

March 2003

## COST AND UTILIZATION OF OUTPATIENT MEDICAID HEALTH CARE SERVICES BY PERSONS WITH SEVERE DISABILITIES

### Executive Summary

Although persons with severe disabilities compose about 15 percent of individuals receiving Medicaid services in Washington,<sup>1</sup> they account for about 27 percent of all Medicaid expenditures.<sup>2</sup> A major component of these expenditures is for outpatient services, such as prescription drugs and physician office visits. This report focuses on cost and utilization trends for outpatient services provided to Medicaid recipients with severe disabilities.

The Washington State Institute for Public Policy (Institute) was directed by the Legislature “to research and evaluate strategies for constraining the growth in state health expenditures.”<sup>3</sup> In consultation with legislative fiscal committee staff, the cost and utilization of outpatient services by individuals eligible for Medicaid due to a severe disability was identified as a useful area of research.

### Key Findings

In calendar year 2001, \$504 million was spent on outpatient service expenditures in the Medicaid program for low-income persons with disabilities—an increase of nearly \$143 million over 1999 expenditures. The increases were caused by three key factors:

- The substantial *caseload growth* experienced by this program is responsible for 29 to 87 percent of new expenditures across outpatient service categories;
- *Higher average prices* contributed substantially to new expenditures, especially for prescription drugs and outpatient hospital services; and
- With the exception of dental services, where utilization actually declined between 1999 and 2001, *increased service utilization* accounted for between 10 and 31 percent of new expenditures, depending upon category of service.

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<sup>1</sup> Based on September 2002 caseload data reported on the Caseload Forecast Council website <<http://www.wa.gov/cfc/>> (Accessed March 4, 2003).

<sup>2</sup> Based on 2001–03 biennial expenditures, all funds, reported on the DSHS budget website <<http://www1.dshs.wa.gov/budget/080main.shtml>> (Accessed March 4, 2003).

<sup>3</sup> ESSB 6153, Section 608(8), Chapter 7, Laws of 2001.

## Introduction

Low-income persons with severe disabilities comprise about 15 percent of individuals receiving Medicaid services in Washington but account for about 27 percent of all Medicaid expenditures. One area of Medicaid services for persons with disabilities that has experienced relatively rapid expenditure growth is outpatient services. This includes office visits to physicians, dentists, and other health professionals, prescription drugs, outpatient surgeries and other hospital services that do not require an overnight stay, and medical equipment and supplies (such as wheelchairs, walkers, syringes, and oxygen tanks).

A strategic attempt to contain outpatient health costs requires analysis of the growth of outpatient services for persons with disabilities. To examine some components of that growth, we have combined the three most recent years of Medicaid data for persons with severe disabilities, calendar years 1999, 2000, and 2001.

