



# 2010 ACTUARIAL REPORT

## ON THE FINANCIAL OUTLOOK FOR MEDICAID



Office of the Actuary  
Centers for Medicare & Medicaid Services  
United States Department of Health & Human Services





*Administrator*  
Washington, DC 20201

**LETTER OF TRANSMITTAL**

Washington, D.C.  
December 21, 2010

The Honorable Kathleen Sebelius  
Secretary of Health and Human Services  
Washington, DC 20201

Dear Madame Secretary:

I have the honor of transmitting to you the *2010 Actuarial Report on the Financial Outlook for Medicaid*. This report provides an analysis of past and projected national trends in Medicaid enrollment and expenditures and will also be provided to Congress for the purpose of complying with section 506(c) of the Children's Health Insurance Program Reauthorization Act of 2009.

Sincerely,

Dr. Donald M. Berwick



**2010 ACTUARIAL REPORT  
ON THE FINANCIAL OUTLOOK  
FOR MEDICAID**

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United States Department of Health & Human Services



## STATEMENT FROM CHIEF ACTUARY

From program inception, the cost of Medicaid has generally increased at a significantly faster pace than the U.S. economy. In 1970, combined Federal and State expenditures for Medicaid represented 0.4 percent of gross domestic product (GDP), but this percentage grew to 0.9 percent in 1980, 1.2 percent in 1990, 2.0 percent in 2000, and 2.7 percent in 2009. As illustrated by the actuarial projections in this report, Medicaid costs will almost certainly continue to increase as a share of GDP in the future under current law. Although much of Medicaid's expenditure growth (both past and future) is due to expansions of eligibility criteria, the per enrollee costs for Medicaid have also increased significantly faster than per capita GDP.

This growth pattern is not unique to Medicaid. Costs for virtually every form of health insurance, public and private, have increased rapidly, reflecting growth in the number of insured persons, wage increases and price inflation in the medical sector, provision of a greater number of medical services, and the development of new, better, more complex, and generally more expensive services. Together, these cost factors have increased at a faster rate than the number of workers, general inflation, and productivity underlying economic growth. Determining how to optimally balance our collective demand for the best possible health care with our not-unlimited ability to fund such care through private and public efforts represents one of the most challenging policy dilemmas facing the Nation.

The Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010, will substantially reduce the number of people in the U.S. without health insurance. Much of this reduction will occur as a result of expanded eligibility criteria for Medicaid, which we estimate will increase the number of Medicaid enrollees by about 20 million in 2019. Medicaid provides a relatively low-cost way to increase the number of people with health coverage, since its payment rates for health care services and health plans are low compared to other forms of health insurance. Even so, aggregate Medicaid costs will increase significantly as a result of the Affordable Care Act, due to the very large number of additional enrollees starting in 2014.

The Office of the Actuary in the Centers for Medicare & Medicaid Services has prepared this annual report on the past financial trends and projected outlook for Medicaid in the hope that it will provide insight into the nature of Medicaid cost trends and be a useful source of information for policy makers and budget analysts. The report is somewhat limited in scope, with projections for the next 10 years only, but our intention is to gradually expand on its content in subsequent installments, including longer-range actuarial projections and more extensive analysis as time and resources permit.

It is my opinion that (i) the techniques and methodology used herein to project the future costs of the Medicaid program are based upon sound principles of actuarial practice and are generally accepted within the actuarial profession, and (ii) the principal assumptions used and the resulting actuarial estimates are, individually and in the aggregate, reasonable for the purpose of projecting such costs under current law. Considering the substantial uncertainties inherent in projecting future health care costs, readers should be aware that actual future Medicaid costs could differ significantly from these estimates.

I would like to thank team leader Chris Truffer, and team members John Klemm, C.J. Wolfe, and Kathryn Rennie for their diligent efforts in preparing this report. In addition, John Shatto, F.S.A., was instrumental in developing estimates of the additional Medicaid enrollment and expenditures under the Affordable Care Act, and Catherine A. Curtis, Ph.D., provided invaluable editorial assistance. We welcome any feedback from readers; comments may be addressed to [Christopher.Truffer@cms.hhs.gov](mailto:Christopher.Truffer@cms.hhs.gov).

Richard S. Foster, F.S.A., M.A.A.A.  
Chief Actuary  
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## **EXECUTIVE SUMMARY**

The joint Federal-State Medicaid program provides health care assistance to certain low-income people and is one of the largest payers for health care in the United States. This report presents an analysis of past Medicaid trends and 10-year projections of Medicaid expenditures and enrollment, including the impacts of the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010.

### **Highlights and Findings**

#### *2009 Medicaid Information*

- Total Medicaid outlays in fiscal year (FY) 2009 were \$380.6 billion; \$250.9 billion or 66 percent represented Federal spending, and \$129.7 billion or 34 percent represented State spending.
- Medicaid provided health care assistance for 50.1 million people on average in 2009. A total of 62.9 million people were enrolled in Medicaid for at least one month in 2009, or about one of every five persons in the U.S.
- Per enrollee spending for health services was \$6,890 in 2009. Per capita spending for non-disabled children (\$2,848) and adults (\$4,123) was much lower than that for aged (\$15,678) and disabled beneficiaries (\$16,563), reflecting the differing health status of, and use of services by, the members of these groups.

#### *2010 Medicaid Projections*

- Medicaid expenditures are projected to increase 6.9 percent to \$404.9 billion in FY 2010. The Federal government is projected to pay \$271.4 billion, or about 67 percent. The Federal share of the total was higher than usual, as a result of the higher matching rates prescribed by the American Recovery and Reinvestment Act of 2009.
- Average Medicaid enrollment is projected to increase 5.6 percent to 52.9 million people in 2010.
- These Medicaid enrollment and expenditure increases are in large part the result of the recent economic recession. Lower income growth and relatively high unemployment rates contribute to increases in Medicaid enrollment and expenditures, mainly for non-disabled children and non-disabled non-aged adults.

### *10-Year Medicaid Projections*

- Over the next 10 years, expenditures are projected to increase at an average annual rate of 8.3 percent and to reach \$840.4 billion by FY 2019.
- Average enrollment is projected to increase at an average annual rate of 4.5 percent over the next 10 years and to reach 78.0 million in FY 2019.
- Both averages reflect the significant increase in Medicaid enrollment that will occur in 2014 as a result of the expansion of Medicaid eligibility under the Affordable Care Act.

### *Affordable Care Act Impacts*

- The Affordable Care Act is projected to increase Medicaid expenditures by a total of \$455 billion for FY 2010 through FY 2019, an increase of about 8 percent over projections of Medicaid spending without the impact of the legislation. Almost all of this increase is projected to be paid by the Federal government (\$434 billion, or about 95 percent).
- The most significant change to Medicaid is the expansion of Medicaid eligibility beginning in 2014. This expansion, together with greater participation by individuals eligible under current rules, is projected to add 11.6 million people to enrollment in FY 2014 and almost 20 million people by FY 2019, 21 percent and 34 percent, respectively, compared to pre-Affordable Care Act estimates. These increases reflect both the greater proportion of the population that will be eligible for Medicaid and an assumption that the new State health insurance exchanges will be very effective in assisting enrollment in Medicaid. Of the new enrollees, about 76 percent are projected to be adults and 24 percent children, and about 78 percent are projected to be eligible only under the new rules beginning in 2014.
- The expansion is projected to increase Medicaid expenditures by a total of \$428 billion during FY 2014 through FY 2019, with the majority to be paid by the Federal government (\$389 billion, or 91 percent) due to the higher Federal matching rate provided for expenditures for newly eligible enrollees.
- The overall average costs per enrollee for Medicaid are projected to grow more slowly than those for any specific eligibility category over the next 10 years, reflecting the fact that the beneficiaries who enroll in the program in 2014 as a result of the Affordable Care Act eligibility expansion are anticipated to have an average cost substantially less than the average cost of all other beneficiaries. This effect is expected to more than offset the impact on Medicaid per enrollee costs over the next 10 years of faster enrollment growth among aged enrollees, as the post-World War II “baby boom” generation reaches age 65.

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# I. INTRODUCTION

Medicaid is a cooperative program between the Federal and State governments to pay for health care and medical services for certain low-income persons in the United States and its Territories. The Federal and the State governments share responsibilities in designing, administering, and funding the program. For the Federal government, the Centers for Medicare & Medicaid Services (CMS) is the agency charged with administering Medicaid.

This is the second annual Medicaid report from the Office of the Actuary (OACT) at CMS (no report was published in 2009). The purpose of this report is to describe the projected trends for Medicaid expenditures and enrollment in fiscal years (FYs) 2009 and 2010 and over the next 10 years. Notably, this report also provides a brief description of the estimated impacts on Medicaid of the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010 (referred to collectively as the “Affordable Care Act”). It also describes the data available on Medicaid spending and enrollment, as well as the methodology and assumptions used in the projections. Finally, this report places the Medicaid program within the context of Federal and State government spending and the U.S. health care system.

## II. OVERVIEW OF MEDICAID

Authorized by Title XIX of the Social Security Act, Medicaid was signed into law in 1965 and is an optional program for the States. Currently all States, the District of Columbia, and all of the Territories have Medicaid programs.<sup>1</sup>

The Federal government establishes certain requirements for each State's Medicaid program. The States then administer their own programs, determining the eligibility of applicants, deciding which health services to cover, setting provider reimbursement rates, paying for a portion of the total program, and processing claims.

