

Medicaid Prescription Drug Spending and Utilization for Dual Enrollees

David K. Baugh, Gary M. Ciborowski and Steve Blackwell

Abstract

This study examines growth from 1996 to 2001 in Medicaid spending and utilization of prescription drugs for dual Medicaid and Medicare enrollees. Trends are presented by state and drug therapeutic category. In 1996, fee-for-service Medicaid prescription drug spending for aged dual enrollees (\$1.61 billion) and disabled dual enrollees (\$1.59 billion) was comparable. By 2001, spending for the disabled had outpaced spending for the aged – spending exceeded \$7 billion for disabled dual enrollees versus \$6 billion for aged dual enrollees.¹ For all drugs provided to dual enrollees between 1999 and 2001, the most important factors influencing spending growth were the number of prescriptions per recipient (both years) and payment per prescription (for aged dual enrollees from 1999 to 2000). Across drug categories, an increase in payment per prescription was the most important factor for aged dual enrollees while an increase in the number of drug recipients was the most important factor for disabled dual enrollees.

Introduction

In this study, we present Medicaid prescription drug spending and utilization for disabled and aged dual (Medicaid and Medicare) enrollees. The Medicaid Analytic eXtract (MAX) data for 1999 to 2001 were used for all states and the District of Columbia. Prior to 1999, data were not available for all states. State Medicaid Research File (SMRF) data for 1996 to 1998 were used to supplement the MAX data to show six year trends for the 29 states for which SMRF data are available (Centers for Medicare & Medicaid Services, 2006a and Centers for Medicare & Medicaid Services, 2006b). The MAX and SMRF prescription drug records include coding that enabled us to analyze prescription drug utilization and spending by therapeutic use, according to Medi-Span therapeutic categories (Centers for Medicare & Medicaid Services, 2006a and Wolters Kluwer Health, 2006).

Prior research has shown that national prescription drug spending grew dramatically in the 1990s and early 2000s. In Medicaid, the average annual increases were high as well averaging over 20 percent for the disabled and 13.5 percent for the aged in the 1990s. The percentage of total Medicaid prescription drug payments for the disabled increased from just over 40 percent to nearly 60 percent during the 1990s (Levit, 2003; Tepper, 2004; Sethi, 2004; and Baugh, 2004). Together, the aged and disabled represented only 29.1 percent of Medicaid drug recipients in fiscal 2000 but they accounted for 84.9

¹ The data on Medicaid prescription drug spending presented in this analysis are for drugs provided by pharmacies under fee-for-service arrangements. Payment amounts for drugs are prior to rebates from prescription drug manufacturers. Please see the “Technical Notes” section below for additional details.

percent of Medicaid drug payments (Baugh, 2004a). As noted below, level of disproportionality is even greater for aged and disabled dual enrollees. This level of disproportionality suggests that analysis is needed of drug utilization and spending for Medicaid aged and disabled enrollees who are also Medicare beneficiaries, the dual enrollees (Dale, 2003). These analyses are important to Medicare because Medicare has assumed coverage of the majority of drugs provided to dual enrollees under Medicare Part D beginning in January, 2006 (Verdier, 2005a). The analyses are important to Medicaid, as well, for two reasons. Drug utilization and spending have had a major impact on Medicaid spending increases prior to the implementation of Medicare Part D. A second reason is that the Medicare Modernization Act (MMA) includes provisions for state contributions toward a portion of the cost of Medicare Part D prescription drug coverage for dual enrollees. The contribution “phases down” over time as Medicare takes on a rising proportion of the drug spending for dual enrollees (Verdier, 2005b and Centers for Medicare & Medicaid Services, 2006c).

In the tables and figures, Medicaid eligibility is presented for the two major groups of dual enrollees: aged and disabled. The Medicaid disabled dual enrollee group includes individuals of any age who were determined to be eligible because of disability or blindness, those in the Medicaid disabled basis of eligibility (BOE) group. The Medicaid aged dual enrollee group includes those individuals who were identified under the Medicaid aged BOE. Because state Medicaid agencies vary in the practice of converting disabled enrollees to aged status upon attaining age 65, some enrollees are identified as disabled by BOE in the MAX data when they are over 64 years of age.

The tables and figures present statistics on prescription drug recipients and number of prescriptions and Medicaid payments for drugs for aged and disabled dual enrollees. These statistics are presented by drug therapeutic category and BOE group and by individual state. Payment amounts are prior to receipt of rebates from drug manufacturers. Except for figures 10-13, payment amounts are presented in current dollars. However, for analyses of the contributing factors to spending increases (Figures 10-13), payment amounts are presented as constant dollars to remove the effects of drug price inflation (See the technical notes for details).

Some figures and tables present payment and utilization data for all of the Medi-Span therapeutic categories. In other figures and tables, data are presented for selected therapeutic categories that represent the largest proportion of total payments within the disabled and aged dual enrollee groups, respectively.