**Exhibit 1**  
**Total Medicaid Expenditures by Service Category, 1999–2001**

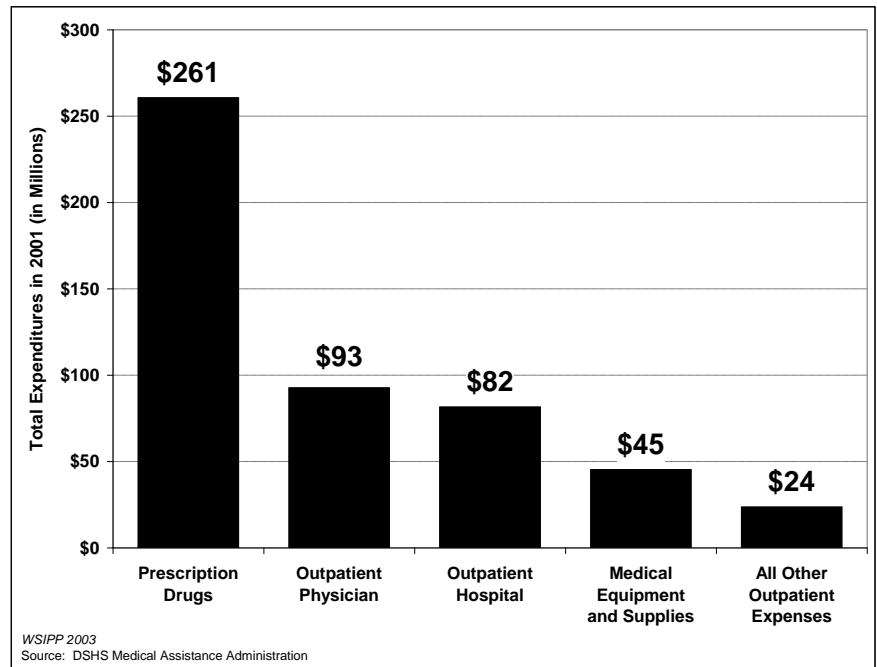
| <b>Service</b>                        | <b>Component</b>    | <b>Expenditure Increase (\$ Millions)</b> | <b>Expenditure Increase (Percent)</b> |
|---------------------------------------|---------------------|---|---------------------------------------|
| <b>Prescription Drugs</b>             | Price Change        | \$35.4                                    | 42%                                   |
|                                       | Caseload Change     | \$24.7                                    | 29%                                   |
|                                       | Utilization Change  | \$25.1                                    | 29%                                   |
|                                       | <b>Total</b>        | <b>\$85.2</b>                             |                                       |
| <b>Outpatient Hospital Services</b>   | Price Change        | \$13.7                                    | 57%                                   |
|                                       | Caseload Change     | \$7.9                                     | 33%                                   |
|                                       | Utilization Change  | \$2.5                                     | 10%                                   |
|                                       | <b>Total</b>        | <b>\$24.1</b>                             |                                       |
| <b>Outpatient Physician Services</b>  | Price Change        | \$5.0                                     | 24%                                   |
|                                       | Caseload Change     | \$9.4                                     | 45%                                   |
|                                       | Utilization Change  | \$6.6                                     | 31%                                   |
|                                       | <b>Total</b>        | <b>\$21.0</b>                             |                                       |
| <b>Medical Equipment and Supplies</b> | Price Change*       | \$1.5                                     | 14%                                   |
|                                       | Caseload Change     | \$4.6                                     | 44%                                   |
|                                       | Utilization Change* | \$4.3                                     | 42%                                   |
|                                       | <b>Total</b>        | <b>\$10.4</b>                             |                                       |
| <b>Dental Services</b>                | Price Change        | \$0.4                                     | 24%                                   |
|                                       | Caseload Change     | \$1.3                                     | 87%                                   |
|                                       | Utilization Change  | -\$0.2                                    | -10%                                  |
|                                       | <b>Total</b>        | <b>\$1.5</b>                              |                                       |

Source: Institute analysis of Department of Social and Health Services Medical Assistance Administration data.

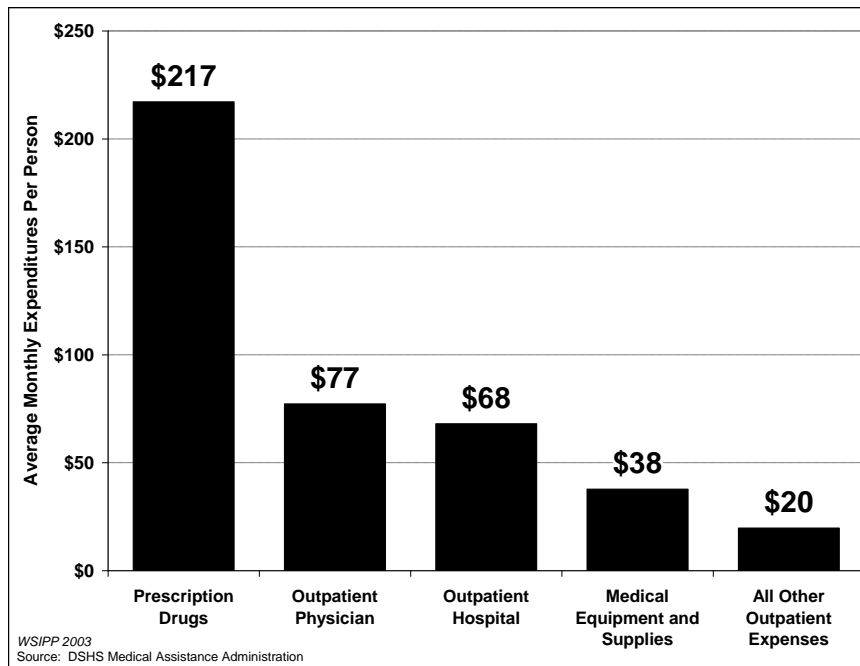
\*Because of difficulties in defining a unit of services for medical equipment and supplies, the change in “price” is defined as the change in average monthly expenditures on equipment and supplies per recipient. For the same reason, the change in “utilization” is defined as the change in the average number of months in a year in which a recipient uses any medical equipment or supplies.

