data files are available from the AHRQ Publications Clearinghouse (E-mail: [ahrqpubs@ahrq.gov](mailto:ahrqpubs@ahrq.gov)). MEPS data files are available on the MEPS Web site ([www.meps.ahrq.gov/](http://www.meps.ahrq.gov/)).

## References

For a detailed description of the MEPS-HC survey design, sample design, and methods used to minimize sources on nonsampling error, see the following publications:

Cohen, J. *Design and Methods of the Medical Expenditure Panel Survey Household Component*. MEPS Methodology Report No. 1. AHCPR Pub. No. 97-0026. Rockville, Md.: Agency for Health Care Policy and Research, 1997.

Cohen, S. *Sample Design of the 1996 Medical Expenditure Panel Survey Household Component*. MEPS Methodology Report No. 2. AHCPR Pub. No. 97-0027. Rockville, Md.: Agency for Health Care Policy and Research, 1997.

These publications are available on the MEPS Web site: <http://www.meps.ahrq.gov/>.

For more information on the NMES survey design, see the following publications:

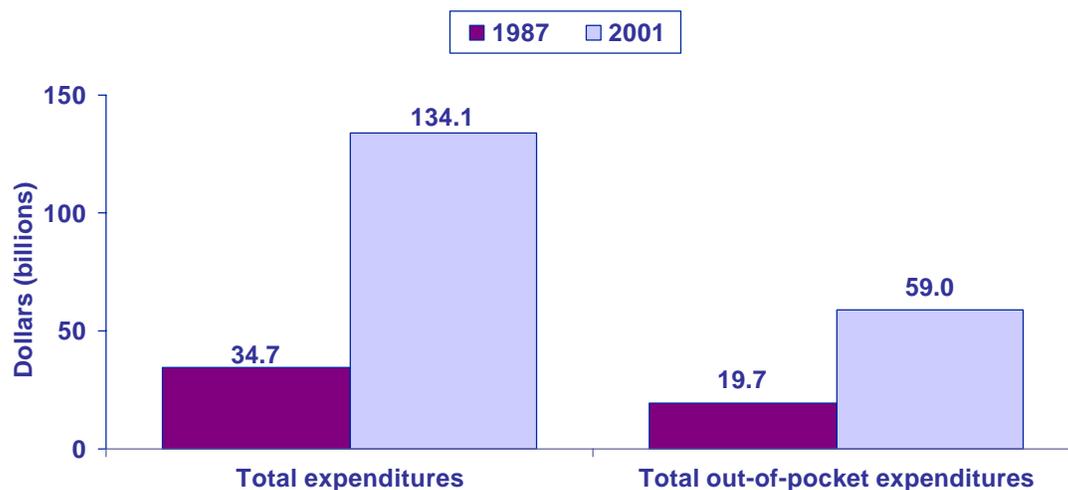
Cohen, S., R. DiGaetano, and J. Waksberg. *Sample design of the 1987 Household Survey*. AHCPR Pub. No. 91-0037. National Medical Expenditure Survey Methods 3. Agency for Healthcare Policy and Research. Rockville, Md.: U.S. Department of Health and Human Services, Public Health Service, 1991.

Edwards, W. and M. Berlin. *Questionnaires and data collection methods for the household survey and the survey of American Indians and Alaskan Natives*. DHHS Pub. No. (PHS) 89-3450. National Medical Expenditure Survey Methods 2. National Center for Health Services Research and Health Care Technology Assessment. Rockville, Md.: U.S. Department of Health and Human Services, Public Health Service, 1989.

### **Suggested Citation**

Pancholi, M. and Stagnitti, M. *Outpatient Prescribed Medicines: A Comparison of Use and Expenditures, 1987 and 2001*. Statistical Brief #33. June 2004. Agency for Healthcare Research and Quality, Rockville, MD.[http://meps.ahrq.gov/mepsweb/data\\_files/publications/st33/stat33.pdf](http://meps.ahrq.gov/mepsweb/data_files/publications/st33/stat33.pdf)

**Figure 1. Total and out-of-pocket expenditures for prescribed medicines for U.S. civilian noninstitutionalized population, 1987 and 2001**

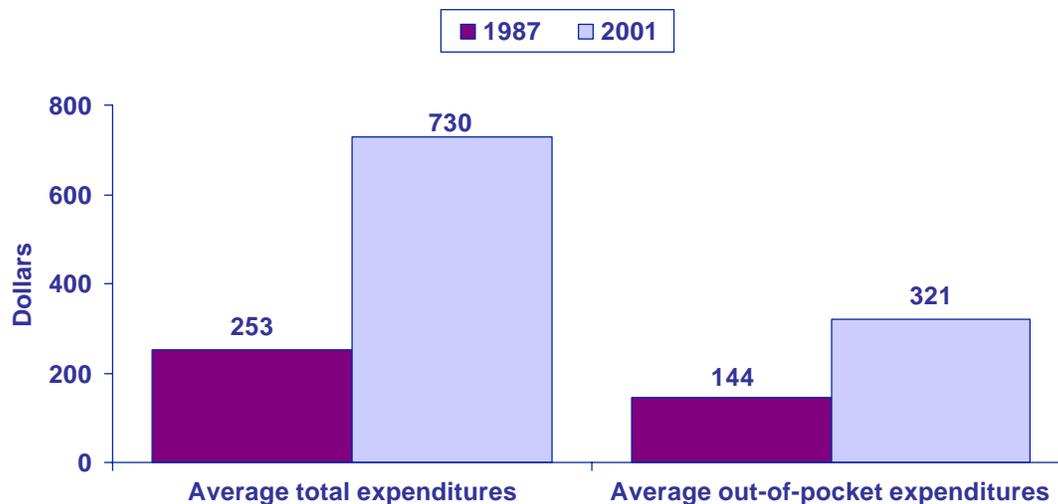


Note: Estimates for 1987 were adjusted for inflation to 2001 dollars using data from the 1987 and 2001 Consumer Price Index for All Urban Consumers.

