

# medicaid and the uninsured

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## Medicaid Spending Growth over the Last Decade and the Great Recession, 2000-2009

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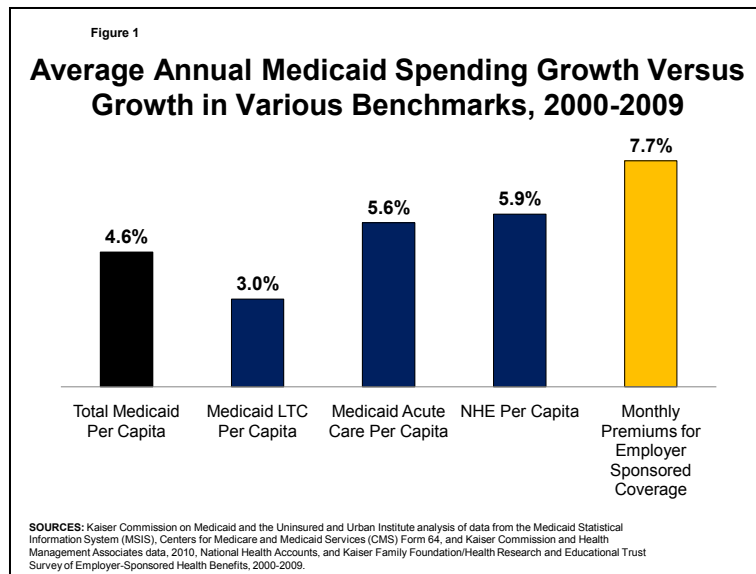
Millions of Americans lost income and health benefits as job losses mounted during the recent recession, leading many to turn to the Medicaid program to provide health benefits for themselves and their families. As a result, Medicaid monthly enrollment rose by the largest amount since the early days of program implementation, increasing by nearly 6 million (13.6%) from December 2007 to December 2009.<sup>1</sup> Without this rise, the number of uninsured Americans would doubtless be larger than the 50 million uninsured in 2009.<sup>2</sup>

Throughout its 45-year history, the Medicaid program's spending patterns have nearly always tracked enrollment growth,<sup>3</sup> and recent history is no exception. During the worst economic downturn our nation has experienced since the great depression, national Medicaid spending rose from \$338 billion in federal fiscal year 2007 to \$359 billion in 2008 and to \$387 billion in 2009.<sup>4</sup> This represents increases of 6.4 percent and 7.7 percent respectively. Medicaid spending on medical services rose from \$300 billion in 2007 to \$318 billion in 2008 and to \$347 billion in 2009 – annual increases of 5.9 and 9.1 percent, respectively.

Medicaid spending, both in medical services and overall, has risen faster than growth in national health expenditures and the gross domestic product (GDP), both in the last two years as well as throughout the past decade. However, this brief demonstrates that increases in Medicaid spending growth in 2008 and 2009 were largely due to enrollment growth. This enrollment growth occurred primarily due to the deepening recession, the American Recovery and Reinvestment Act's (ARRA) protections against eligibility restrictions and additional federal funding, and decisions to expand Medicaid eligibility in some states.

On a per enrollee basis, however, growth in Medicaid spending (the national average, not necessarily specific states) is slower than both growth in national health expenditures per capita and increases in private health insurance premiums (Figure 1). Moreover, although Medicaid spending per enrollee has risen 1.6 percentage points faster than growth in GDP per capita (3.0 percent) over the last decade (2000-2009), its per capita growth has been far below the rise in overall per capita health spending in America, which has risen 2.9 percentage points per year faster than GDP per capita over this same period.

Despite the program's success in holding down per capita cost growth relative to other segments of the health care system, states are grappling with immediate budgetary crises that may result in significant cuts to the program. The enhanced federal Medicaid matching funds from the ARRA are set to expire on June 30, 2011, despite the fact that most states' fiscal situation has not yet recovered.



As policymakers explore deficit reduction options involving Medicaid at the federal level and spending reductions at the state level, they need to recognize that a large amount of cost containment measures have already been taken, with considerable success, and further cuts could have adverse effects on access and health care quality for their sickest and poorest residents. The cuts in enrollment that are being considered will affect the number of uninsured and the demands placed on the safety net providers who care for them.

## Data Sources and Methods

Because no existing Medicaid data source includes current spending data, current enrollment data, and detailed data on spending per enrollee, data from three sources are combined for this analysis. The main source for spending data is the Medicaid Financial Management Reports (Form 64) from the Center for Medicare and Medicaid Services (CMS) for fiscal years 2000 to 2009, which are used to obtain aggregate spending. These CMS-64 data are available by state and by spending category, but are not available by eligibility group.

A second data source, the Medicaid Statistical Information System (MSIS), provides detailed, individual level spending and enrollment data stratified by service type and eligibility group. Data from the 2004 MSIS are used to estimate spending and spending per enrollee growth rates by eligibility group. The 2004 MSIS data are used to estimate growth in total spending per enrollee in a way that accounts for differences in service use across eligibility groups. MSIS data are also used to decompose total spending growth over time into increases in

enrollment and spending per enrollee by enrollee eligibility group. More methodological details can be found in appendix A.

Data on enrollment come from a survey of all 50 states and the District of Columbia conducted by Health Management Associates (HMA) for the Kaiser Commission on Medicaid and the Uninsured (KCMU). These data provide point in time enrollment for June of each year. Because of inconsistencies that occur between state reporting systems, it is only possible to use detailed data for 45 states on the enrollment of two groups: aged and/or disabled, and children, parents, and other non-aged, non-disabled adults (throughout the report referred to simply as "families"). Using these data as well as total enrollment for the remaining states, enrollment was allocated to the aged/disabled and families for the total population in the same proportions as reported in the 45 states.

In 2006, prescription drug coverage for "dual eligibles" (those eligible for both Medicaid and Medicare) shifted from Medicaid to Medicare Part D, halving Medicaid's drug expenditures in that year.<sup>5</sup> We address this by providing data on overall prescription drug spending with and without spending by dual eligibles. Spending between 2000 and 2009 for non-duals should give a more accurate picture of the growth in drug spending for a population that is consistently enrolled in the Medicaid program. The proportions of non-dual prescription drug spending were calculated separately for each year from 2000 to 2007 using a random sample of the Medicaid Statistical Information System.<sup>6</sup>

Estimates of prescription drug expenditures reflect payments to pharmacies. Drug spending data in this paper do not account for the Medicaid rebate that drug manufacturers must pay to the federal and state governments for outpatient prescription drugs as a condition of Medicaid coverage for the drug in fee-for-service during the period. Incorporating trends in the federal and state drug rebates is beyond the scope of this analysis. Since the rebates effectively lower the price that Medicaid pays for prescription drugs, the level of Medicaid prescription drug spending in this analysis reflects payments to pharmacies, and therefore state spending on drugs is somewhat overstated.

This paper presents data on changes in enrollment and spending per enrollee. It is beyond the scope of this paper to definitively assign causality. We speculate on likely causes of changes in growth rates, relying considerably on existing surveys conducted by Health Management Associates for the Kaiser Commission on Medicaid and the Uninsured. These are, however, hypotheses and actual reasons for changes in spending growth in specific categories and in specific states may differ.

## Medicaid Enrollment and Spending Growth, 2000-2009

Over the past decade (2000-2009), the US economy has experienced three distinct periods (Table 1)<sup>7</sup>. Between 2000 and 2004, the economy fell into a recession which, while officially over in October 2001, continued to affect unemployment rates and incomes until 2004. The most serious impacts were felt in 2001 and 2002, but effects still lingered until 2004. Between 2004 and 2007, the economy emerged from the recession and grew at a modest rate; the unemployment rate declined, GDP increased, and real median household and real per capita incomes grew. In 2007, the economy entered a sharp downturn that has become known as the Great Recession. Unemployment grew sharply, GDP declined and then fell in 2009, and real per capita incomes declined.