**Exhibit 2**  
**Total 2001 Outpatient Medicaid Expenditures**

The Medicaid program, which provides health care services to low-income persons with a severe disability, is referred to as the Categorically Needy Blind and Disabled program.<sup>4</sup> To provide an overview of how outpatient expenditures in this program are distributed, Exhibit 2 displays expenditures by five categories in calendar year 2001.



**Exhibit 3**  
**Average Monthly Expenditures Per Recipient, 2001**



To put this information in another context, Exhibit 3 indicates the average monthly expenditures per person eligible for the Categorically Needy Blind and Disabled program during 2001. For example, over \$217 was spent on prescription drugs per month for *each eligible person* in the program.<sup>5</sup>

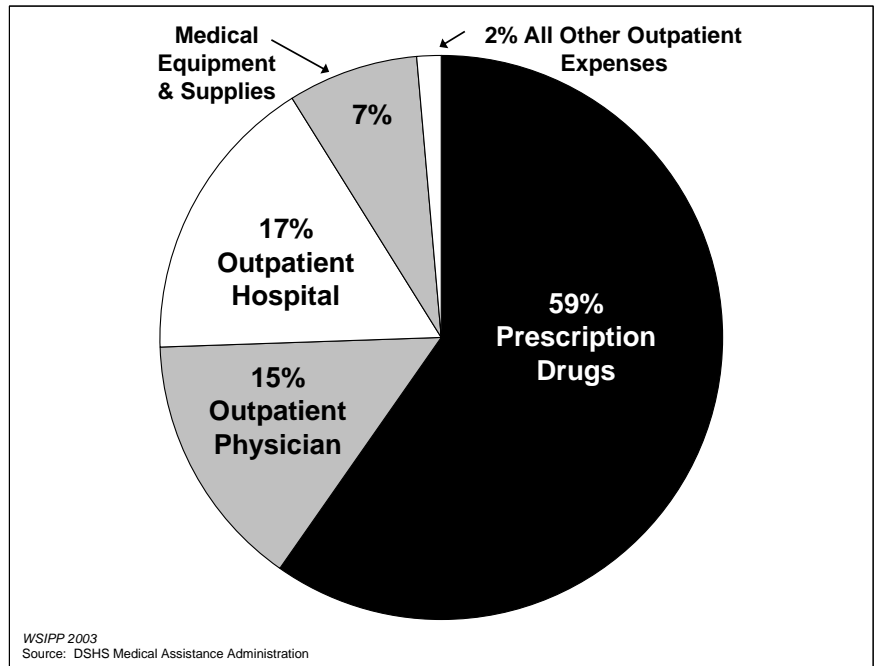
<sup>4</sup> Over 75 percent of individuals in the Categorically Needy Blind and Disabled program qualify as a result of eligibility for the federal Supplemental Security Income (SSI) program. The data included in this report refer only to those blind or disabled persons who qualify for Medicaid on the basis of SSI eligibility.