Source: Center for Financing, Access, and Cost Trends, AHRQ, 1987 National Medical Expenditure Survey and the 2001 Medical Expenditure Panel Survey—Household Component.



**Figure 2. Average total and out-of-pocket expenditures for prescribed medicines for those with a prescribed medicine purchase, 1987 and 2001**

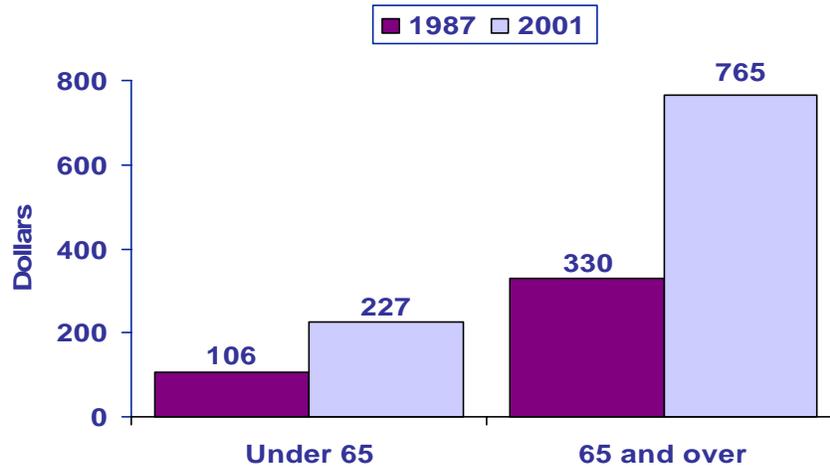


Note: Estimates for 1987 were adjusted for inflation to 2001 dollars using data from the 1987 and 2001 Consumer Price Index for All Urban Consumers.

Source: Center for Financing, Access, and Cost Trends, AHRQ, 1987 National Medical Expenditure Survey and the 2001 Medical Expenditure Panel Survey—Household Component.



**Figure 3. Average total out-of-pocket expenditures for prescribed medicines for those with a prescribed medicine purchase, by age, 1987 and 2001**



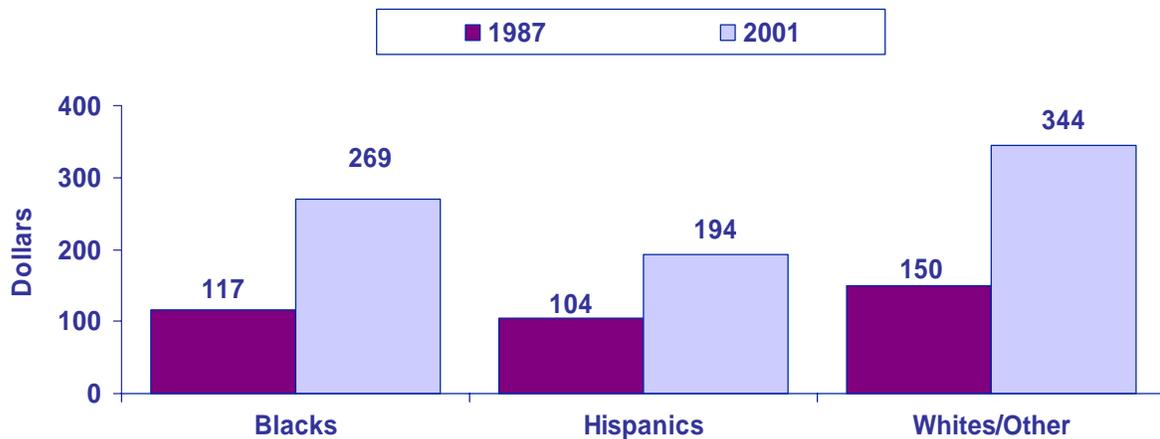
Note: Estimates for 1987 were adjusted for inflation to 2001 dollars using data from the 1987 and 2001 Consumer Price Index for All Urban Consumers.



Source: Center for Financing, Access, and Cost Trends, AHRQ, 1987 National Medical Expenditure Survey and the 2001 Medical Expenditure Panel Survey—Household Component.



**Figure 4. Average total out-of-pocket expenditures for prescribed medicines for those with a prescribed medicine purchase, by race/ethnicity, 1987 and 2001**



Note: Estimates for 1987 were adjusted for inflation to 2001 dollars using data from the 1987 and 2001 Consumer Price Index for All Urban Consumers.



Source: Center for Financing, Access, and Cost Trends, AHRQ, 1987 National Medical Expenditure Survey and the 2001 Medical Expenditure Panel Survey—Household Component.