Eligibility for enrollment in Medicaid is determined by both Federal and State law. Title XIX specifies which groups of people must be eligible, and States have considerable flexibility to extend coverage to additional groups. In addition to income, eligibility is typically based on several other factors, including financial resources (or assets), age, disability status, other government assistance, and other health or medical conditions such as pregnancy. Beginning in 2014, the Affordable Care Act expands Medicaid eligibility to all individuals under age 65 in families with income below 138 percent of the Federal Poverty Level (FPL).<sup>2</sup>

Title XIX specifies that certain medical services must be covered under Medicaid, while also granting the States flexibility to cover many other benefits. Services typically covered include hospital care, physician services, laboratory and other diagnostic tests, prescription drugs, dental care, and many long-term care services. The States also have the options to use managed care plans to provide and manage benefits and to apply for waivers that allow the States more flexibility in developing specialized benefit packages for specific populations. With limited exceptions—such as the use of waivers, demonstration projects, and benchmark benefit plans—States must provide the same benefit package to all Medicaid enrollees. Additionally, States must extend eligibility to all mandatory populations and cover all mandatory services defined by Title XIX in order to receive Federal matching funds for their Medicaid programs.

The Federal government and the States share the responsibility for funding Medicaid. States pay providers or managed care organizations for Medicaid costs

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<sup>1</sup> For more information on Medicaid, including information on eligibility and covered services, see Klees, Wolfe, and Curtis, "Brief Summaries of Medicare & Medicaid," November 2009: [http://www.cms.hhs.gov/MedicareProgramRatesStats/02\\_SummaryMedicareMedicaid.asp](http://www.cms.hhs.gov/MedicareProgramRatesStats/02_SummaryMedicareMedicaid.asp).

<sup>2</sup> The estimated impacts of the expansion of Medicaid eligibility on enrollment and expenditures are presented in the Actuarial Analysis section of this report. The Affordable Care Act technically specifies an upper income threshold of 133 percent of the FPL but also allows a 5-percent income disregard, making the effective threshold 138 percent.

and then report these payments to CMS. The Federal government pays for a percentage of the costs of medical services by reimbursing each State; this percentage, known as the Federal Medical Assistance Percentage (FMAP), is calculated annually for each State based on a statutory formula that takes into account State per capita income with some adjustments prescribed by legislation.<sup>3</sup> Notably, the Affordable Care Act specifies FMAPs for beneficiaries who are newly eligible as a result of the Medicaid expansion beginning in 2014. Additionally, the Federal government pays for a portion of each State's administration costs. Beneficiary cost sharing, such as deductibles or co-payments, and beneficiary premiums are very limited in Medicaid and do not represent a significant share of the total cost of health care services for Medicaid enrollees.

In contrast to the Federal Medicare program, Medicaid's financial operations are not financed through trust funds. Other than a very small amount of premium revenue from enrollees, as noted above, and some other sources of State revenue (such as provider taxes), there are no dedicated revenue sources comparable to the Medicare Hospital Insurance payroll tax. Medicaid costs are met by Federal and State general revenues, on an as-needed basis. The Federal financing is authorized through an annual appropriation by Congress. These funds are then spent through daily draws from the general fund of the Treasury in the amounts required to pay that day's Federal matching amounts on the State program expenditures. As a result, Medicaid outlays and revenues are automatically in financial balance, there is no need to maintain a contingency reserve, and, unlike Medicare, the "financial status" of the program is not in question from an actuarial perspective.

Medicaid coverage is extremely valuable to the low-income individuals and families who qualify for the health care services provided by the program. By extension, the program is also valuable to society at large, as it enables the least-fortunate members to obtain the health care they need in an orderly way. It is also important, of course, to consider the cost to society of providing this coverage and to look ahead in anticipation of likely future trends in such costs. The balance of this report is intended to help illuminate these trends.

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<sup>3</sup> In general, Title XIX specifies that the FMAP for each State cannot be lower than 50 percent and cannot be higher than 83 percent; in 2008, FMAP ranged from 50 percent to 76 percent. Also, Title XIX overrides the normal formula and sets specific FMAP levels for certain States. The American Recovery and Reinvestment Act of 2009 (ARRA) and the Education, Jobs, and Medicaid Assistance Act of 2010 provided temporary increases to the FMAP for FY 2009, FY 2010, and part of FY 2011; the impact of these increases is described in the Analysis section of this report. Additionally, the Affordable Care Act specifies different FMAP for certain sections of the Act. Most significantly, newly eligible beneficiaries' expenditures are covered at a greater FMAP than are currently eligible beneficiaries' expenditures starting in 2014; States that already covered adults up to 100 percent of the FPL are eligible for additional FMAP; and the temporary increase in primary care physician payments starting in 2013 and 2014 is paid for entirely by the Federal government.

### III. DATA AND ASSUMPTIONS

Projections of Medicaid expenditures and enrollment are highly dependent on both demographic and economic assumptions. The most important such assumptions are those regarding the growth of health care prices, growth in the use of health care services, overall economic growth, individual wage growth, and population growth. In addition, there are various “programmatically” factors that have historically influenced Medicaid expenditure and enrollment trends, including decisions by the States regarding eligibility and payment rules for their Medicaid plans, the coverage of and enrollment in other health insurance programs, including Medicare and private health insurance, and changes in the participation rates of eligible persons in Medicaid. The projections also depend importantly on the nature and quality of the available data on Medicaid operations. This section describes the sources of data and assumptions that are used to generate the Medicaid projections shown in this report.

The data and assumptions on which these Medicaid projections are based are derived from four major sources. The first source is CMS data, which are submitted by the States to CMS on a regular basis.<sup>4</sup> The States provide a quarterly report of spending by type of service; this report, known as the CMS-64, comprises expenditures for all Medicaid fee-for-service programs and capitation arrangements. The Medicaid Statistical Information System (MSIS) contains both service and demographic data supplied by the States, including provider payments and enrollment counts. The States also submit quarterly to CMS 2-year forecasts of spending by service, known as the CMS-37. Spending data are reported at both the Federal and State levels in the CMS-64 and CMS-37; MSIS expenditure data are reported as total Medicaid (Federal and State spending combined). OACT makes several adjustments to these data to merge them together for use in preparing projections.

The Boards of Trustees for Old-Age, Survivors, and Disability Insurance (OASDI, or Social Security) and Medicare constitute the second source for the data and assumptions.<sup>5</sup> The projections in this Medicaid report are based on the same economic and demographic assumptions that were developed by the Trustees and used to determine the intermediate estimates presented in their statutory 2010 annual reports to Congress on the financial statuses of the OASDI and Medicare programs. The Trustees’ intermediate economic assumptions are also used

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<sup>4</sup> More information on these sources is available on the CMS website at [http://www.cms.hhs.gov/MedicaidBudgetExpendSystem/01\\_Overview.asp#TopOfPage](http://www.cms.hhs.gov/MedicaidBudgetExpendSystem/01_Overview.asp#TopOfPage). Additional detail is provided in the Appendix.

<sup>5</sup> *The 2010 Annual Report of the Boards of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds* and *The 2010 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds*.

to develop the health care service price forecasts underlying the projections in this report.<sup>6</sup>

The third source is the Office of the Actuary Health Reform Model (OHRM), which is primarily based on the Medical Expenditure Panel Survey (MEPS) Household Component. The OHRM was developed and used by OACT to estimate the impact of proposed health care reform legislation, including the Affordable Care Act as enacted. The projections presented in this report for the increases in Medicaid expenditures and enrollment due to the expansion of Medicaid eligibility under the Affordable Care Act are derived from the OHRM estimates. As a result, this report also relies on the data and assumptions used by the OHRM.<sup>7</sup>

The fourth source—National Health Expenditure (NHE) historical data and projections—is used for comparing Medicaid expenditures and enrollment with Medicare, private health insurance, and total health care spending in the United States. The NHE data and projections are developed by OACT.<sup>8</sup>

It is important to note the limitations that are associated with the data described in this section. First, the most recent MSIS data available are from FY 2008, and the MSIS is the only available source of enrollment data. Consequently, to relate FY 2009 actual expenditures to the number of enrollees, estimates of Medicaid enrollment have to be made for FY 2009. Another qualification is that the CMS-64 does not provide any data on enrollment or spending by enrollment category, and

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<sup>6</sup> These assumptions are different from those used for projections in the President's Budget. Consequently, the projections presented in this report usually differ somewhat from the President's Budget projections. In addition, due to differences in the timing of this report and the Budget, later data are generally available for use in this report. Finally, while the Trustees' economic assumptions underlie the health care service price forecasts for both the Medicare Trustees Report and the Medicaid actuarial report, the two sets of price growth forecasts are not the same. The two programs have significantly different statutory mechanisms for setting provider price updates, and these differences are reflected in the update assumptions for each program.

<sup>7</sup> More information is available in the memorandum titled "Estimated Financial Effects of the Patient Protection and Affordable Care Act, as Amended" on the CMS website at [http://www.cms.gov/ActuarialStudies/Downloads/PPACA\\_2010-04-22.pdf](http://www.cms.gov/ActuarialStudies/Downloads/PPACA_2010-04-22.pdf). In addition, a forthcoming memorandum will describe the OHRM methodology in detail. A key assumption made in those estimates and relied upon in these projections is that there would be a sufficient supply of health care providers to meet the expected increases in demand for health care services, without considering any market disruptions or price increases. Given that Medicaid generally pays the lowest prices for health care services and that Medicaid enrollment is expected to increase, it is possible that meeting all additional demand would be difficult, especially in the early years of the coverage expansion.

<sup>8</sup> More information on the NHE historical accounts and projections is available on the CMS website at <http://www.cms.hhs.gov/NationalHealthExpendData/>. Also, see Hartman, *et al.*, "Health Spending Growth at a Historic Low in 2008," *Health Affairs*, January 2010; 29(1): 147-155; Truffer, *et al.*, "Health Spending Projections Through 2019: The Recession's Impact Continues," *Health Affairs*, March 2010; 29(3): 522-529; and Sisko, *et al.*, "National Health Spending Projections: The Estimated Impact of Reform Through 2019," *Health Affairs*, October 2010; 29(10): 1-9.

the definitions of medical service categories are not consistent between the MSIS and the other CMS data sources. As a result, adjustments need to be made to develop a data set that contains not only service-level expenditures that match the CMS-64 data but also expenditures by enrollment group. The MSIS and the CMS-64 are merged together to provide a more complete understanding of Medicaid spending. Since the service definitions are different between these two sources, MSIS data is used to estimate spending by enrollment group for each Medicaid service.