**TABLE 1.**  
**National Economic Data 2000-2009**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<b>GDP<sup>a</sup></b>										
in billions	9,951.50	10,286.20	10,642.30	11,142.10	11,867.80	12,638.40	13,398.90	14,061.80	14,369.10	14,119.00
% change	6.39%	3.36%	3.46%	4.70%	6.51%	6.49%	6.02%	4.95%	2.19%	-1.74%
<b>Unemployment %<sup>b</sup></b>	3.97%	4.74%	5.78%	5.99%	5.54%	5.08%	4.61%	4.61%	5.82%	9.28%
<b>Income<sup>c</sup></b>										
Real Median Household	52,388	52,301	51,161	50,563	50,519	50,343	50,899	51,965	50,112	49,777
Real Per Capita <sup>d</sup>	27,833	27,685	27,177	27,145	27,507	27,507	28,034	27,728	26,862	26,530

SOURCE: Reproduced from Holahan, John. "The 2007-09 Recession and Health Insurance Coverage." Health Affairs, January 2011, Vol. 30, No. 1, available online at <http://content.healthaffairs.org/content/early/2010/12/07/hlthaff.2010.1003.full.pdf+html>

<sup>a</sup> Bureau of Economic Analysis: National Economic Accounts. U.S. Department of Commerce. [www.bea.gov](http://www.bea.gov)

<sup>b</sup> Bureau of Labor Statistics: Current Population Survey: Labor Force Statistics. U.S. Department of Labor. [www.bls.gov/data](http://www.bls.gov/data)

<sup>c</sup> Income measurements are from U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplements.

<sup>d</sup> The per capita income data presented in this report are not directly comparable with estimates

of personal per capita income prepared by the Bureau of Economic Analysis, U.S. Department of Commerce. The lack of correspondence stems from the differences in income definition and coverage. For further details, see [www.census.gov/hhes/www/income/compare1.html](http://www.census.gov/hhes/www/income/compare1.html)

Growth in Medicaid spending generally tracks the rate of growth in the economy, rising when the economy falls and falling when the economy rises. As shown in Figure 2, spending on medical services (excluding prescription drug spending for dual eligibles<sup>8</sup>) increased by 13.0 percent per year between 2000 and 2002; the rate of growth then declined between 2002 and 2004 (7.4 percent per year). Growth in spending on medical services fell further between 2004 and 2007 (5.9 percent per year) largely due to flat or declining Medicaid enrollment (Table 2). In 2008, spending on medical services grew (6.4 percent) largely because of rising enrollment, and in 2009 spending growth increased more sharply (9.1 percent), again largely driven by recession-induced enrollment increases.

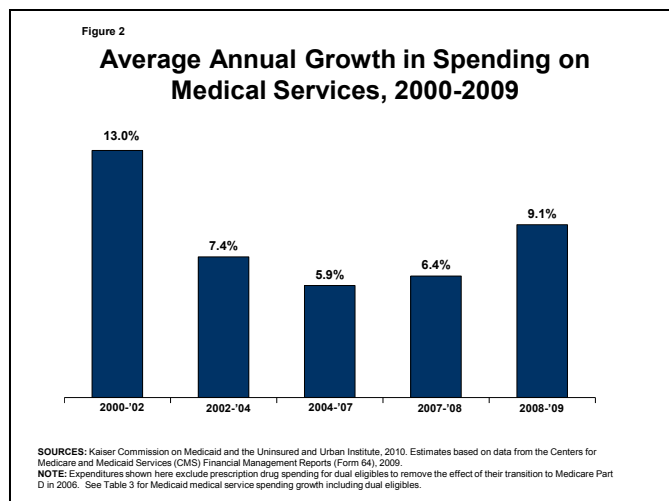


Table 2. Monthly Medicaid Enrollment, 2000 - 2009 (in millions)

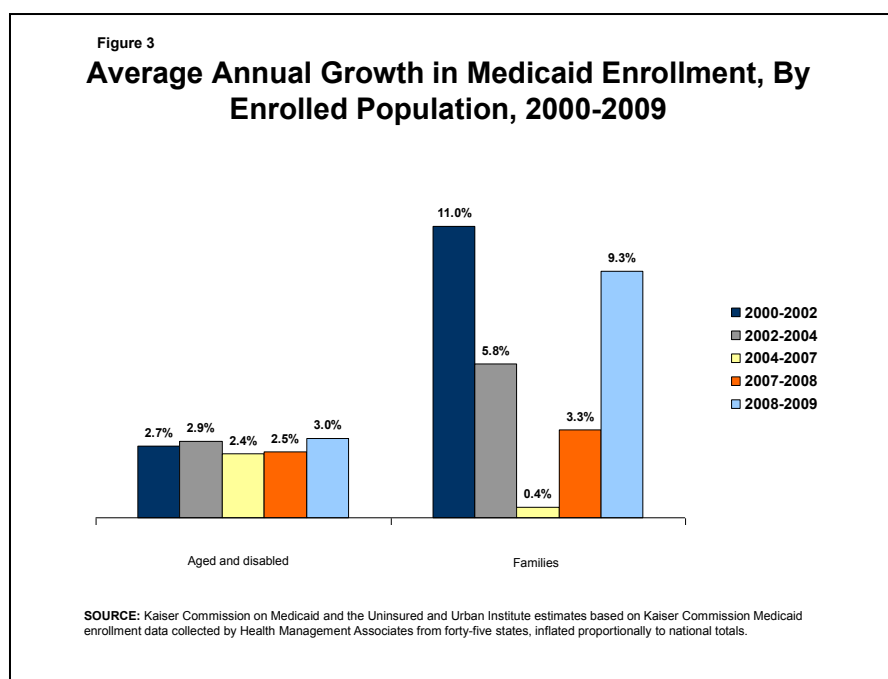
Population	Enrollment						Average Annual Growth Rate				
	June 2000	June 2002	June 2004	June 2007	June 2008	June 2009	2000-2002	2002-2004	2004-2007	2007-2008	2008-2009
<b>Total</b>	<b>31.7</b>	<b>37.3</b>	<b>41.1</b>	<b>42.3</b>	<b>43.6</b>	<b>46.9</b>	<b>8.4%</b>	<b>5.0%</b>	<b>0.9%</b>	<b>3.1%</b>	<b>7.5%</b>
Aged & Disabled	10.1	10.7	11.3	12.1	12.4	12.8	2.7%	2.9%	2.4%	2.5%	3.0%
Families <sup>1</sup>	21.6	26.6	29.8	30.2	31.1	34.1	11.0%	5.8%	0.4%	3.3%	9.3%

SOURCE: Kaiser Commission on Medicaid and the Uninsured and Urban Institute estimates based on KCMU Medicaid enrollment data collected by Health Management Associates from 45 states inflated proportionally to national totals.

1. The term "families" is used to refer to non-disabled children and adults.

### Enrollment Growth, 2000-2009

Table 2 shows average levels of monthly Medicaid enrollment and average annual enrollment growth rates between 2000 and 2009. Medicaid enrollment increased from 31.7 million in 2000 to 46.9 million in 2009. Among families, changes in enrollment reflected effects of the economic cycle. Family enrollment increased by 11.0 percent per year between 2000 and 2002 and continued to grow at 5.8 percent in the next two years (Figure 3). The growth in family enrollees was fairly flat between 2004 and 2007 as the economy expanded and declined between 2006 and 2007 (data not shown). Family enrollment increased by 3.3 percent in 2008 at the beginning of the recent recession and by 9.3 percent in 2009 as the recession deepened.



The most significant cause of the growth in Medicaid enrollment at the end of this period was the economic decline. Individuals lost jobs and suffered lower incomes. As a result, many became eligible for public coverage under Medicaid or the Children's Health Insurance Program (CHIP). Although eligibility for parents and other adults is more restricted in Medicaid compared to children's eligibility for public insurance, a significant increase in Medicaid coverage for adults in these later two years is apparent in Current Population Survey (CPS) data.<sup>9</sup> Moreover, state efforts to expand Medicaid and CHIP eligibility throughout the period allowed Medicaid to offset more of the decline in employer sponsored coverage than it might have otherwise. Finally, as a condition of receiving enhanced matching funds for Medicaid through the American Recovery and Reinvestment Act (ARRA), enacted in February 2009, states were prohibited from imposing eligibility restrictions which would have led to Medicaid enrollment declines.