<sup>5</sup> The Medicaid program receives rebates directly from pharmaceutical manufacturers for drugs prescribed to Medicaid recipients. Because this analysis is based on claims submitted by pharmacies, it does not account for those rebates and overstates the amount of total Medicaid drug expenditures.

## Expenditure Growth and Trends

Between 1999 and 2001, expenditures for all outpatient services for the Medicaid Categorically Needy Blind and Disabled program increased by nearly \$143 million. Exhibit 4 shows the contribution of each service area to this increase. Over half the increase is due to spending on prescription drugs.

**Exhibit 4**  
Change in Total Outpatient Expenditures, 1999–2001



**Exhibit 5**  
Annual Average Expenditure Growth, 1999-2001

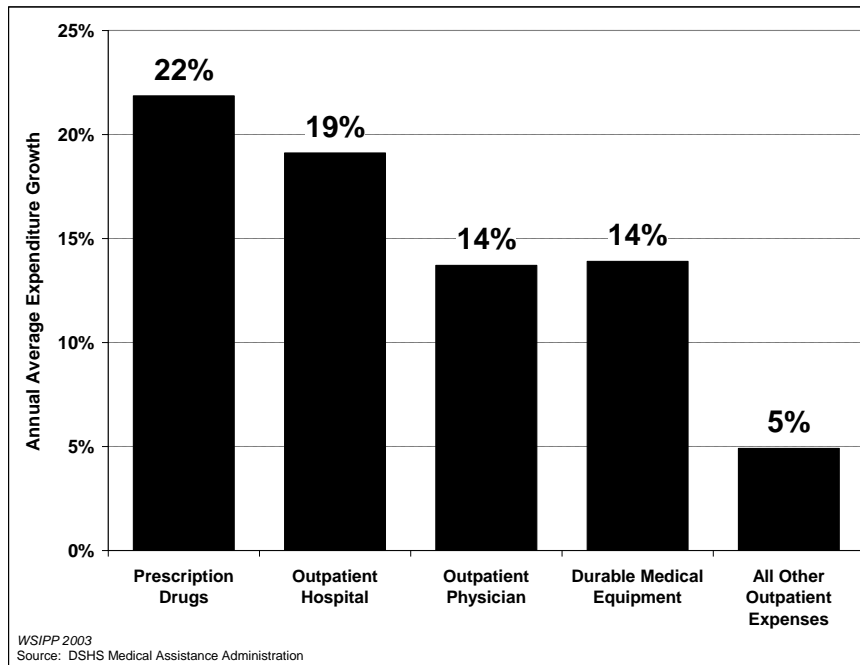


Exhibit 5 displays the growth trends between 1999 and 2001 for each outpatient service area. At an annual average growth rate of 22 percent, prescription drug expenditures are growing faster than any other outpatient service category. However, expenditure growth in *all* these areas exceeds the annual average General Fund State revenue growth experienced in any year since the 1989–91 biennium.<sup>6</sup>

<sup>6</sup> Washington State Office of the Forecast Council, *Washington Economic and Revenue Forecast* (Olympia, November 2002), 43.

## Reasons for Expenditure Growth

To understand why outpatient expenditures have increased so dramatically, we need to examine the underlying reasons for this growth. An obvious factor is the increasing caseload: the Categorically Needy Blind and Disabled program has grown from 103,500 recipients at the start of 1999 to over 116,100 recipients at the end of 2001.<sup>7</sup> Clearly, more recipients lead to a greater demand for all types of health care services.

However, the health care needs of recipients vary depending upon the presence of chronic diseases, substance abuse problems, and mental health issues. In addition, the treatment of specific diseases and injuries changes over time as new procedures, drugs, and medical devices are developed. This means that an increasing caseload may impact some types of health care services more strongly than others. In addition, while the price of most health care services has been rising, some prices have been rising more quickly than others.

Because the appropriate policy responses will differ depending upon the source of expenditure growth, we break down spending changes in each service area into three major components:

- Change in the average price of services;
- Change in the number of persons eligible for the Categorically Needy Blind and Disabled program; and
- Change in the utilization of services.<sup>8</sup>

For each outpatient service area, Exhibit 1 displays the share of increased expenditures attributable to each of these three components.