Yet another limitation is the unavailability of demographic, macroeconomic, health care, and program assumptions specific to each State. Because these State-specific assumptions are not available, it is not possible to project Medicaid spending or enrollment separately by State. In addition, since the NHE data and projections use somewhat different definitions of Medicaid spending and services than do the other Medicaid data sources, historical Medicaid data and projections from the NHE accounts may not match the historical data and projections presented here. A final caveat is that OACT has reviewed the data sources used in these projections but has relied on CMS program components and the States to ensure the quality of the data.

The Medicaid expenditure and enrollment projections shown in this report are based on current law; that is, they are consistent with current legislation and administrative policy regarding Medicaid as of September 25, 2010. This analysis does not attempt to forecast any future changes in policy or legislation that, if realized, would affect the Medicaid program—including Federal Medicaid, State Medicaid, or Medicare policy and legislation or other legislation that could affect private health insurance plans. Thus, while changes in Federal or State Medicaid policy have been a significant factor affecting the patterns of growth in expenditures and enrollment over history, we do not assume any future changes in policy (beyond those already scheduled under current law).

Like any projection of future health care costs, the Medicaid projections shown in this report are necessarily uncertain. Actual numbers of enrollees, the number of services used, and the reimbursement levels per service will depend on all of the factors described previously—none of which can be predicted with certainty. Past increases in Medicaid and other health care costs have often been relatively volatile, adding to the difficulty of correctly anticipating future trends. Moreover, the impacts of the numerous sections of the Affordable Care Act that affect Medicaid, especially the broadening of Medicaid eligibility in 2014, introduce additional uncertainty into these projections. The actual number of people who will become eligible for and enroll in Medicaid in 2014 is unknown, as are their health care costs; accordingly, these estimates should be considered more uncertain than other projections of Medicaid enrollment and expenditures under current eligibility criteria due to the lack of experience and program data to inform them.

For these reasons, the projections shown in this report should be regarded as a reasonable indication of future Medicaid costs under current law and from today's perspective. It is important to recognize that actual costs in the future could differ significantly from these projections, as a result of (i) unanticipated developments in demographic, economic, or health cost growth trends; (ii) effects of the Affordable Care Act (such as the proportion of newly eligible individuals and families who become enrolled) that differ from current estimates; (iii) regulatory interpretations of the Affordable Care Act that differ from our expectations; or (iv) any further changes in the legislation governing Medicaid.

## IV. METHODOLOGY

This section briefly describes the methodology behind the projections of Medicaid spending presented in this report.

Health actuaries typically base estimates of medical expenditures on three major factors:

- $C$  – the number of people enrolled in the program (“caseload”),
- $U$  – the quantity of services each person uses (“utilization”), and
- $P$  – the reimbursement (“price”) for each unit of service.

The product of these three factors yields an estimate of total expenditures for the medical service:

$$E = C \times U \times P \tag{1}$$

Direct application of equation (1) requires data on utilization and reimbursement rates for Medicaid that are not currently available or practical to maintain.<sup>9</sup> An alternative recursive approach is therefore used for the projections, as described below.

The projection algorithm begins with development of data on the current level of Medicaid expenditures, by eligibility category and by type of medical service, to serve as a projection base. Changes in the three determinants of expenditures in equation (1) are then projected for future years and applied sequentially to the base year expenditures. Thus, if  $E_y$  represents expenditures in year  $y$ , then

$$E_{y+1} = E_y \times (1 + c_{y+1}) \times (1 + u_{y+1}) \times (1 + p_{y+1}), \tag{2}$$

where  $c_{y+1}$ ,  $u_{y+1}$ , and  $p_{y+1}$  are the assumed or projected rates of change in caseload, utilization, and prices, respectively, between years  $y$  and  $y+1$ . Equation (2) is applied separately to expenditures for each combination of the 4 Medicaid eligibility categories and 41 categories for type of service.

With a few exceptions, caseload change factors vary by eligibility category, and utilization and price factors vary by type of service. The projected caseload factors

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<sup>9</sup> No comprehensive sources are available that track reimbursement rates and use by service for all Medicaid programs. Because the expenditure data reported by the States in the CMS-64 are at an aggregate service level, each category likely includes various services with different numbers of claims and distinct reimbursement rates. Additionally, reimbursement rates and service use are different for each State.

are determined by trend and regression analysis of Medicaid enrollment data. Projections of future enrollment by eligibility category are based on estimates of the change in the share of the U.S. population enrolled in Medicaid. The most important factors are the unemployment rate and percentage of the U.S. population with private health insurance; these factors (while exhibiting some correlation between themselves) correlate strongly with the percentage of the U.S. population enrolled in Medicaid, as they reflect (1) how many people are without private health insurance and (2) how many people might qualify for Medicaid based on its income requirements. Price changes are derived from economic forecasts produced for the 2010 Medicare Trustees Report, including forecasts for economy-wide inflation, inflation for medical services prices, and wage growth. Utilization is treated as the residual between total growth and the growth due to enrollment and price changes. The estimate of utilization is determined by an analysis of the historical interrelationship of expenditure, caseload, and price factor growth.<sup>10</sup> The residual factor, while termed “utilization,” reflects not only the change in the average number of services per enrollee but also changes in the “intensity” or average complexity of the services. In addition, any errors in the measurement of the number of enrollees and price per service are implicitly included in the residual.

The results obtained from the “Caseload, Utilization, Price” (“CUP”) recursive forecast, using equation (2), are frequently adjusted to be consistent with recent expenditure and outlay trends and with the 2-year budget estimates submitted by States.

As noted previously, estimates of the impact of the Medicaid eligibility expansion under the Affordable Care Act are derived from the results of the Office of the Actuary Health Reform Model (OHRM).<sup>11</sup> This model is based on the Medical Expenditure Panel Survey (MEPS), reweighted to match the spending and insurance coverage estimates of the National Health Expenditure (NHE) projections in 2010.<sup>12</sup> The OHRM specifically estimates (1) the number of people who would become newly eligible for Medicaid and would enroll as a result of the eligibility expansion; (2) the number of people who are already eligible for Medicaid, but are not enrolled, and who would now enroll in the program as a result of the publicity and new assistance with application that will result from the Affordable Care Act; and (3) what the new enrollees’ per capita Medicaid expenditures would be once they enroll. To estimate expenditures by service category for new Medicaid enrollees, it was assumed that such expenditures would be in the same proportion

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<sup>10</sup> More details on the trend residual methodology are included in the Appendix.

<sup>11</sup> More information is available in the memorandum titled “Estimated Financial Effects of the Patient Protection and Affordable Care Act, as Amended” on the CMS website at [http://www.cms.gov/ActuarialStudies/Downloads/PPACA\\_2010-04-22.pdf](http://www.cms.gov/ActuarialStudies/Downloads/PPACA_2010-04-22.pdf).

A forthcoming memorandum from the Office of the Actuary will provide additional details on the methodology used in the OHRM.

<sup>12</sup> Truffer, *et al.*, “Health Spending Projections Through 2019: The Recession’s Impact Continues.”

as that for currently enrolled Medicaid enrollees by eligibility category. (For example, if 50 percent of Medicaid spending for currently enrolled children is attributable to acute care fee-for-service, then an equal share would be expected to be spent on acute care fee-for-service for newly eligible children.) Estimates of the other sections of the Affordable Care Act that affect Medicaid were developed separately by OACT and are added to the Medicaid expenditure and enrollment projections. More details on the estimates of Medicaid impacts of the Affordable Care Act are available in the Actuarial Analysis section of this report.

## V. ACTUARIAL ANALYSIS

### A. FY 2009 MEDICAID OUTLAYS AND ENROLLMENT

The Federal government and the States collectively spent \$380.6 billion for Medicaid in FY 2009. Of this amount, the Federal government paid \$250.9 billion, representing about 66 percent of net program outlays, and the States paid \$129.7 billion, or about 34 percent of net outlays. Table 1 summarizes total Medicaid outlays for FY 2009.

**Table 1—Medicaid Outlays for Fiscal Year 2009 by Type of Payment  
(In billions)**

Title XIX Outlays <sup>1</sup>	Federal Share	State Share	Total
Medical Assistance Payments:			
Acute Care Benefits <sup>2</sup>	\$91.2	\$43.6	\$134.7
Long-Term Care Benefits <sup>2</sup>	73.5	37.8	111.2
Capitation Payments and Premiums <sup>2</sup>	62.5	30.8	93.3
Disproportionate Share Hospital (DSH) Payments <sup>2</sup>	9.2	6.9	16.1
Adjustments <sup>3</sup>	1.5	2.2	3.7
Subtotal, Medical Assistance Payments	237.9	121.2	359.1
Administration Payments	10.3	8.5	18.8
Vaccines for Children Program	3.2	—	3.2
Gross Outlays	251.4	129.7	381.1
Collections <sup>4</sup>	-0.4	—	-0.4
Net Outlays	250.9	129.7	380.6

<sup>1</sup> Federal outlays are the funds drawn from the U.S. Treasury by the States. The State and total outlays reflect spending as reported by the States for the purposes of drawing Federal funding from the U.S. Treasury. Expenditures represent the spending as it was paid by the State to health care plans or providers. While expenditures and outlays are generally similar, they are not equal mainly due to the timing differences between the States paying for services and the States receiving Federal funds. Neither outlays nor expenditures include Title XIX costs in support of the Children's Health Insurance Program.