Medicaid enrollment of the aged and disabled grew at a fairly steady rate between 2.4 percent and 3.0 percent over the 2000 to 2009 period. A closer examination of enrollment between 2005 and 2007 suggests that Medicaid enrollment of the aged actually fell, while enrollment of the disabled increased steadily (data not shown).<sup>10</sup> Nonetheless, taken together, enrollment growth among the aged and disabled has exceeded the rate of growth of the overall US population, and has significantly contributed to higher Medicaid costs due to the high cost of medical care for this population. In previous analyses we have identified the following factors as contributing to the increasing share of the aged and disabled within the general population:

- "Baby boomers," who are now in the 55-64 age range, when the likelihood of disability increases, and are beginning to expand the elderly population;
- New medical technologies and advances in pharmaceuticals that save, improve, and lengthen lives for many—and increase the number of people living with disabilities, many of whom rely on Medicaid to pay for their care;
- Increased ability to recognize and treat chronic conditions, particularly mental health problems, which may contribute to enrollment growth among the disabled.

There is also evidence that during the current recession, the disabled have been more likely to become unemployed sooner and apply for disability benefits through both supplemental security income (SSI) and social security disability insurance (SSDI).<sup>11</sup>

## Medicaid Spending Growth by Service Category, 2000-2009

Table 3 shows Medicaid spending and average annual growth rates in spending by service category, both with and without dual eligibles' prescription drug spending. Total spending grew from \$209.6 billion in 2000 to \$387.1 billion in 2009. Spending on acute care has consistently grown faster than spending on long-term care; but over the period as a whole, Medicaid spending on prescribed drugs and managed care has risen faster than both overall acute care spending and long-term care. After excluding drug spending on dual eligibles, the overall average annual growth rate of Medicaid spending on prescribed drugs from 2000 to 2009 was 11.7 and managed care spending rose by 13.1 percent per year, while overall acute care spending increased by 9.6 percent, long-term care spending by 5.8 percent, and spending on all medical services rose by 8.2 percent (Figure 4).

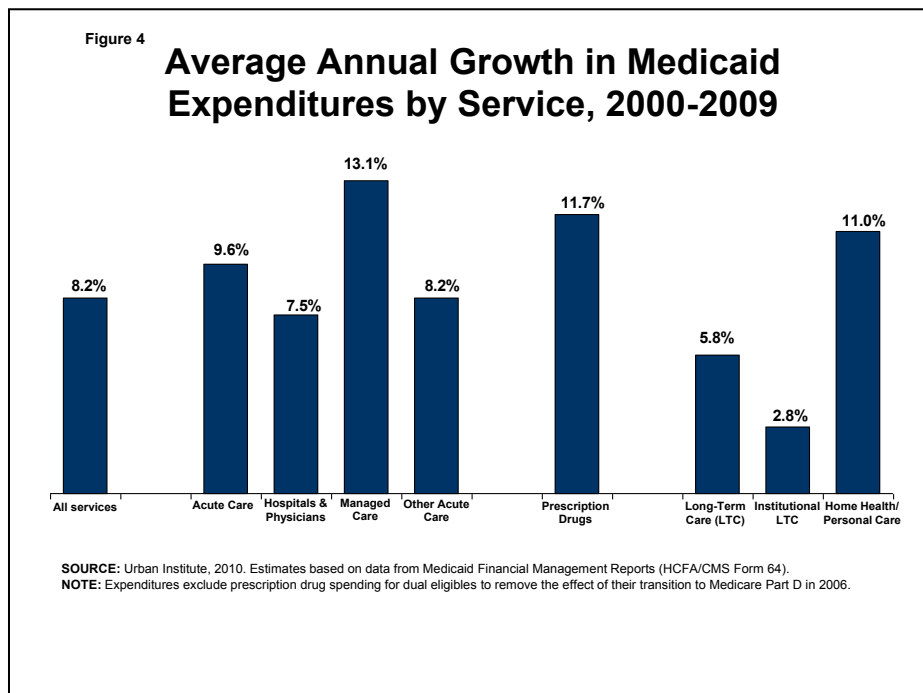


Table 3. US Medicaid Expenditures, by Spending Category and Year, FFY 2000 - FFY 2009 (in billions)

Expenditure Category	Expenditures						Average Annual Growth Rate					
	2000	2002	2004	2007	2008	2009	2000-2002	2002-2004	2004-2007	2007-2008	2008-2009	2000-2009
<b>Total Spending</b>	209.6	263.2	304.7	337.6	359.3	387.1	12.1%	7.6%	3.5%	6.4%	7.7%	7.1%
<b>Total Spending Without Dual Eligibles' Prescription Drug Spending</b>	198.5	248.2	283.4	336.2	359.3	387.1	11.8%	6.8%	5.9%	6.9%	7.7%	7.7%
Total Medical Services	181.9	233.1	272.9	300.0	317.7	346.5	13.2%	8.2%	3.2%	5.9%	9.1%	7.4%
Total Medical Services Without Dual Eligibles' Prescription Drug Spending	170.8	218.1	251.5	298.6	317.7	346.5	13.0%	7.4%	5.9%	6.4%	9.1%	8.2%
<b>Acute Care</b>	86.0	111.2	132.5	165.5	175.9	195.8	13.7%	9.1%	7.7%	6.3%	11.3%	9.6%
Hospitals & Physicians	47.8	59.9	71.1	83.2	83.6	91.5	12.0%	8.9%	5.4%	0.5%	9.4%	7.5%
Medicaid Managed Care	26.5	35.8	44.9	60.7	70.1	80.5	16.2%	12.1%	10.6%	15.4%	14.8%	13.1%
Other Care <sup>1</sup>	11.7	15.5	16.5	21.5	22.2	23.8	15.2%	3.0%	9.3%	3.1%	7.2%	8.2%
<b>Prescription Drugs</b>	20.6	29.3	40.1	22.4	23.7	25.5	19.5%	16.9%	-17.7%	6.0%	7.5%	2.4%
<b>Prescription Drugs Without Dual Eligibles' Prescription Drug Spending</b>	9.4	14.3	18.7	21.0	23.7	25.5	23.3%	14.3%	3.8%	13.1%	7.5%	11.7%
<b>Long-Term Care</b>	75.4	92.5	100.3	112.2	118.0	125.3	10.8%	4.1%	3.8%	5.2%	6.1%	5.8%
Institutional Long-Term Care	53.1	62.8	62.8	64.3	66.0	68.2	8.8%	0.0%	0.8%	2.7%	3.3%	2.8%
Home Health/Personal Care <sup>2</sup>	22.3	29.7	37.5	47.9	52.0	57.1	15.3%	12.4%	8.5%	8.7%	9.7%	11.0%
<b>Medicare Payments</b>	4.7	5.7	7.1	11.0	11.8	12.0	9.5%	11.9%	15.9%	6.7%	2.1%	11.0%
<b>DSH</b>	15.6	15.9	16.9	15.4	17.7	17.7	1.1%	2.9%	-3.0%	14.9%	-0.2%	1.4%
<b>Adjustments</b>	-3.1	-3.3	-6.5	-5.3	-5.5	-7.4	-2.6%	-40.6%	7.0%	-4.2%	-34.3%	-9.9%
<b>Administration</b>	10.5	11.9	14.4	16.4	17.6	18.3	6.2%	10.2%	4.4%	7.5%	3.7%	6.3%

SOURCE: Urban Institute estimates based on data from Medicaid Financial Management Reports (HCFA/CMS Form 64). Annual expenditures reflect nominal spending for the federal fiscal year.

1. Includes dental, other practitioners, abortion, sterilization, PACE programs, and emergency services for undocumented aliens

2. Includes home health services, home- and community-based waiver services, personal care, and related services.



### Acute Care

Throughout the period, spending on acute care services has followed changes in enrollment, particularly among families (data not shown). Growth in spending on acute care slowed down over the period, with a low point of 6.3 percent growth in 2008 followed by a jump in growth of 11.3 percent in 2009. Spending on hospitals and physicians increased from \$47.8 billion in 2000 to \$91.5 billion in 2009. In 2009, spending on these services grew by 9.4 percent, following a year of seemingly very slow growth. As reported in a previous paper, the slow growth in 2008 was likely due to very high levels of hospital spending in a select number of states in 2007,<sup>12</sup> leading to lower spending growth in 2008. Thus the 0.5 percent growth in 2008 does not truly reflect the actual growth rate in 2008. The 9.4 percent growth in 2009 indicates a return to normal growth, reflecting payment increases as well as enrollment growth. Unlike inpatient and outpatient spending growth, growth in physician expenditures has been slow for a number of years, most likely due to relatively low real increases in fees paid to physicians. However, this trend also generally reflects the movement away from fee-for-service.