Conclusions

In 2001, dual enrollees comprised approximately 15 percent of total Medicaid enrollees but they represented 54 percent of total Medicaid payments for prescription drugs. Medicaid prescription drug payments for dual enrollees grew rapidly from 1996 to 2001, at an average annual increase of 16.4 percent. However, payment growth accelerated more rapidly on an average annual basis for the disabled (21 percent) than the aged (14.5 percent) during those years. By 2001, payments for disabled dual enrollees were \$7

billion as compared with \$6 billion for aged dual enrollees. In 2001, disabled dual enrollees accounted for nearly 54 percent of drug payments for all drug payments for dual enrollees, or 29 percent of total Medicaid payments for prescription drugs (See Figure 1).

Among therapeutic categories, central nervous system (CNS) drugs and cardiovascular drugs accounted for the highest payment levels for both groups of dual enrollees. Six therapeutic categories represented nearly 74 percent of payments for aged dual enrollees while seven therapeutic categories represented nearly 83 percent of payments for disabled dual enrollees. CNS drugs include antianxiety agents, antidepressants, antipsychotics and hypnotics that are used to treat a wide array of mental disorders. Between 1999 and 2001, the average annual increases in payments, number of prescriptions and drug recipients varied by therapeutic group. The most important contributing factors to payment increases varied by therapeutic category and aged or disabled dual enrollees. However, there were some patterns. Across drug categories, payment per prescription was the most important factor for aged dual enrollees while an increase in the number of drug recipients was the most important factor for disabled dual enrollees. For aged dual enrollees, increase in payment per prescription was usually the most important factor behind total increases for most of the selected drug categories from 1999-2000 and 2000-2001. For disabled dual enrollees, increases in the number of recipients were usually the most important factors.

Spending for Medicaid prescription drugs is growing at a faster rate than Medicaid spending for other services. The high rate of growth is a concern to policy makers at both the state and federal levels. This and other similar studies have provided valuable information on the factors influencing this growth. Future research should continue to monitor these trends and the cost-effectiveness of alternative drug therapies.

As of January, 2006, most prescription drug coverage for dual enrollees has been switched to Medicare Part D. Under Medicare Part D, Prescription Drug Plan (PDP) sponsors are required to have a Medication Therapy Management (MTM) program in place for targeted beneficiaries. Targeted beneficiaries are enrollees in the PDP sponsor's plan who have multiple chronic conditions, are taking multiple Part D drugs and are likely to incur annual costs above a certain level (i.e., \$4,000 for 2006). Because dual enrollees have high rates of chronic conditions, often take multiple medications and have higher drug use than other Medicare beneficiaries, they are prime candidates for MTM programs as targeted beneficiaries.

Technical Notes

1. Medicaid payment amounts for drugs include original and refills for prescribed drugs and over-the-counter drugs that were prescribed by a physician and provided by a pharmacy.
2. Payment amounts from these data do not include rebates from drug manufacturers.

3. Medicaid enrollees are counted as prescription drug recipients if they received at least one fee-for-service prescription during the year.
4. Payments and numbers of prescriptions are counted for prescriptions dispensed on a fee-for-service basis.
5. Statistics may exclude prescription drug provided to patients in long-term care facilities in a limited number of states because it is not possible to separately identify spending for drugs included in facility per-diem rates. As of 1999, only three states (Delaware, New York and South Dakota) included prescribed drugs in facility per-diem rates for any long-term care facilities in their states (Swan, 2002).
6. These measures exclude persons in prepaid plans who received no fee-for-service prescriptions and any prescription drugs that may have been provided through a prepaid plan. For this reason, these analyses may understate total Medicaid utilization and payment for drugs for dual enrollees. However, enrollment of dual enrollees in comprehensive prepaid plans (e.g. HMOs) during these years was quite low. Approximately 14 percent of all dual enrollees were “ever enrolled” in a prepaid plan in Fiscal 2001. An unknown percent of total drugs dispensed to dual enrollees may also have been provided by a Prepaid Health Plan (PHP). PHPs offer prepaid plan coverage for other than comprehensive care.
7. For Figures 10-13, Medicaid payments for 1999-2001 were converted to constant dollars to remove the effect of drug pricing inflation. Two series on personal health care (PHC) price indices were used: prescription and non-prescription drugs. The indices were weighted according to the mix of Medicaid payments for prescribed versus over-the-counter drugs to develop a composite index for Medicaid. The weighting was based on the observed percentages of payments for prescription and over-the-counter drugs in the MAX data for 1999 (Centers for Medicare & Medicaid Services, 2006d). Total percentage increases in constant dollar payments for drugs can be represented by the following identity, where percentage increases are expressed as indices:

$$1 + r_{cpmt} = (1 + r_{recip}) \times (1 + r_{rx/recip}) \times (1 + r_{pmt/rx}),$$

where r = annual percent growth,
 $cpmt$ = constant dollar payments,
 $recip$ = recipients,
 $rx/recip$ = prescriptions per recipient and
 pmt/rx = payment per prescription.