<sup>2</sup> Benefit expenditures as reported on the CMS-64 (base expenditures).

<sup>3</sup> Adjustments include net adjustments of benefits from prior periods and the difference between expenditures and outlays.

<sup>4</sup> Collections from Medicare Part B for the Qualifying Individuals (QI) program.

The great majority of Medicaid spending—94 percent of total outlays in FY 2009—was for medical assistance payments. In table 1, these payments are divided into four major categories: acute care, long-term care, capitation payments, and disproportionate share hospital (DSH) payments.

Acute care includes fee-for-service (FFS) spending for inpatient and outpatient hospital care, physician and other medical professional services, prescription drugs, dental care, laboratory and imaging tests, mental hospital services, and case management costs, as well as coinsurance payments for beneficiaries in managed care plans. Long-term care includes spending on nursing home services, home health care, intermediate care facility services, and home and community-based services. Capitation payments and premiums include premiums paid to Medicaid

managed care plans, pre-paid health plans, other health plan premiums, and premiums for Medicare Part A and Part B. (Most services provided by capitated plans under Medicaid are for acute care.) DSH payments are provided to certain hospitals that have furnished care for a significant number of uninsured persons and Medicaid beneficiaries and that have acquired, as a result, a substantial amount of uncompensated care costs.

Of these four categories, acute care represented the largest portion of Medicaid spending in FY 2009, accounting for \$134.7 billion or 38 percent of Medicaid expenditures on benefits. Medicaid spending amounted to \$111.2 billion for long-term care and \$93.3 billion for managed care and other premiums in FY 2009, representing 31 percent and 26 percent of expenditures on benefits, respectively. DSH accounted for \$16.1 billion, or 4 percent, of Medicaid benefits in 2009.

Medicaid spending on program administration totaled \$18.8 billion in FY 2009—\$10.3 billion in Federal expenditures and \$8.5 billion in State expenditures, together representing 5 percent of Medicaid outlays. Medicaid also provided \$3.2 billion of funding in FY 2009 for the Vaccines for Children program (all Federal funding).<sup>13</sup>

At the time this report was prepared, the latest Medicaid enrollment data available were from FY 2008 (with the exception of Hawaii).<sup>14</sup> Accordingly, enrollment by eligibility group (children, adults, aged, and blind or disabled) has been estimated for FY 2009.

Enrollment is measured in two ways: (1) “person-year equivalents” (PYE), or the average enrollment over the course of a year, and (2) “ever-enrolled” persons, or the number of people covered by Medicaid for any period of time during the year. In FY 2009, Medicaid enrollment was estimated to be 50.1 million PYE (including enrollment in the U.S. territories). An estimated 62.9 million people, or about one person in five in the U.S., were ever-enrolled.

Table 2 shows estimated enrollment by eligibility group for FY 2009. Historically, non-disabled children have been the largest group of Medicaid enrollees. In FY 2009, this group is estimated to have represented 24.0 million PYE, or about 49 percent of overall Medicaid enrollment (excluding Territory programs). Non-disabled non-aged adults made up an estimated 11.4 million PYE (23 percent), while blind or disabled enrollees and aged enrollees are estimated to have accounted for 9.0 million and 4.8 million PYE (18 percent and 10 percent,

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<sup>13</sup> The Vaccines for Children program is administered by the Centers for Disease Control and Prevention and provides vaccines for children enrolled in Medicaid, as well as for other children who might otherwise not be able to afford vaccines.

<sup>14</sup> Enrollment data for Hawaii were estimated for FY 2008 based on FY 2007 data.

respectively). Another 1 million enrollees were projected for the five U.S. territories (Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, and the Northern Mariana Islands).

**Table 2—2009 Estimated Enrollment, Expenditures, and Estimated Per Enrollee Expenditures, by Enrollment Group<sup>1</sup>**

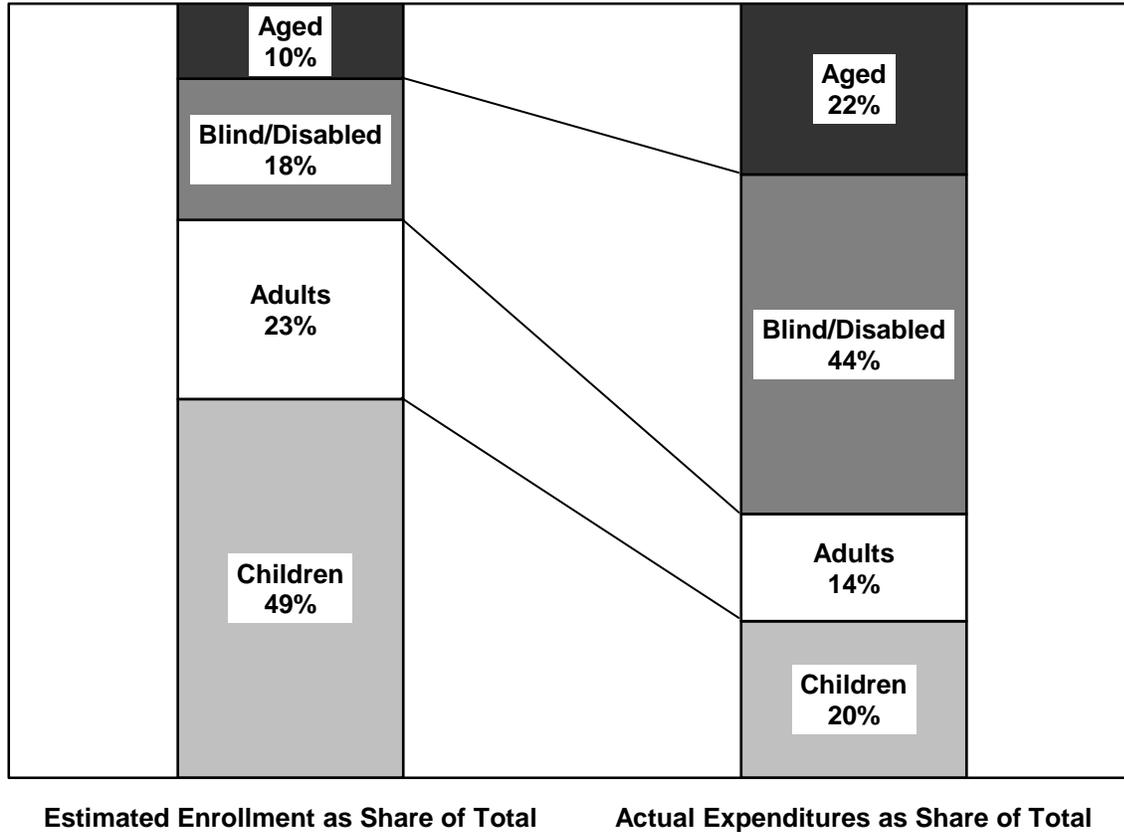
Eligibility Group	Enrollment <sup>2</sup> (in millions)	Expenditures (in billions)	Per Enrollee Spending
Children	24.0	\$68.4	\$2,848
Adults	11.4	46.8	4,123
Blind/Disabled	9.0	148.4	16,563
Aged	4.8	74.6	15,678
Total	49.1	338.1	6,890

<sup>1</sup> Does not include DSH expenditures, territorial enrollees or payments, or adjustments.

<sup>2</sup> Measured in person-year equivalents.

While blind or disabled enrollees and aged enrollees are the smallest enrollment groups in Medicaid, they are projected to account for the majority of spending. As indicated in table 2, for FY 2009, benefit spending was estimated to be \$148.4 billion for blind or disabled enrollees and \$74.6 billion for aged enrollees. Combined, spending on these two groups constituted 66 percent of Medicaid expenditures (excluding DSH, territory expenditures, and adjustments that cannot be allocated by eligibility group). Medicaid spending on non-disabled children represented about 20 percent of total Medicaid benefit expenditures, and spending on non-disabled non-aged adults accounted for about 14 percent.

**Figure 1—Medicaid Enrollment and Expenditures, by Enrollment Group, as Share of Total,<sup>1</sup>  
FY 2009**



<sup>1</sup> Totals and components exclude DSH expenditures, territorial enrollees and expenditures, and adjustments.