Medicaid payments to managed care organizations increased from \$26.5 billion in 2000 to \$80.5 billion in 2009. Continuing a relatively high rate of growth, managed care spending increased at about 15 percent per year in both 2008 and 2009. Some of this increase is clearly due to overall Medicaid enrollment growth, but the growth in managed care spending is also due to changes in state policies such as the expanded use of Medicaid managed care for disabled populations who have greater health needs than non-disabled parents and children, expanded service areas for managed care, and mandatory, rather than voluntary, enrollment of beneficiaries into managed care.<sup>13</sup> Thus, the double-digit growth in managed care spending throughout the period may be more reflective of the number and types of enrollees receiving services through managed care arrangements, rather than higher per capita spending growth in managed care as compared to fee-for-service Medicaid. Further analysis would be required to explore whether spending for enrollees in capitated arrangements was rising at a higher or lower rate than for similar enrollees in fee-for-service Medicaid in the same state and with the same benefit package.

Spending on “other care” roughly doubled between 2000 and 2009 and had an average annual spending growth rate of 8.2 percent throughout the period. Most of the growth in “other care” appears to be due to increases in rehabilitation services, residential care, psychiatric services, and adult daycare (data not shown). The expanded use of Section 1115 waiver services in a number of states also contributed to growth in this period. Spending on “other acute care” services such as dental care, vision, hearing, pediatric and chiropractic care increased slowly throughout the period (data not shown).

## Prescription Drugs

As a consequence of the shift of dual prescription drug spending to Medicare in 2006, prescription drug spending including dual eligibles declined sharply between 2005 and 2007 and then resumed growth. Without dual eligibles' prescription drug spending, drug spending grew throughout the entire period at 11.7 percent per year on average, increasing from \$9.4 billion to \$25.5 billion. Although spending on prescription drugs for non-duals grew consistently throughout the period, it grew at a slower rate between 2004 and 2007. The slower growth in Medicaid drug spending in the 2004-2007 period (3.8 percent per year) is consistent with efforts by states to control drug spending through dispensing limits, preferred drug lists, prior authorization, generic substitution and co-payments.<sup>14</sup> Spending on prescription drugs grew sharply in 2008 before returning to a more modest increase in 2009. Smith et al. (2008) suggest that states' incentives to control drug spending diminished when prescription drug coverage for dual eligibles shifted to Medicare in 2006, since direct state Medicaid drug spending decreased by almost half.<sup>15</sup> However in a follow-up survey in 2009, the authors find a conspicuous increase in the number of states pursuing cost control measures such as lower dispensing fees and lower reimbursements for ingredient costs.<sup>16</sup>

## Long-Term Care

While Medicaid's spending on long-term care increased from \$75.4 billion in 2000 to \$125.3 billion in 2009, long-term care spending grew more slowly than either acute care or prescription drug spending (excluding duals) throughout the decade. Long-term care includes a range of services that we categorize into two main components: institutional long-term care, such as care provided in nursing facilities and intermediate care facilities for the mentally retarded (ICF/MR), and home health and personal care, which includes home and community-based services.

Spending on home health and personal care grew at much faster rates than spending on institutional services over the decade, as states have increased resources for home health and personal care. The relatively high growth in home and community-based care may be contributing to the low growth in the institutional care, as Smith et al. (2010) suggest that many states are continuing to reorient long-term care delivery systems in their Medicaid programs towards personal care and home and community-based services.<sup>17</sup>

The result is that overall spending on home health and personal care services has moved closer to the level of expenditures for institutional services over the period. This trend slowed in 2008 and 2009, as spending on institutional services, relatively flat since 2002, increased somewhat more in the past two years. The slow growth in institutional service spending may reflect a leveling or decline in

nursing home case loads, as suggested by the decrease in enrollment of aged within the period. Additionally, although many states still hope to increase the availability of community based options, the rate at which these expansions are occurring has slowed due to state fiscal constraints during the recession.

There is also slow growth in some of the components of institutional spending, including ICF/MR and mental hospital spending, perhaps reflecting a continued movement of many individuals to home and community-based care centers (data not shown). Spending on home health and personal care, in contrast, has increased substantially faster, at 15.3 percent per year between 2000 and 2002 and 12.4 percent per year between 2002 and 2004. The rate of increase fell below 10 percent after 2004 but was nonetheless quite high. In order to contain costs, states have adopted utilization controls (e.g. coverage limits, enrollment caps, and waiting lists for services) in community-based services.<sup>18</sup>

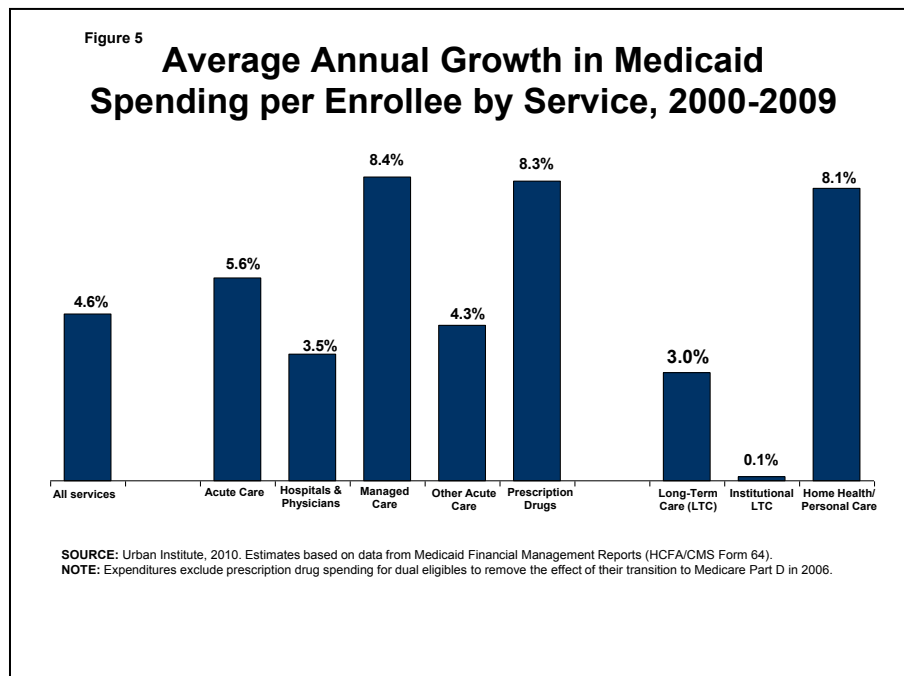
### Other Spending Categories

Payments to Medicare programs (e.g. premiums, deductibles, and cost sharing for dual eligibles' enrollment in Medicare Part A and Part B) increased from \$4.7 billion in 2000 to \$12.0 billion in 2009.<sup>19</sup> However, after high growth through 2007, growth slowed to 2.1 percent in 2009. The faster growth early in the decade may reflect increased enrollment among dual eligibles because of rapid increases in the costs of prescription drugs and the availability of the drug benefit only within Medicaid. Once the drug benefit was shifted to Medicare, Medicaid enrollment growth among dual eligibles may have slowed as low-income Medicare enrollees gained access to drug coverage through Medicare.

DSH spending jumped in 2008 after several years of very low growth. Lower rates of growth in 2006 and 2007 suggest that the states were not fully using their allotments (data not shown). DSH spending in 2008 could reflect greater use of the DSH allotments by states due to growing need given the rising number of uninsured individuals.

## Spending Growth per Enrollee

Table 4 presents spending growth per enrollee by type of medical service. Growth in spending per enrollee by service over the entire period is illustrated in Figure 5. These estimates, which exclude prescription drug spending for duals, adjust spending per enrollee to control for the effect of the changing composition of Medicaid enrollment. Simply dividing total change in spending by total change in enrollment would bias the estimate of the growth in spending per enrollee. Without this adjustment, spending would be biased downward in the early and late years of the decade because of the faster enrollment among less expensive family beneficiaries relative to the aged and disabled. The reverse is true in the middle years. We describe the adjustment approach in more detail in Appendix A. Essentially, the growth in spending per enrollee for a specific service reflects the change in spending on that service divided by the growth in enrollees, where the growth of enrollees is weighted to reflect increases in enrollment in proportion to the use of that specific service among a particular type of enrollee. For example, the growth in enrollees for long-term care services reflects the growth in enrollment of the aged and disabled much more than the growth among family enrollees. In contrast, the growth in enrollees for acute care services more evenly reflects enrollment growth among the aged and disabled as well as families.