Using a natural log transformation, the equation becomes:

$$\ln(1 + r_{cpmt}) = \ln(1 + r_{recip}) + \ln(1 + r_{rx/recip}) + \ln(1 + r_{pmt/rx}).$$

The relative contributions of each factor can then be represented as follows:

Recipients: $\ln(1 + r_{\text{recip}}) / \ln(1 + r_{\text{cpmt}}) \times r_{\text{cpmt}}$,

Prescriptions per recipient: $\ln(1 + r_{\text{rx/recip}}) / \ln(1 + r_{\text{rx/recip}}) \times r_{\text{cpmt}}$ and

Payment per prescription: $\ln(1 + r_{\text{pmt/rx}}) / \ln(1 + r_{\text{rx/recip}}) \times r_{\text{cpmt}}$.

8. Dual enrollment percentages presented in Figure 1 are based on estimates of dual enrollees for 2001. These estimates were prepared according to the methodology that was used for published estimates of dual enrollees for 1999 (Baugh, 2004-2005).
9. The data include Medicaid enrollees who were classified under basis of eligibility (BOE) as aged or disabled dual enrollees by state Medicaid agencies. Conversely, the data exclude small numbers of Medicaid enrollees who were identified as dual enrollees, but who were classified under BOE as adults or children. These individuals may have been identified as dual enrollees in error. These individuals represented less than 0.7 percent of drug payments for dual enrollees.
10. The Medicaid statistics presented here can be used to examine patterns of payment, but not appropriateness of care. Differences in payment patterns should not be attributed to inappropriate recognition or management of complex conditions by health care professionals. However, the Medicaid MAX and SMRF data can be used in other types of studies to examine appropriateness and quality of care provided to Medicaid enrollees.

Acknowledgments

We thank Harold Cooper and Celia Dahlman of CHD Research Associates, Inc., for their work to develop the software that was used to tabulate State Medicaid Research File prescription drug claim records by therapeutic category and group.

References

Baugh, D.; Pine, P.; Blackwell, S. and Ciborowski, G.: Medicaid Prescription Drug Utilization and Payment in the 1990s: A Decade of Change. *Health Care Financing Review*. 26 (1), Fall 2004, pp. 57-73.

Baugh, D.; Pine, P.; Blackwell, S. and Ciborowski, G.: Medicaid Spending and Utilization for Central Nervous System Drugs. *Health Care Financing Review*. 25 (3), Spring 2004, pp. 5-23.

Baugh, D.: Estimates of Dual and Full Medicaid Benefit Dual Enrollees, 1999. *Health Care Financing Review*. 26 (2), Winter 2004-2005, p. 1-7.

Centers for Medicare & Medicaid Services,
http://www.cms.hhs.gov/MedicaidDataSourcesGenInfo/07_MAXGeneralInformation.asp#TopOfPage (31 March 2006a).

Centers for Medicare & Medicaid Services,
http://www.cms.hhs.gov/MedicaidDataSourcesGenInfo/08_MedicaidPharmacy.asp#TopOfPage (31 March 2006b)

Centers for Medicare & Medicaid Services,
<http://www.cms.hhs.gov/States/Downloads/StateMedicaidAgencyFactSheet.pdf> (30 October, 2006c)

Centers for Medicare & Medicaid Services,
<http://www.cms.hhs.gov/NationalHealthExpendData/downloads/dsm-04.pdf> (5 April 2006d)

Cowan, Cathy. Personal communication. April 7, 2006.

Dale, S. and Verdier, J.: State Medicaid Prescription Drug Expenditures for Medicare-Medicaid Dual Eligibles. Issue Brief, Task Force on the Futures of Health Insurance, Commonwealth Fund, April 2003.

Levit, K., Smith C., Cowan, C., Lazenby, H. Sensenig A., and Catlin, A.: Trends in U.S. Health Care Spending, 2001. *Health Affairs*. 22 (1), January/February 2003, pp. 154-164.

Sethi, R.: Prescription Drugs: Recent Trends in Utilization, Expenditures and Coverage. Issue Brief No. 265, Employee Benefit Research Institute, January 2004.

Swan, J.: unpublished data. State Medicaid Reimbursement Surveys, 1998-99 (updated 2002), Department of Health Sciences, Wichita State University.

Tepper, C., and Lied, T.: Trends in Medicaid Prescribed Drug Expenditures and Utilization. *Health Care Financing Review*. 25 (3), Spring 2004, pp. 69-78.

Verdier, J., and Kim, M.: Medicaid Drug Use Data Show High Costs and Wide Variation for Dual Eligibles. Issue Brief, Mathematica Policy Research, Inc., Number 5, August 2005a.

Verdier, J. and Kim, M: New State Data on Medicaid Drug Use and Cost Can Help States Solve Problems. Issue Brief, Mathematica Policy Research, Inc., Number 4, March 2005b.

Wolters Kluwer Health, <http://www.medispan.com> (3 April 2006).