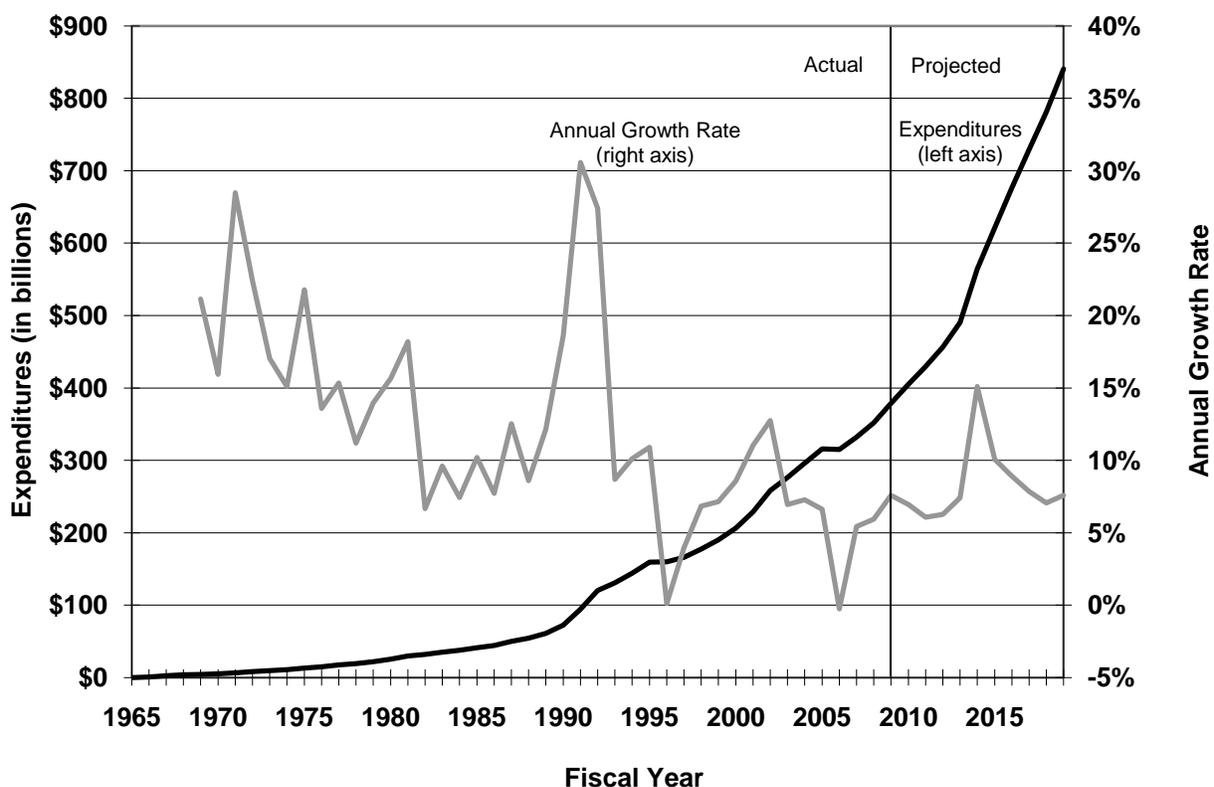
The average per enrollee cost for 2009 was estimated to be \$6,890 (excluding DSH outlays, territorial enrollees and costs, adjustments, and administration costs). These differences between the relative shares of enrollment and expenditures, as shown in figure 1, result from per enrollee costs that vary dramatically among the enrollment groups. Non-disabled children in Medicaid received an estimated \$2,848 in benefits on average in FY 2009, and non-disabled non-aged adults received an estimated average of \$4,123 in benefits (based on PYE enrollment). In both instances, these average costs reflect the relatively favorable health status of the enrollment groups, although a large portion of the non-disabled adults are pregnant women. As would be expected, expenditures are substantially greater for the aged and the disabled; that is, aged beneficiaries received an estimated \$15,678 in benefits on average, and disabled beneficiaries are estimated to have received an average of \$16,563 in benefits. These differences in average costs, while substantial, actually understate the impact of differences in health status for these groups. In particular, Medicaid pays almost all health care costs for enrolled children and non-disabled non-aged adults. However, many aged or disabled beneficiaries are also enrolled in Medicare, which is the primary payer of benefits before Medicaid; thus,

these per enrollee Medicaid estimates are less than the total cost of such beneficiaries' annual health care across all payers.

### B. RECENT MEDICAID TRENDS

Since the start of the Medicaid program, the year-to-year growth of total Medicaid expenditures (Federal and State expenditures combined) has varied substantially, as can be seen in figure 2. The growth in expenditures over time reflects growth in the number of enrollees in the program and growth in the cost per enrollee. From program inception in FY 1966 through FY 2009, Medicaid expenditures grew at an average annual rate of 14.7 percent; over this time period, enrollment increased at an average annual rate of 4.9 percent, and per enrollee costs grew 9.4 percent on average. Enrollment growth is a result of a change in the number of people eligible and electing to participate in the program, but it is also strongly influenced by legislative changes to the eligibility criteria for the program. Similarly, per enrollee costs change over time due to changes in the use of medical services and the prices paid to providers of health care services and supplies, as well as legislative and other policy changes to the benefits offered by Medicaid plans.

**Figure 2—Historical and Projected Medicaid Expenditures and Annual Growth Rates, FY 1966–FY 2019**



From FY 1966 through FY 1993, the average annual rate of Medicaid expenditure growth was 19.5 percent. Enrollment increased 6.0 percent per year on average, and per enrollee costs grew at an average annual rate of 12.7 percent. Since 1993, however, both growth factors have averaged lower annual increases, with enrollment growing at 3.0 percent on average during 1994-2009 and per enrollee spending increasing at 3.8 percent (for a combined total growth rate that averaged 6.9 percent per year). The remainder of this section describes the trends in Medicaid expenditure, enrollment, and per enrollee cost growth from FY 1994 through FY 2009 in more detail.<sup>15</sup>

During FY 1994 through FY 1999, Medicaid experienced a period of relatively slow expenditure growth—an average rate of 6.4 percent per year. The key driver of this slower trend was enrollment; Medicaid enrollment growth slowed dramatically due to the combination of strong economic growth and welfare reform. Enrollment grew at a rate of just 0.4 percent per year over the 6-year period, a rate that was lower than overall U.S. population growth. Enrollment for non-disabled children and non-disabled non-aged adults was actually lower in FY 1999 than it was in FY 1994. The growth in Medicaid per enrollee costs averaged 6.0 percent per year. This was relatively slower than in prior periods (from FY 1987 through FY 1993, per enrollee costs grew 9.8 percent per year on average). This slower growth reflected several important trends, including a deceleration in the growth of DSH expenditures and increased use of managed care plans. During this period, States expanded eligibility and benefits as strong economic growth, combined with slow enrollment, gave the States the ability to fund more generous Medicaid programs. In the absence of these expansions, the annual growth rates in expenditures and enrollment would have been even slower.

During FY 2000 through FY 2005, Medicaid growth was faster than in the previous 6 years, with spending increasing an average of 8.8 percent per year. Medicaid enrollment increased at an average rate of 6.3 percent per year during this period, in significant part due to the 2001 economic recession. Over the same time period, Medicaid per enrollee expenditures grew at an average rate of 2.4 percent per year.

One factor that contributed to slower growth in Medicaid per enrollee spending was States' efforts to control the costs of their Medicaid programs. As enrollment and medical prices grew faster than they had in the past and economic growth was slower, many of the States' efforts were focused on controlling program growth rather than on expanding their Medicaid programs. Absent these changes, per enrollee cost growth and total expenditure growth would likely have been somewhat greater over this period. Partially offsetting this slowdown was a temporary

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<sup>15</sup> For a description of Medicaid expenditure trends from the beginning of the program in 1966 through 2000, see Klemm, "Medicaid Spending: A Brief History," *Health Care Financing Review*, Fall 2000; 22(1): 105-112.

increase in Federal funding for Medicaid. Congress increased the FMAP for parts of FY 2003 and FY 2004 in the Jobs and Growth Tax Relief Reconciliation Act of 2003, thereby temporarily increasing the Federal share of Medicaid expenditures. While changes to the FMAP do not directly change the level of total Medicaid expenditures, these increases probably assisted States in avoiding deeper cuts in their plans.

In FY 2006, aggregate Medicaid spending was 0.3 percent *lower* than in FY 2005, decreasing for the first time in the program's history. Medicaid enrollment grew 1.0 percent in FY 2006, while Medicaid per enrollee expenditures decreased 1.2 percent. The primary driver of this decrease was the shift of most prescription drug coverage for dual-eligible beneficiaries (those eligible for both Medicaid and Medicare) from Medicaid to the new Medicare Part D program, which began in January 2006. All dual-eligible beneficiaries were automatically enrolled in Part D, and Medicare now served as the primary source of their prescription drug coverage.<sup>16</sup> As a result of this shift in coverage, Medicaid drug spending (net of rebates) decreased 34 percent from FY 2005 to FY 2006. All other Medicaid benefit spending grew 3.9 percent—still a relatively low growth rate compared to historical growth trends.

Medicaid expenditures grew 5.4 percent in FY 2007. Medicaid enrollment decreased by 0.7 percent, with reductions in enrollment levels for children and adults, presumably due to the relatively strong economic growth in the preceding several years. Growth in Medicaid per enrollee expenditures was 6.2 percent in FY 2007. Due to the shift of drug coverage for dual-eligible beneficiaries to Medicare Part D, benefit spending was 2.4 percent lower in the first quarter of FY 2007 than in the first quarter of FY 2006. For the rest of FY 2007, Medicaid benefits increased 8.1 percent compared to the same period in 2006.

Medicaid expenditures increased at a rate of 5.9 percent in FY 2008, driven in part by a 2.7-percent increase in Medicaid enrollment. While the recent severe economic recession was determined to have started in December 2007, unemployment rates increased only slightly throughout the first half of the fiscal year. Per enrollee expenditure growth slowed to 3.2 percent in FY 2008.

In FY 2009, Medicaid expenditures increased by 7.6 percent, a level that was significantly affected by the economic recession. Although Medicaid enrollment data are not yet available for 2009, it is believed that Medicaid enrollment growth accelerated sharply last year because enrollment tends to grow faster during periods of higher unemployment rates and slower economic growth. Medicaid PYE enrollment is estimated to have increased by 5.0 percent in FY 2009, with the

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<sup>16</sup> Medicaid still provides some prescription drug coverage for dual-eligible beneficiaries for categories of drugs that Medicare Part D does not cover.

fastest growth expected amongst non-disabled children (5.5 percent) and non-disabled non-aged adults (7.5 percent). In part because these two categories of enrollees are the least costly, Medicaid per enrollee benefit cost growth was estimated to be only 2.4 percent in FY 2009.

Medicaid expenditures in FY 2009 were also influenced by two recent acts of legislation. The first—the Children’s Health Insurance Program Reauthorization Act of 2009 (CHIPRA)—is estimated to have reduced Medicaid expenditures in FY 2009 by about \$0.3 billion. (Without the reauthorization, Medicaid-expansion CHIP plans were projected to run out of funding and then to shift costs to Medicaid). The second—the American Recovery and Reinvestment Act of 2009 (ARRA)—added about \$0.5 billion in Medicaid expenditures in FY 2009 from an increase in DSH allotments. The more notable effect of ARRA, however, was that it provided for a higher temporary FMAP for all States retroactive to the beginning of FY 2009. This change resulted in an average effective Federal share for FY 2009 of about 65 percent (benefits and administration costs); this action increased Federal expenditures by \$34.3 billion (over what the Federal government otherwise would have spent) and decreased State expenditures by the same amount. As a result, Federal Medicaid expenditures increased by 23.0 percent in FY 2009, while State Medicaid expenditures decreased by 12.8 percent.