**Prescription Drugs.** Prescription drug expenditures increased by over \$85 million between 1999 and 2001. The price of the average prescription increased from \$49 to \$58 during this period and accounted for 42 percent of the increase in prescription drug spending. The addition of nearly 13,000 recipients increased the demand for prescription drugs and accounted for 29 percent of the additional prescription drug spending. However, utilization of prescription drugs was also rising—recipients were using 4.3 prescriptions per year *more* in 2001 than in 1999. This contributed 29 percent of the increase in prescription drug spending.

**Outpatient Hospital Services.** Expenditures for outpatient hospital services grew by \$24.1 million between 1999 and 2001. This category includes emergency room visits (except those that resulted in a hospital admission), outpatient surgeries, and other procedures performed in a hospital that did not require an overnight stay. This category does not include expenditures for related physician services, which are billed separately. Increases in the average price of an outpatient hospital “visit” (all hospital services provided to a specific individual on the same day) account for 57 percent of the increased expenditures, with much of the remaining increase due to caseload growth.

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<sup>7</sup> For a particular year, the caseload data include all persons eligible for the Blind or Disabled programs according to Medicaid eligibility data for one or more months.

<sup>8</sup> The formula used to disaggregate the share of growth due to changes in price, caseload, and utilization makes use of standard rules for differentiating an algebraic function. For example, see J. E. Draper and J.S. Klingman, *Mathematical Analysis: Business and Economic Applications, 2nd Edition* (New York: Harper and Row, 1972), 184-188.

**Physician and Other Health Professional Services.** This category includes outpatient services provided by physicians and other health professionals, such as podiatrists, psychiatrists, and optometrists. These services are provided in a hospital as part of an outpatient procedure<sup>9</sup> or in an office or clinic setting. Between 1999 and 2001, expenditures for outpatient physician services increased by \$21 million. Forty-five percent of these new expenditures was due to caseload growth, while higher utilization explained 31 percent of new spending, and increases in the average price of a visit accounted for 24 percent of new spending.

**Medical Equipment and Supplies.** This area covers a relatively disparate group of services, including items such as wheelchairs, prosthetics, communication devices, and oxygen. Eyeglasses and hearing aids have also been included in this category. As a result, it is difficult to define a meaningful “unit” that is equivalent to a prescription or a visit to a doctor’s office.

To get around this difficulty, our analysis defines a unit as any month in which there are one or more bills (claims) for medical equipment and devices for a recipient. In other words, we are simply counting months where individuals receive some type of medical equipment or supplies. In this case, the growth factors are the change in average monthly expenditures per recipient (instead of a change in the average price per unit), the change in the average number of months a recipient uses services (instead of the average number of service units a recipient uses), and caseload change.

The change in the caseload accounts for the largest share, 44 percent, of the \$10.4 million increase in expenditures for medical equipment and supplies between 1999 and 2001. Increased utilization of these services has also led to increasing expenditures. It is likely that the 42 percent of new spending accounted for by an increasing number of months with services understates the increased utilization in this area, because the higher average monthly expenditure per recipient could be the result of both rising prices and increased service use.

**Dental Services.** Between 1999 and 2001, expenditures for dental services increased by \$1.5 million. Because of a decline in utilization of dental services per recipient, this overall increase is nearly \$200,000 *below* what we would expect if the use of dental services per person had remained constant over the three-year period.

This somewhat unusual result is reflected in Exhibit 1, where we see that 87 percent of new spending is due to caseload growth, and 24 percent of new spending is due to increases in the average price of a dental visit.<sup>10</sup> In other words, price and caseload increases would have resulted in new expenditures *above* the \$1.5 million actually observed. However, the impact of those two growth components is partially offset by the declining utilization of dental services.