The increases in overall (national) medical service spending per enrollee averaged 4.6 percent per year over the entire 2000 to 2009 period. Spending per enrollee for acute care increased by 5.6 percent per year, led by growth in managed care and prescription drugs. Long-term care spending per enrollee increased by 3.0 percent per year, almost wholly driven by increases in home and community-based care.

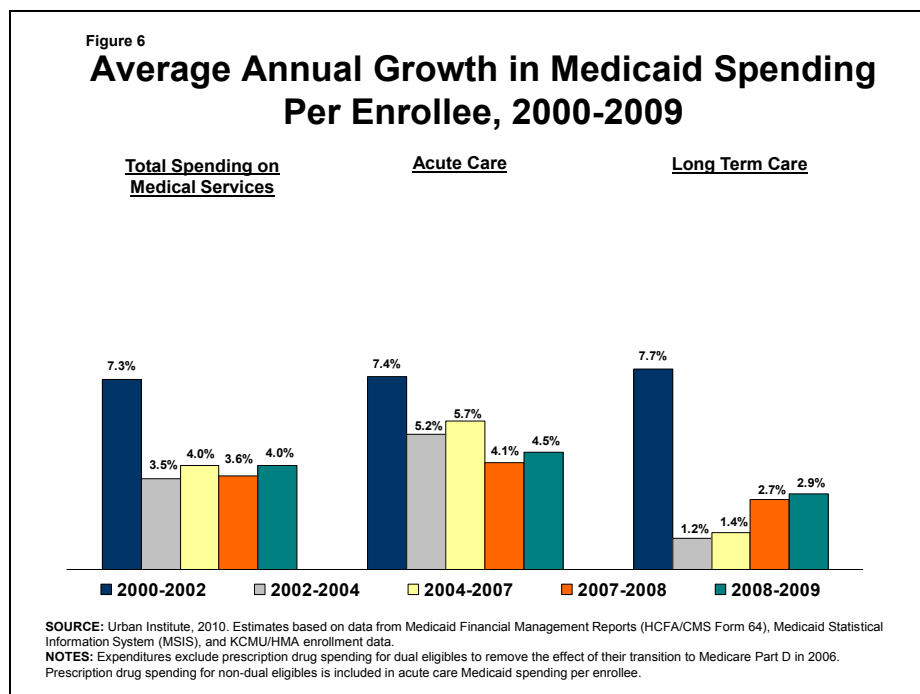
**Table 4. Average Annual Growth in Spending Per Enrollee by Type of Service Excluding Prescription Drug Spending for Dual Eligibles, FFY 2000 - 2009**

Service Category	2000-2002	2002-2004	2004-2007	2007-2008	2008-2009	2000-2009
<b>Medical Services</b>	<b>7.3%</b>	<b>3.5%</b>	<b>4.0%</b>	<b>3.6%</b>	<b>4.0%</b>	<b>4.6%</b>
<b>Acute Care</b> (including Prescription Drugs)	<b>7.4%</b>	<b>5.2%</b>	<b>5.7%</b>	<b>4.1%</b>	<b>4.5%</b>	<b>5.6%</b>
Hospitals & Physicians	4.8%	4.5%	4.0%	-2.4%	3.0%	3.5%
Medicaid Managed Care	7.4%	6.9%	9.4%	12.1%	7.2%	8.4%
Other Acute Care <sup>1</sup>	8.5%	-1.0%	7.6%	0.3%	1.5%	4.3%
Prescription Drugs <sup>2</sup>	18.2%	10.5%	1.8%	10.2%	3.2%	8.3%
<b>Long-Term Care</b>	<b>7.7%</b>	<b>1.2%</b>	<b>1.4%</b>	<b>2.7%</b>	<b>2.9%</b>	<b>3.0%</b>
Institutional Long-Term Care	5.7%	-2.9%	-1.5%	0.2%	0.1%	0.1%
Home Health/Personal Care <sup>3</sup>	12.1%	9.3%	6.0%	6.0%	6.4%	8.1%

SOURCE: Urban Institute estimates based on data from Medicaid Financial Management Reports (HCFA/CMS Form 64), Medicaid Statistical Information System (MSIS), and KCMU/HMA enrollment data. Expenditures reflect nominal spending and exclude payments made under CHIP, Medicare premiums paid by Medicaid for persons eligible for both programs, Disproportionate Share Hospital (DHS) payments, administrative costs, and accounting adjustments.

1. Includes dental, other practitioners, abortion, sterilization, PACE programs, emergency services for undocumented aliens, and other care services. Other care services could not be calculated separately from other acute care services due to data limitations.
2. Excludes prescription drug spending for dual eligibles to remove the effect of their transition to Medicare Part D in 2006.
3. Includes home health services, home- and community-based waiver services, personal care, and related services.

Growth in Medicaid spending per enrollee by service type and time period is shown in Figure 6 (with more detail in Table 4). For the remainder of the analysis, prescription drug spending is combined with acute care spending. After higher growth in earlier periods, growth in spending per enrollee for acute care services was 4.1 percent in 2008 and 4.5 percent in 2009. Spending on hospitals and physicians (fee-for-service) actually fell on a per enrollee basis in 2008 and then increased by 3.0 percent in 2009. The decline in 2008 reflects the 2007 reporting problem described above. Managed care spending per enrollee grew somewhat faster than fee-for-service. On a per enrollee basis, spending growth on “other acute care” services (described above) has slowed to 0.3 percent in 2008 and 1.5 percent in 2009 after a high growth rate of 7.6 percent per year between 2004 and 2007. Expenditures for prescription drugs spiked in 2008 and then slowed to a more modest growth of 3.2 percent in 2009, for reasons that may follow those suggested above to explain the pattern of overall drug spending growth in those years.

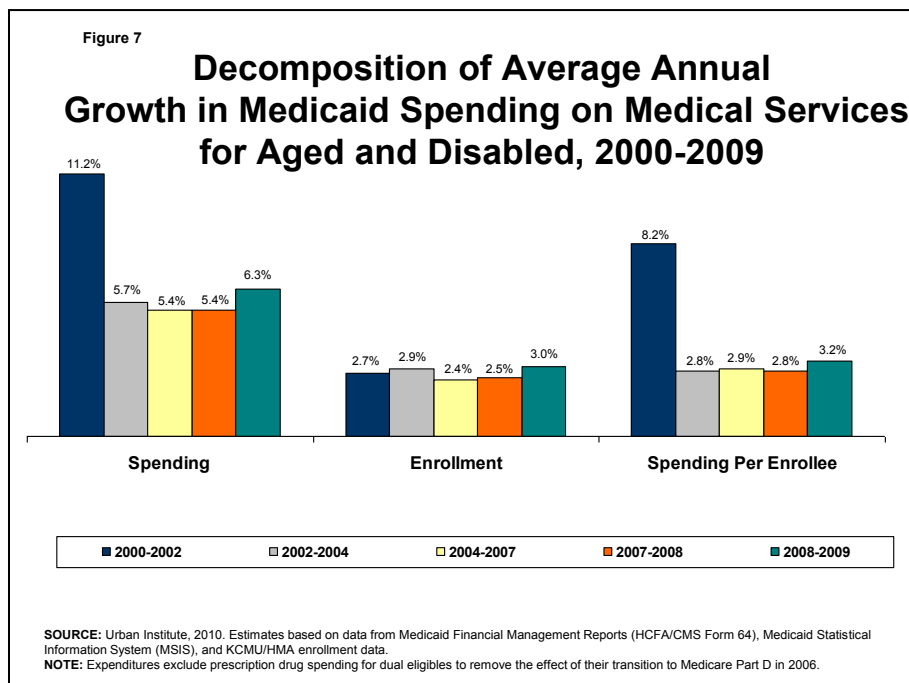


Overall, growth in spending per enrollee for long-term care services is substantially slower than that for acute care services. Long-term care spending per enrollee increased by 2.7 percent and 2.9 percent in 2008 and 2009, respectively. On a per enrollee basis, institutional long-term care spending barely increased, suggesting a smaller share of the aged and disabled in institutions as well as modest changes in reimbursement rates. Home health and personal care services spending per person has increased at about 6 percent per year since 2004 and likely has contributed to the slow growth in institutional long-term care spending.