### *C. MEDICAID EXPENDITURES AND ENROLLMENT PROJECTIONS, FY 2010–FY 2019*

The projections presented in this report focus on Medicaid benefit expenditures and Medicaid enrollment; administration costs are also included and are based on the projections from the President’s FY 2011 Budget Mid-Session Review. Other Title XIX expenditures (such as the Vaccines for Children program) are not included.

Total Medicaid expenditures (Federal and State expenditures combined) for medical assistance payments and administration are projected to grow 6.9 percent in FY 2010 to \$404.9 billion and to reach \$840.4 billion by FY 2019, increasing at an average rate of 8.3 percent per year over the next 10 years.<sup>17</sup> Federal government spending on Medicaid medical assistance payments and administration costs is projected to rise to \$271.4 billion in FY 2010, or about 67 percent of total Medicaid benefit expenditures. Federal spending on Medicaid is projected to reach \$512.9 billion by FY 2019, or about 61 percent of total spending. State Medicaid expenditures are projected to increase to \$133.5 billion in FY 2010 and to reach \$327.6 billion by FY 2019. The Affordable Care Act contains many Medicaid

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<sup>17</sup> This increase reflects average annual growth of 6.7 percent in 2010-2013, a large increase of 15.1 percent in 2014, as the eligibility expansion under the Affordable Care Act takes effect, and average growth of 8.3 percent in 2015-2019, in part due to the continuing implementation of the Affordable Care Act.

provisions, including a substantial increase in Medicaid eligibility beginning in 2014. These impacts are expected to have a significant influence on future Medicaid expenditure trends, and they are presented in more detail in the next section. Historical and projected Medicaid expenditures for medical assistance payments and administration are shown in table 3.

**Table 3—Historical and Projected Medicaid Enrollment and Expenditures for Medical Assistance Payments and Administration, Selected Years**  
(Enrollment in millions of person-year equivalents, expenditures in billions of dollars)

Fiscal Year	Enrollment	Total expenditures	Federal expenditures	State expenditures
Historical data:				
1966	4.0	\$0.4	\$0.2	\$0.2
1970	14.0	4.7	2.6	2.2
1975	20.2	12.6	7.0	5.6
1980	19.6	25.2	14.0	11.2
1985	19.8	41.3	22.8	18.4
1990	22.9	72.2	40.9	31.3
1995	33.4	159.5	90.7	68.8
1996	33.2	159.6	90.7	68.9
1997	33.0	166.0	93.9	72.0
1998	32.5	177.3	100.1	77.2
1999	32.1	190.0	107.5	82.5
2000	34.6	206.2	117.0	89.2
2001	36.9	229.0	129.8	99.2
2002	40.5	258.2	146.6	111.6
2003	43.5	276.2	161.0	115.1
2004	45.2	296.3	175.0	121.3
2005	46.5	315.9	180.4	135.5
2006	46.7	315.1	179.3	135.8
2007	46.4	332.2	189.0	143.2
2008	47.6	351.9	200.2	151.7
2009	50.1 <sup>1</sup>	378.6	246.3	132.3
Projections:				
2010	52.9	404.9	271.4	133.5
2011	54.3	429.5	271.9	157.6
2012	54.8	456.4	260.3	196.1
2013	55.1	490.2	281.3	208.9
2014	67.1	564.3	340.2	224.1
2015	73.0	621.1	378.5	242.6
2016	75.6	676.5	414.6	261.9
2017	76.7	729.6	445.9	283.7
2018	77.4	781.1	477.0	304.1
2019	78.0	840.4	512.9	327.6

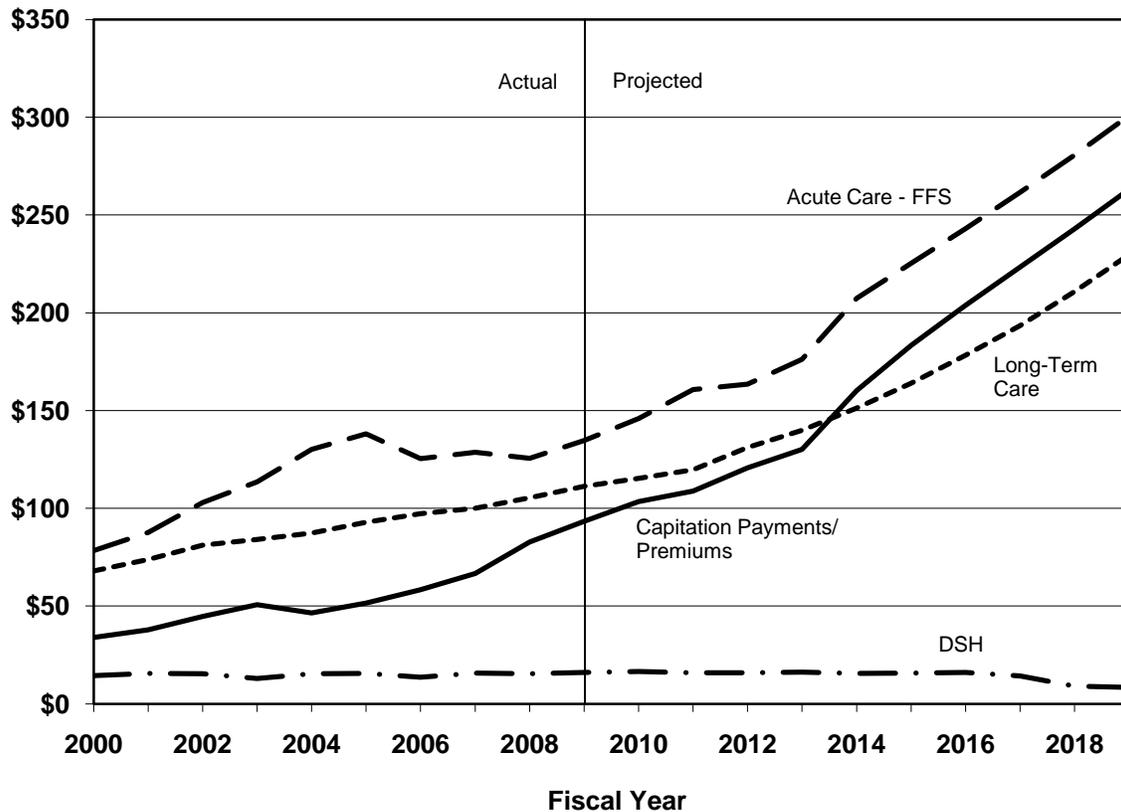
<sup>1</sup> FY 2009 enrollment is projected.

The Federal share of total Medicaid expenditures is projected to vary over the next 10 years due to several acts of legislation. From FY 2005 through FY 2008, the average Federal share was about 57 percent. For FYs 2009, 2010, and 2011, the ARRA provided for temporary FMAP increases, in part based on changes in each State's unemployment rate. This act led to a higher Federal share in FY 2009 of about 65 percent and is projected to result in a slightly higher share in FY 2010 of about 67 percent. As a result of an extension of the temporary FMAP increase through June 30, 2011, as provided for in the Education, Jobs, and Medicaid Assistance Act of 2010, the Federal share for FY 2011 is projected to be about 63 percent. The average Federal share is expected to return to about 57 percent in FYs 2012 and 2013 before increasing again in FY 2014—with the latter increase due mainly to the higher FMAP for newly eligible Medicaid beneficiaries as required in the Affordable Care Act. The projected average Federal share increases to about 60 percent in FY 2014 and to about 61 percent for FY 2015 through FY 2019.

Total Medicaid expenditures (Federal and State expenditures combined) for medical assistance payments are projected to grow 7.1 percent in FY 2010 to \$385.7 billion and to reach \$809.9 billion by FY 2019, increasing at an average rate of 8.4 percent per year over the next 10 years. Federal government spending on Medicaid medical assistance payments is projected to rise to \$261.0 billion in FY 2010 and to reach \$496.2 billion by FY 2019.

The fastest-growing service categories in Medicaid over the next 10 years are projected to be capitation payments and acute care fee-for-service, as shown in figure 3. The expansion of Medicaid eligibility in the Affordable Care Act beginning in 2014 is the primary factor underlying the growth in Medicaid spending in these categories, as acute care and capitation payments tend to be the predominant categories of expenditures for children and non-aged adults. Medicaid capitation payments are projected to increase at an average annual rate of 10.9 percent per year for FY 2010 through FY 2019. This projected trend reflects the assumption that many of the newly eligible Medicaid enrollees in 2014 will be enrolled in Medicaid managed care plans, as has been true of currently enrolled children and adults. Capitation payments are projected to remain as the fastest-growing category of services in Medicaid over the next 10 years. During this period, acute care fee-for-services expenditures by Medicaid are projected to grow at an average annual rate of 8.4 percent per year.