**Other Outpatient Services.** Besides the services grouped above, about 19 percent of recipients received home health agency services, family planning, or ambulance and other medical transportation services. Between 1999 and 2001, expenditures for this group of services increased by \$628,000. Because of the varied nature of these services and the relatively low frequency of use, we have not attempted to analyze the components of expenditure change in this area.

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<sup>9</sup> Physician services provided to individuals admitted to the hospital overnight or longer are considered to be inpatient physician services and are thus not considered here.

<sup>10</sup> Dental visits are defined in the same way as physician visits—all services provided to a recipient by the same dentist on a single day compose a dental visit.

## Policy Relevance of the Analysis

The information in Exhibit 1 can be used to estimate the *maximum possible* impacts of a variety of policy initiatives. For example, a policy (such as the Therapeutic Consultation Service program currently in place for Medicaid recipients in Washington) to limit the use of brand-name prescription drugs would be intended to reduce the average price of prescriptions by substituting less expensive generic equivalents for brand-name drugs when feasible. Such a policy would be expected to have no impact on caseload growth or on the average number of prescriptions per recipient. However, because Exhibit 1 indicates that 42 percent of the \$85.2 million increase (over \$35 million) in prescription drug expenditures between 1999 and 2001 was due to price increases, it is clear that an effective policy to reduce the price of the average prescription has the potential to substantially reduce Medicaid expenditures.

The analysis indicates that the impact of rising prices explains the largest share of expenditure increases for all outpatient services, with the impact of growing caseloads nearly as large. This suggests that policies aimed at minimizing prices and reducing the pool of eligible persons will have the largest impact on the growth in outpatient service expenditures.

However, some policies that meet these goals may be difficult to implement or have additional, unintended consequences. For example, reductions in physician payments may result in fewer physicians willing to see Medicaid patients. As noted in another Institute report,<sup>11</sup> there are limitations on a state's ability to address many of the issues that affect the size and growth of the Categorically Needy Blind and Disabled caseload.

## Further Research

The breakdown of overall expenditure growth into price, caseload, and utilization factors provides greater understanding about why spending on outpatient services in the Categorically Needy Blind and Disabled program has been growing. However, this analysis also suggests additional questions of interest that may help to focus future policy initiatives.

One set of questions relates to changes in the health status of recipients, technology, or practice patterns that may have contributed to some of the growth in expenditures. As an example, if the Categorically Needy Blind and Disabled program caseload has become progressively more ill over the 1999–2001 period, we might expect not only a greater utilization of health care services (which we have captured in the above analysis) but also an increase in the complexity or intensity of services required.

More complex physician and hospital services are generally more expensive. New prescription drugs, medical devices, and diagnostic procedures, reflecting more expensive medical technology, are also generally more costly. Therefore, an increase in service complexity would have the impact of raising the average price of a service. This means that the fraction of new expenditures due to higher average prices could reflect a general price increase for all services, an increase in the use of more complex or technologically advanced services, or both. Additional research to separate these two “price” factors would be valuable in focusing case management efforts and better understanding the impact of budgeted vendor rate increases as they apply to health care providers.

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<sup>11</sup> Steve Lerch, *Medicaid Coverage for Persons With Severe Disabilities: Caseload Composition and Growth* (Olympia: Washington State Institute for Public Policy, in press).

Another area of interest concerns the change in expenditures related to higher utilization of services, such as prescription drugs and physician services. Is utilization of these services increasing across all recipients or is it driven by a subset of patients with specific characteristics (e.g., certain diseases or combinations of diseases)? The answer to this question would help to identify candidates for case management or possibly suggest policies intended to reduce unnecessary service use.

## Summary

This report has provided a more detailed look at factors related to the growth in expenditures for the Categorically Needy Blind and Disabled program between 1999 and 2001. Higher average prices contributed substantially to new expenditures, especially for prescription drugs and outpatient hospital services. The large caseload growth experienced by this program is responsible for between 29 and 87 percent of new expenditures across outpatient service categories. With the exception of dental services, where utilization actually declined between 1999 and 2001, increased service utilization accounted for between 10 and 31 percent of new expenditures, depending upon the service category.

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