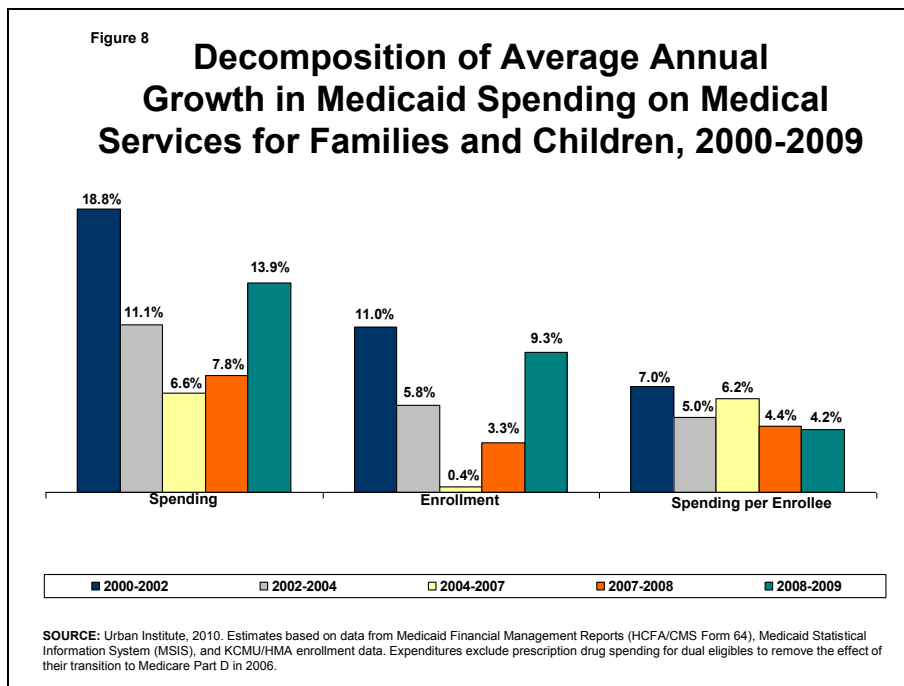
### Decomposing Growth into Enrollment and Spending per Enrollee

Total spending is a function of the number of people in the program and spending per enrollee. This section decomposes the growth in total spending into increases in enrollment and spending per enrollee over the 2000 to 2009 period. As in the previous section, these estimates are adjusted for changes in enrollment composition. We used the 2000 MSIS data to calculate baseline spending by eligibility group. We calculated spending growth for each eligibility group by taking the product of eligibility group specific spending per enrollee growth estimates, derived using service specific weights from the MSIS, and enrollment growth from Table 2. Due to the weighting of spending, total spending differs slightly from the estimates in previous tables. The estimates also adjust for the shift in dual eligibles drug spending to Medicare; that is, prescription drug spending includes non-dual eligibles only.

Overall spending on the aged and disabled increased slightly less than 6.5 percent over the last seven years due to both enrollment growth and relatively slow growth in spending per enrollee (Figure 7). Enrollment increased by 2.4 to 3.0 percent per year throughout the period. Spending per enrollee for the aged and disabled grew between 2000 and 2002 at the relatively high rate of 8.2 percent per year, reflecting spending growth in acute care services, prescription drugs, and home health/personal care, but growth has been approximately 3 percent per year since then. The decline in spending growth per enrollee after 2002 is likely attributed to the slowing growth in spending on prescription drugs and most long-term care. Thus the growth rate over the period in total spending for the aged and disabled is largely driven by the steady increases in enrollment and the slower growth in spending per enrollee, dampened by growth in institutional care services.



In contrast to Medicaid spending on the aged and disabled, the economic cycle is apparent in the decomposition of spending on families (Figure 8). Growth in total spending increased annually at 18.8 percent between 2000 and 2002 and then fell sharply and increased by only 6.6 percent per year between 2004 and 2007. In 2009, spending again accelerated, increasing by 13.9 percent. Spending growth tends to mirror growth in enrollment. Enrollment increases were particularly rapid during the 2000 to 2004 recession, growing by 11.0 percent and then 5.8 percent during that period, then flattening out to 0.4 percent growth per year between 2004 and 2007 and, most recently, increasing sharply to 9.3 percent in 2009.



Spending per enrollee among families primarily reflects the growth in services they use most—acute care. Since acute care services grew more rapidly than long-term care services, spending per enrollee grew more quickly for families than for the aged and disabled. In recent years relatively slow growth in Medicaid spending per enrollee among families of 4.4 percent in 2008 and 4.2 percent in 2009 has been established.

### Medicaid Spending Growth in Context

Medicaid expenditure growth on medical services has generally exceeded increases in national health expenditures and certainly the growth in GDP (Table 5 and Figure 9). For example, over the entire period, Medicaid expenditures on medical services increased annually by 8.2 percent while national health expenditures increased by 6.9 percent and GDP increased by 4.0 percent. In 2009, Medicaid spending on medical services increased by 9.1 percent, while national health expenditures increased by 5.7 percent and GDP declined by 1.7 percent.



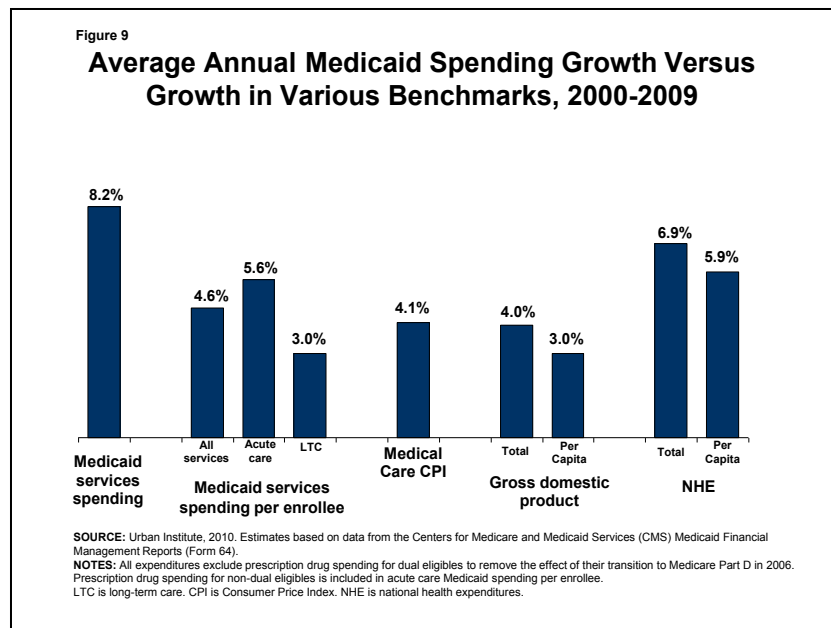
**Table 5. Average Annual Growth in Medicaid Expenditures Excluding Prescription Drug Spending for Dual Eligibles and in Selected Benchmarks**

	Average Annual Growth Rates					
	2000-2002	2002-2004	2004-2007	2007-2008	2008-2009	2000-2009
<b>Medicaid Expenditures for Medical Services*</b>	13.0%	7.4%	5.9%	6.4%	9.1%	8.2%
<b>Medicaid Expenditures per Enrollee</b>						
Medical Services*	7.3%	3.5%	4.0%	3.6%	4.0%	4.6%
Acute Care (including Prescription Drugs)*	7.4%	5.2%	5.7%	4.1%	4.5%	5.6%
Long Term Care	7.7%	1.2%	1.4%	2.7%	2.9%	3.0%
<b>CPI- Medical Care</b>	4.6%	4.2%	4.2%	3.7%	3.2%	4.1%
<b>National Health Expenditures</b>	8.8%	7.6%	6.5%	4.4%	5.7%	6.9%
<b>NHE per Capita</b>	7.8%	6.6%	5.5%	3.5%	4.8%	5.9%
<b>Gross Domestic Product</b>	3.4%	5.6%	5.8%	2.2%	-1.7%	4.0%
<b>GDP per Capita</b>	2.5%	4.7%	4.8%	1.2%	-2.6%	3.0%

SOURCE: Kaiser Commission on Medicaid and the Uninsured and Urban Institute analysis of data from the Medicaid Statistical Information System (MSIS), Centers for Medicare and Medicaid Services (CMS) Form 64, and Kaiser Commission and Health Management Associates data, 2010, National Health Accounts.