**Figure 3—Past and Projected Medicaid Expenditures for Medical Assistance Payments, by Type of Payment, FY 2000–FY 2019 (In billions)**

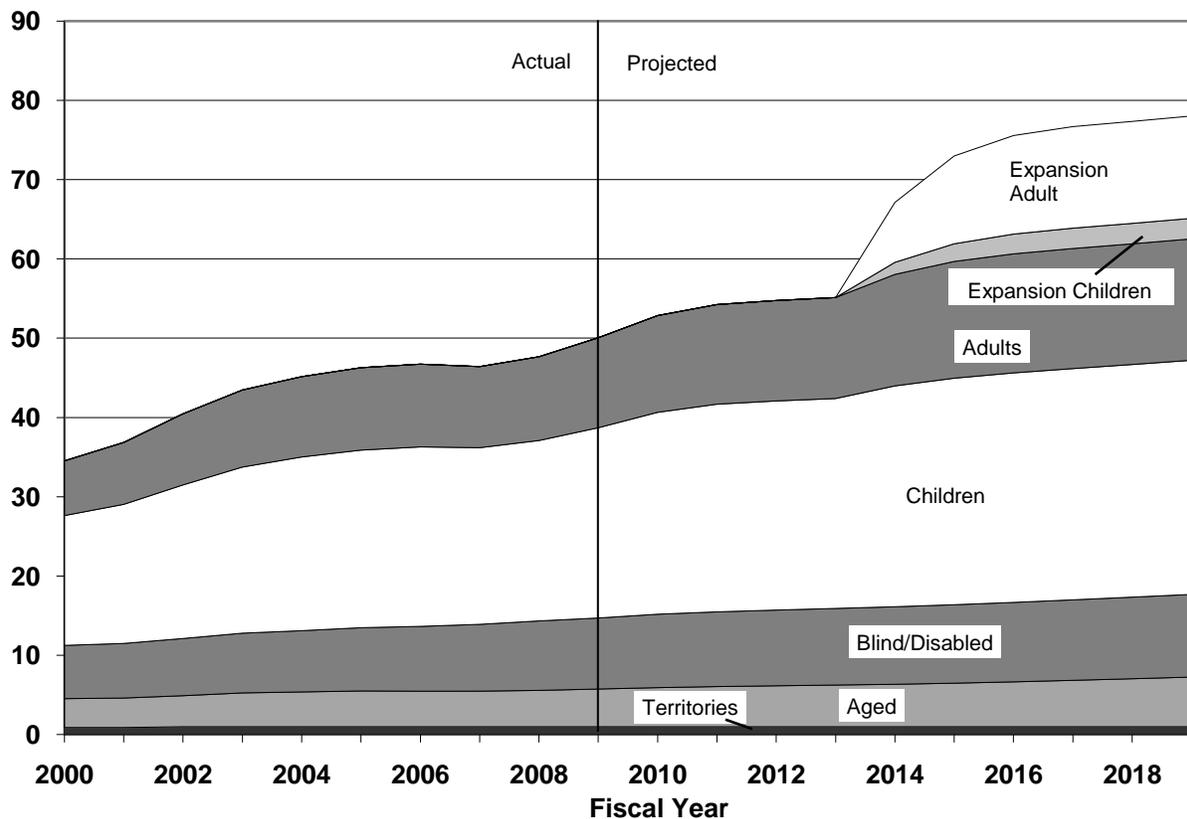


Medicaid spending on long-term care is projected to increase by 7.5 percent on average for FY 2010 through FY 2019. While this growth rate would be less than the projected rates of growth for capitation payments and acute care fee-for-service, it would still be significantly faster than long-term care spending growth in the prior 10 years. The aging of the population is one contributing factor to increases in spending for long-term care: as the number of people age 65 or older increases—and especially for those over age 85—there is a corresponding increase in the amount of long-term care spending, since elderly beneficiaries tend to use more long-term care than younger beneficiaries. As the oldest members of the baby boom generation begin to reach age 65, both the number of aged enrollees in Medicaid and eventually the rate of long-term care spending growth are projected to increase. While the baby boom generation is not estimated to have a major effect on long-term care spending during FY 2010 through FY 2019, the increase in the number of people over age 85 in the next 10 years is expected to do so. Additionally, while few of the new enrollees in Medicaid due to the Affordable Care Act are anticipated to have significant or immediate long-term care needs, several provisions in the Affordable Care Act are expected to expand access and thus spending for long-term care services.

Medicaid DSH spending is typically expected to grow at the same rate as the Medicaid Federal DSH allotments, which is based on the consumer price index (CPI); however, the Affordable Care Act prescribes reductions in Medicaid DSH beginning in FY 2014, with the largest adjustments starting in FY 2017. Thus, the average growth rate for DSH spending is projected to be –6.3 percent over the next 10 years.

Administration costs are projected to be about \$19.2 billion in FY 2010 and to reach about \$30.5 billion by FY 2019; such spending is projected to grow at an average annual rate of 5.2 percent.

**Figure 4—Past and Projected Numbers of Medicaid Enrollees, by Category, FY 2000–FY 2019**  
(In millions of person-year equivalents)



Historical and projected Medicaid enrollments are shown in figure 4 by category. Total enrollment is projected to increase from 50.1 million PYE in FY 2009 (including 1.0 million enrollees in the U.S. Territories) to 52.9 million in FY 2010 and to 78.0 million PYE by FY 2019, reflecting the following factors:

- An increase of 5.6 percent is estimated for 2010, based on the current slow recovery from the recent economic recession and the relatively high rate of unemployment experienced this year. This increase follows a 5.0-percent

growth rate in 2009 and is consistent with the pattern experienced during and immediately following past recessions. Job losses associated with recessions result in losses of employer-sponsored health insurance and lower family income, with an associated increase in the number of people eligible for Medicaid. Other workers may no longer be able to afford individual or employer insurance coverage and seek Medicaid coverage.

- During 2011-2013, enrollment growth is expected to slow substantially as the economy recovers from the recent recession and unemployment declines. The estimated average annual growth rate during this period is only 1.4 percent.
- In 2014, when the eligibility expansion under the Affordable Care Act takes effect, total enrollment is estimated to increase by 12.0 million or 21.8 percent; 11.6 million of these new beneficiaries are anticipated to enroll as a result of the Affordable Care Act. As noted previously, eligibility will be expanded to all persons under age 65 in families with income below 138 percent of the Federal Poverty Level (FPL). (The Affordable Care Act specifies an income threshold of 133 percent of FPL, but it also allows a 5-percentage-point income disregard, which sets the effective income limit to 138 percent of FPL.)
- The increase in Medicaid enrollees attributable to the eligibility expansion is assumed to occur during 2014-2016, with most of the increase taking place in the first year. The additional growth in enrollment in 2015-2016 is estimated to average 6.1 percent per year.
- Finally, after the coverage expansion is fully realized, the total number of Medicaid enrollees is projected to increase during 2017-2019 at about 1.1 percent per year, reflecting normal population growth, stable economic assumptions, and an increase in the number of aged enrollees as the baby boom generation continues to reach age 65. (Excluding the newly eligible enrollment groups, the growth of aged adults is expected to be faster than the other categories of enrollment; the average annual increase for aged adults is estimated to be 2.8 percent over the next 10 years.)

Figure 5 displays historical and projected average Medicaid benefit expenditures per enrollee for all enrollees collectively and by eligibility group. The relative differences shown previously in table 2 for the individual enrollment categories are expected to continue, with average costs for aged and disabled enrollees projected to remain substantially higher than for children and adults.

- Aged Medicaid enrollees have traditionally had the highest average benefit cost, primarily as a result of nursing facility expenses and, prior to 2006, prescription drug costs. During FY 2000-2008, however, nursing home costs per aged enrollee increased relatively slowly, and most costs for prescription

drugs were shifted from Medicaid to the new Medicare Part D program starting January 1, 2006. As a result, the average benefit cost per aged Medicaid enrollee grew very slowly during this period (1.6 percent) and declined to approximately the same level as blind and disabled enrollees in 2006-2008. The average annual increase in all other benefit costs per aged enrollee (that is, excluding nursing home and prescription drug costs) was substantially faster during 2000-2008.

Average benefits for aged enrollees are projected to continue to increase at a below-average pace (4.1 percent) for the next 10 years, in large part because of expected continuing slow growth in the use of nursing home care. The projected growth rate is significantly faster than that experienced during 2000-2008, since the introduction of Medicare Part D had a strong impact on average growth over this historical period but will not further affect future growth rates. In addition, provisions in the Deficit Reduction Act of 2005 tightened the eligibility criteria for nursing facility benefits, while the Affordable Care Act broadens availability of long-term care services and supports.

- Per enrollee costs for the blind and disabled have been increasing at a faster pace than for aged beneficiaries (3.8 percent on average during 2000-2008), in part due to expanding use of home and community-based services. Slow growth in nursing home costs has had a much smaller impact on average costs for this category of enrollees, since the proportion of blind and disabled enrollees with nursing home placement is substantially lower than for aged enrollees. Per enrollee costs for the blind and disabled were also reduced significantly by the shift of prescription drug coverage from Medicaid to Medicare.

Per enrollee benefits are projected to increase in 2010-2019 at a similar rate to the 2000-2008 experience (after adjusting for the removal of most prescription drugs). Growth in benefits for the blind and disabled is projected to average 6.0 percent (the fastest among the enrollment categories), reflecting a lower proportion of costs spent on nursing home care than for aged enrollees and a continuing rapid expansion in the use of home and community-based services.<sup>18</sup>

- Per enrollee Medicaid benefits for non-disabled non-aged adults increased by about 3.5 percent annually during 2000-2008, reflecting growth in the costs of prescription drugs, clinics, laboratory tests, and capitation payments, offset

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<sup>18</sup> Although the availability of home and community-based services can help prevent or postpone nursing home placement—and thus substantially reduce Medicaid costs for beneficiaries—this impact appears to be outweighed by the increasing availability and use of home and community-based services by blind and disabled enrollees who may not have used institutional long-term care in the absence of these services.

by relatively flat trends in spending for inpatient and outpatient hospital care and for physician services. These patterns by type of service are strongly affected by the increasing proportion of the adult Medicaid population enrolled in managed care plans.<sup>19</sup>

Growth in average benefits for non-expansion adults is projected to increase during 2010-2019 at a somewhat faster pace, reflecting faster growth in fee-for-service acute care expenditures and a slowdown in moving beneficiaries to managed care plans. As the proportion of beneficiaries in managed care plans has increased, it is assumed in these projections that future increases would be smaller and that ultimately fee-for-service and managed care plan spending per enrollee would grow at similar rates.