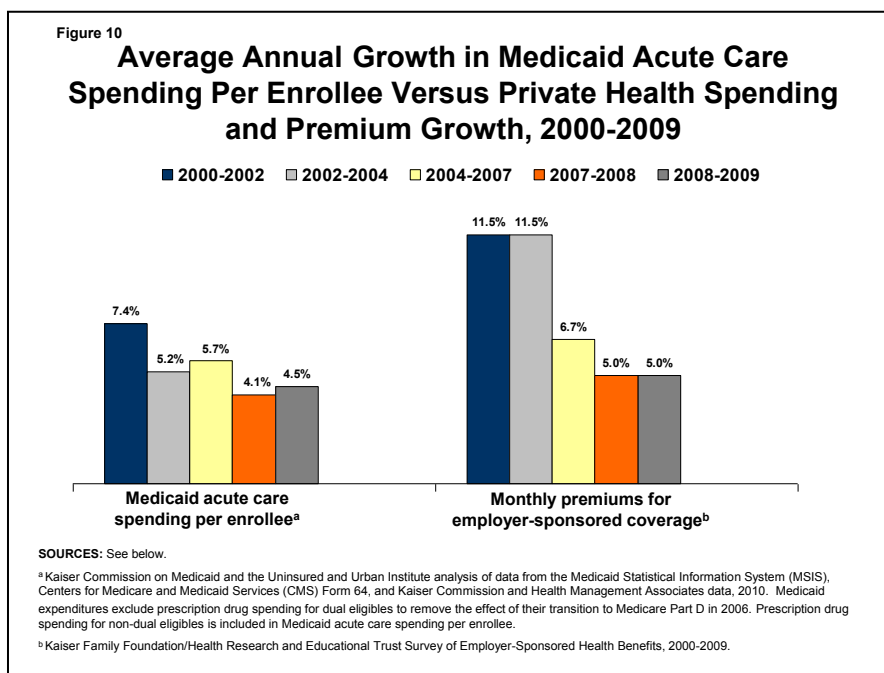
\* Because of the shift of prescription drug payments for dual eligibles to Medicare in 2006, Medicaid expenditures and expenditures per enrollee exclude prescription drug spending for dual eligibles.

The higher growth in Medicaid spending over 2000-2009 is predominantly explained by changes in enrollment. Overall per enrollee spending on medical services increased by 4.6 percent per year over this period, while national health expenditures per capita increased by 5.9 percent annually. However, Medicaid spending on medical services per enrollee grew faster than GDP per capita, which increased at just 3.0 percent annually over the period. Spending per enrollee on acute care services grew by 5.6 percent per year, which again is a smaller rate of increase than that for national health expenditures. Long-term care spending per enrollee grew 3.0 percent annually over the period, in line with growth in GDP per capita. Medicaid spending per enrollee is very close in most years to the growth in the consumer price index (CPI) for medical care. For example, over the entire period, the medical care CPI grew



4.1 percent annually while spending per enrollee on medical services increased by 4.6 percent per year.

The growth in Medicaid acute care spending per enrollee is compared to the growth in employer-sponsored health insurance premiums for selected periods (Figure 10). Medicaid spending per enrollee has grown more slowly than premiums for employer-sponsored insurance throughout the period. While the average annual growth in Medicaid acute care spending per enrollee was 7.4 percent between 2000 and 2002, the growth fell in the following period and then ended up at 4.1 percent in 2008 and 4.5 percent in 2009. In contrast, the growth in employer-sponsored health insurance premiums was substantially higher, at 11.5 percent between 2000 and 2004, and 6.7 percent between 2004 and 2007. The rate of increase fell to 5.0 percent after 2007, but was still higher than the growth rate of Medicaid acute care spending during that time. This would suggest that while Medicaid spending may be growing faster than growth in the economy, Medicaid has done considerably better in controlling per capita costs than has private coverage.



Growth in Medicaid spending per enrollee is lower than the increases in national health expenditures per capita and the premium growth of employer-sponsored health insurance plans due to an aggressive set of cost containment policies implemented by states in general. These include lower fee-for-service payment rates, consistent expansion of Medicaid managed care programs, an array of policies to control prescription drugs, and extension of home health and community-based services intended to reduce the level of institutionalization.<sup>20</sup>

However, many are hopeful that improved coordination of services for dual eligibles between Medicare and Medicaid could produce efficiencies that reduce the rate of spending growth in both programs. Similarly, improving and developing models of care coordination for high cost populations that make care provision more efficient may also someday yield program savings. In addition, while states have already implemented various policies to control the use and costs of drugs, spending on drugs deserves closer scrutiny, since the growth in total and per enrollee drug spending during the period has often far exceeded the rate of growth in overall medical spending.

Health spending projections suggest that drug spending will accelerate faster than spending on hospital or other medical services over the long run.<sup>21</sup> As an attempt to control costs, the new federal reform law increased the federal Medicaid rebate and expanded the rebate to cover drugs purchased under Medicaid managed care plans.<sup>22</sup> However, early evidence suggests that drug manufacturers have increased prices aggressively in order to compensate for the rebate increases.<sup>23</sup>

Beyond these approaches, it is difficult to see ways to reduce Medicaid spending growth on a per capita basis without serious impacts on access to needed care and the quality of care available. Cost-containment efforts that go beyond Medicaid and affect expenditures for the entire population, i.e. bend the cost growth curve further, are likely to be required for there to be any additional progress in controlling spending in Medicaid, which is already growing more slowly than other payers on a per capita basis.

## **Conclusion**

The factors driving Medicaid spending growth are enrollment increases and the various factors that explain the growth in health expenditures for all populations and across all payers. Medicaid enrollment is affected by changes in economic cycles. When the economy does poorly, people lose jobs and access to employer-based health insurance. At the same time, they experience decreases in income that make them eligible for Medicaid under existing eligibility criteria.

The accelerating enrollment in Medicaid observed during the recent recession illustrates this result. In addition, rising income inequality in the country has led to substantial growth in the low-income population over the last decade and is also a major contributor to Medicaid enrollment growth over the entire period. Enrollment in Medicaid was also affected during this period by protections against eligibility restrictions and increased federal funding included in the American Recovery and Reinvestment Act and by decisions to expand Medicaid eligibility in some states. Eligibility expansions have also included the

expansion of Medicaid benefits to more disabled individuals, another contributor to Medicaid spending increases.

Ultimately this analysis finds that growth in Medicaid spending per enrollee, on average for the nation, has not increased much more rapidly than the growth in underlying medical care inflation and has increased more slowly than both the growth in national health expenditures per capita and growth in private health insurance premiums.

This brief was prepared by John Holahan, Lisa Clemans-Cope, and Emily Lawton of the Urban Institute and by David Rousseau of the Kaiser Family Foundation's Commission on Medicaid and the Uninsured.

## Appendix A

No existing Medicaid data source includes all of the data needed for this analysis. We used data from different sources on current Medicaid spending and current enrollment, and used a third data set to make estimates of spending per enrollee from different databases. The main source for spending data is the Medicaid Financial Management Reports (Form 64) from the Center for Medicare and Medicaid Services (CMS) for fiscal years 2000 – 2009. These data are available by state and spending category but not available by eligibility group.

Data on enrollment come from a survey of all 50 states and the District of Columbia conducted by Health Management Associates (HMA) for the Kaiser Commission on Medicaid and the Uninsured (KCMU). These data provide point in time enrollment for June of each year. Because of inconsistencies that occur between state reporting systems, it is only possible to use detailed data for 45 states on the enrollment of two groups: aged and/or disabled, and children, parents, and other non-aged, non-disabled adults (throughout the report referred to simply as “families”). Using these data as well as total enrollment for the remaining states, enrollment was allocated to the aged/disabled and families for the total population in the same proportions as reported in the 45 states.

The Medicaid Statistical Information System (MSIS) provides detailed individual level spending and enrollment data stratified by service type and eligibility group. Data from the 2004 MSIS are used to estimate spending per enrollee growth rates by eligibility group. The 2004 MSIS data are used to create service level weights to estimate growth in total spending per enrollee in a way that accounts for differences in service use across eligibility groups by calculating service-specific enrollment growth rates. The growth in spending per enrollee for particular service is then calculated by dividing the growth in spending for that service by the service-specific weighted enrollment growth.

MSIS data are also used to decompose total spending growth over time into increases in enrollment and spending per enrollee by eligibility group. The 2000 MSIS is used to establish baseline spending by eligibility category. Then, growth in spending per enrollee by eligibility group is calculated by weighting the growth in total spending per enrollee for each service by the importance of that service to the specific eligibility group and then aggregating individual service spending per enrollee growth for each eligibility group. Spending growth rates for each eligibility group are then calculated by taking the product of eligibility group specific spending per enrollee growth estimates and enrollment growth. Finally, these rates are applied to baseline spending by eligibility group calculated using 2000 MSIS data.

Medicaid spending growth through 2009 for families versus the aged and disabled cannot be calculated directly because CMS-64 data break down spending by spending category, but do not associate spending with eligibility groups. Therefore, the analysis presented in this paper estimates spending growth for the aged and disabled versus families by using available data on enrollment growth by group and by estimating spending per enrollee separately for families and for the aged and disabled. Changes in spending per enrollee are calculated by using the changes in spending on each service divided by a measure of enrollment specific to each service. FY 2004 MSIS data on the distribution of spending by service for families versus aged and disabled are used to calculate a service-specific, enrollment growth rate.

In FY 2004, for example, families accounted for more than 40 percent of spending on inpatient hospital, physician, lab and x-ray, and outpatient hospital services, and more than 60 percent of the spending on prepaid managed care. But families accounted for only a small share of spending on long-term care. Thus, enrollment growth among non-disabled adults and children is particularly likely to affect acute care services while enrollment growth among the aged/disabled is likely to affect all services. To calculate the measure of enrollment that is specific to prescription drugs, MSIS data on the share of growth attributable to the aged/disabled (0.82) and families (0.18) are used. For hospitals, enrollment growth among the aged/disabled was given a weight of 0.55 versus 0.45 for families. The service-specific weights for these groups were then multiplied by the enrollment growth observed for each of the two groups to obtain a service-specific enrollment growth. Enrollment growth for each service was then divided into the growth in spending for the service to calculate the increase in spending per enrollee.

Service-specific measures of spending per enrollee were used to calculate average increases in spending per enrollee for the aged and disabled and for families. This was accomplished by weighting the increases in spending per enrollee by the importance of each service to the specific group. The growth of enrollment was then multiplied by the growth in spending per enrollee to calculate the increase in total spending for each of the two eligibility groups. The spending totals and rates of growth calculated using this method are shown in Table 5 and differ from the spending growth in Figure 3 and Table 3 because the calculations used to produce Table 5 began with MSIS data on spending by eligibility group in FY 2000 (totals from which differ from CMS-64 totals for FY 2000) and then apply calculated growth rates for each service through 2009.

## Notes

- <sup>1</sup> Smith et al, 2010.
- <sup>2</sup> Holahan et al, 2010.
- <sup>3</sup> See e.g. Kronick and Rousseau, 2005.
- <sup>4</sup> Unless otherwise noted, all years in this brief refer to the federal fiscal year (FFY), which runs from October 1 through September 30.
- <sup>5</sup> Bruen B and L Miller, "Changes In Medicaid Prescription Volume And Use In The Wake Of Medicare Part D Implementation," Health Affairs, 2008.
- <sup>6</sup> Authors' calculations using the MSIS data showed that the proportions of non-dual prescription drug spending for 2000-2007 were 45.9%, 47.1%, 48.8%, 47.2%, 46.7%, 46.2%, 70.7%, and 93.7% , respectively. The random sample in each year consisted of the larger of five percent of observations or 10,000 observations by state. A sensitivity analysis to the sample selection was conducted in two years, comparing the random sample to the full sample, and it was found that the results did not differ substantially. Because there is missing dual eligibility information in 2004, the 2004 proportion was estimated by taking the average of the 2003 and 2005 proportions at the national level. The prescription drug expenditures of aged or disabled beneficiaries with missing dual information in years other than 2004 were allocated to total non-dual prescription drug spending by applying the non-dual proportion calculated with the remaining prescription drug expenditures for that year specific to the aged or disabled eligibility group, respectively. For non-disabled non-elderly, all expenditures were attributed to non-duals regardless of whether dual information was missing or not. Due to missing prescription drug spending by eligibility group and dual status in Tennessee in 2000 and 2001, the proportion of 2002 total prescription drug spending by eligibility group and dual status was applied to total prescription drug spending on the CMS-64 to approximate spending by these groups.
- <sup>7</sup> Table 1 is reproduced from Holahan, John. "The 2007-09 Recession and Health Insurance Coverage." Health Affairs, January 2011, Vol. 30, No. 1, available online at <http://content.healthaffairs.org/content/early/2010/12/07/hlthaff.2010.1003.full.pdf+html>
- <sup>8</sup> See spending section for more details on the rationale for excluding drug spending for dual eligibles over this time period.
- <sup>9</sup> The number of individuals age 18 and older covered by Medicaid increased to 22.4 million in 2009, from 20.1 million in 2008 and 18.7 million in 2007. Authors' calculations based on "Table C-3. Health Insurance Coverage by Age: 1999 to 2009," DeNavas -Walt et al., P60-238, September 2010.
- <sup>10</sup> Authors' tabulations of Medicaid enrollment growth by eligibility category in the MSIS 2005 to 2007 (the most recent MSIS data available) show that average annual June enrollment grew among the disabled by 2.9 percent per year, while average annual June enrollment among the aged declined -0.7 percent per year during the same period. Similar results were obtained using alternative measures of enrollment available in the MSIS, including "ever-on" and "full-year equivalent" enrollment.
- <sup>11</sup> Kaye, H. Stephen. "The impact of the 2007-09 recession on workers with disabilities," The Monthly Labor Review, U.S. Bureau of Labor Statistics, October 2010, Vol. 133, No. 10, available online at <http://www.bls.gov/opub/mlr/2010/10/art2exc.htm>.
- <sup>12</sup> Holahan J, A Yemane, D Rousseau, "Medicaid Expenditures Increased by 5.3% in 2007, Led By Acute Care Spending Growth," September 2009.
- <sup>13</sup> Smith et al. "Headed for a crunch", September 2008.
- <sup>14</sup> Smith et al. "As Tough Times Wane, States Act to Improve...", September 2007.
- <sup>15</sup> Smith et al. "Headed for a crunch", September 2008.
- <sup>16</sup> Smith et al. "The crunch continues", September 2009.
- <sup>17</sup> Smith et al. (2010)

<sup>18</sup> Smith V, et al. "Hoping for Economic Recovery, Preparing for Health Reform: A Look at Medicaid Spending, Coverage and Policy Trends," Kaiser Family Foundation, September 2010 ([www.kff.org/medicaid/8105.cfm](http://www.kff.org/medicaid/8105.cfm))

<sup>19</sup>For example, state Medicaid programs are required to pay the Part B premium on behalf of those who are dually eligible for Medicare and Medicaid and enroll in Medicare Part B,

<sup>20</sup>Holahan J A Yemane. " Enrollment Is Driving Medicaid Costs—But Two Targets Can Yield Savings " Health Affairs, 2009.

<sup>21</sup> Truffer CJ et al. "Health Spending Projections Through 2019: The Recession's Impact Continues," Health Affairs, February 2010.

<sup>22</sup> Previously, the minimum rebate for brand-name drugs was 15.1 percent of the price that manufacturers charge to wholesalers, known as the Average Manufacturer Price (AMP), or the difference between the AMP and the lowest price offered to any private purchaser, whichever was higher. The new minimum rebate percentage for most brand-name drugs is 23.1. The minimum rebate for generic drugs was increased from 11 percent of the AMP to 13 percent of the AMP. Also, if a brand-name drug's AMP rises faster than the growth in the Consumer Price Index (CPI), it will be subject to an increased rebate.

<sup>23</sup> For example, The Wall Street Journal, April 15, 2009, "Drug Makers, Hospitals Raise Prices," [http://online.wsj.com/article/SB123975436561018959.html?mod=dist\\_smartbrief](http://online.wsj.com/article/SB123975436561018959.html?mod=dist_smartbrief)





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