As shown in figure 5, the estimated average costs for adults who become enrolled as a result of the expanded eligibility criteria in the Affordable Care Act are significantly lower than those for existing beneficiaries. In part this difference arises from the fact that adults in poor health often suffer a loss in income, increasing their likelihood of qualifying for Medicaid under the pre-Affordable Care Act criteria.

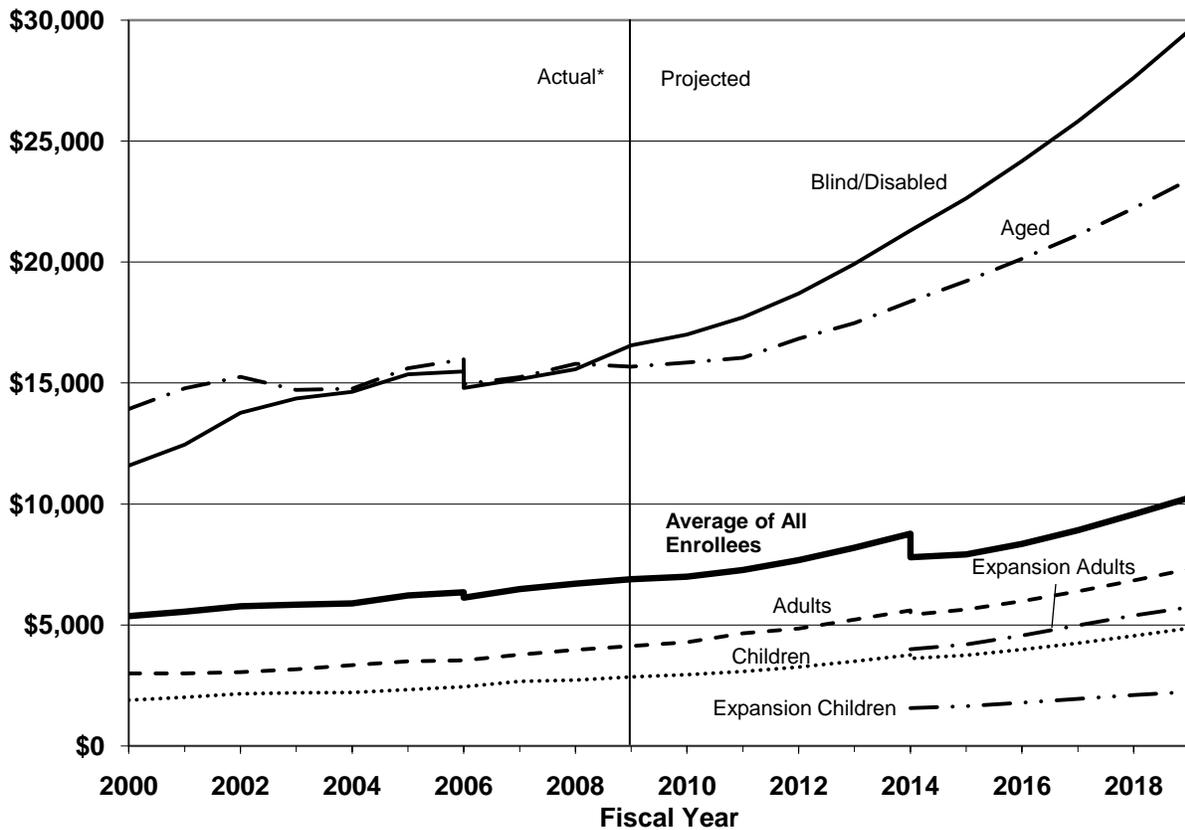
- The past and projected patterns of per enrollee cost growth for children are generally similar to those described above for adults. During 2000-2008, per enrollee Medicaid benefits for non-disabled children increased at a 4.7-percent annual rate. Future growth in per enrollee spending is projected to be somewhat faster, averaging about 5.5 percent per year.

Over the next 10 years, the projected average annual growth rates of per enrollee benefit expenditures range from 6.0 percent for blind or disabled enrollees to 4.1 percent for aged enrollees. As suggested by the discussion above, variations in per enrollee cost growth rates between enrollment categories are mainly due to the different mix of services assumed for each group of enrollees. In particular, the growth rate for aged enrollees is strongly affected by the expected continuing slow increase in the use of nursing home care, which dominates this category, while costs for other enrollees reflect a greater proportion of acute-care services and capitation payments, which are expected to increase at more normal rates.

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<sup>19</sup> Medicare expenditures for nursing home care, on behalf of children and non-disabled non-aged adults, are very low, and such enrollees were unaffected by the implementation of Medicare Part D in 2006.

**Figure 5—Past and Projected Medicaid Expenditures on Medical Assistance Payments Per Enrollee, by Enrollment Category, FY 2000–FY 2019**



\* Per enrollee amounts for 2009 are based on actual expenditures and estimated enrollment.

Across all enrollment categories, by FY 2019 the average beneficiary is projected to receive about \$10,300 in health care benefits through Medicaid. For all categories combined, per enrollee spending on medical assistance payments during 2010 through 2019 is projected to increase at an average annual rate of 4.1 percent per year—which, somewhat counter-intuitively, is as slow as or slower than the rate for any of the separate eligibility categories. The apparent anomaly is explained by expected changes in the proportions of total enrollees in each category.<sup>20</sup> In particular, most of the estimated 20 million new enrollees becoming eligible in 2014 and later under the Affordable Care Act will be non-disabled non-aged adults and children, who have a much lower average cost than aged or disabled enrollees.

<sup>20</sup> This effect—that differences in enrollment growth rates between enrollment groups have influenced overall per enrollee spending trends—has had major impacts on historical per enrollee growth trends. These impacts have been most notable during economic recessions: as more children and non-disabled non-aged adults enroll in Medicaid during a typical recession—since they tend to be the Medicaid beneficiary groups most sensitive to changes in the economy—the overall per enrollee expenditure growth rate tends to be relatively lower, reflecting the influx of less costly enrollees. Similarly, in periods when enrollment growth of children and adults has been slower than that of aged and blind or disabled beneficiaries, the overall per enrollee expenditure growth rate has tended to be relatively higher.

Moreover, as noted above, the expansion populations are expected to have a lower average cost than existing beneficiaries in each category. Without the effects of the new beneficiaries, average Medicaid expenditures per enrollee would be projected to grow 5.9 percent per year on average over the next 10 years. (As indicated in figure 5, the average per enrollee cost across all beneficiaries is projected to decline 4.8 percent in 2014 with the addition of the new, comparatively less expensive enrollees and then to increase only 1.4 percent in 2015 as additional people become enrolled under the broader eligibility criteria.)

The downward impact on average cost growth described above will be partially offset by a change in the relative number of aged enrollees in the program. With accelerating growth in the number of Medicaid enrollees age 65 or older, coinciding with the aging of the baby boom generation, there will be a greater share of aged enrollees in the program in the near future. Between 2010 and 2019, the number of such beneficiaries is expected to increase by 27 percent, or 1.3 million. Although this demographic shift is significant, it is still small compared to the expansion of coverage under the Affordable Care Act.

#### *D. AFFORDABLE CARE ACT AND OTHER LEGISLATIVE IMPACTS*

The Affordable Care Act will have a substantial effect on Medicaid trends over the next 10 years and beyond. In terms of the magnitude of changes to the program's projected expenditures and enrollment, it is likely that the Affordable Care Act will be the largest legislative change to Medicaid since the program's inception. This section will describe the estimated impacts on total Medicaid expenditures, Federal and State Medicaid expenditures, and Medicaid enrollment.<sup>21</sup>

From FY 2010 through FY 2019, the Affordable Care Act is expected to add a total of \$455 billion to aggregate Medicaid expenditures—an increase in Medicaid expenditures of about 8 percent over projections of Medicaid spending without the impact of the Affordable Care Act. Federal expenditures make up the great majority of this projected increase; Federal Medicaid expenditures are projected to be \$434 billion higher (or about 13 percent) over this time period, while State expenditures are projected to expand only \$21 billion (or about 1 percent). The Federal government is projected to pay for about 95 percent of this increase.

The most significant provision, measured by its impact on expenditures and enrollment, is the expansion of Medicaid eligibility to all persons under age 65 living in families with incomes below 138 percent of the FPL beginning in 2014. This expansion is projected to add 11.6 million PYE to enrollment in FY 2014

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<sup>21</sup> More information on the Medicaid and other financial and coverage impacts under the Affordable Care Act is available in the April 22, 2010 memorandum by Richard S. Foster. A forthcoming memorandum by the Office of the Actuary will describe the assumptions and methodology underlying the Medicaid effects in more detail.

during the 9 months that the new eligibility rules will be in effect for that year and is expected to add almost 20 million PYE by FY 2019. Of the new enrollees, about 76 percent are projected to be adults, and the remaining 24 percent children.<sup>22</sup> Furthermore, 78 percent are projected to be newly eligible (that is, eligible only under the new rules beginning in 2014), while 22 percent are projected to be eligible under the current Medicaid rules. (This latter group is expected to enroll in Medicaid as a result of the new assistance that will be available through the State insurance exchanges and the publicity associated with the expansion of eligibility.)

Of the total increase in Medicaid expenditures under the Affordable Care Act, the expansion, including the enrollment of newly eligible individuals and increased participation of currently eligible individuals, is projected to contribute \$428 billion from FY 2014 through FY 2019. Of this increase, the majority is projected to be paid by the Federal government—\$389 billion, or about 91 percent—and the States are projected to spend an additional \$39 billion. The Federal government participation is relatively larger than for current Medicaid expenditures because the Affordable Care Act specifies a much higher Federal matching rate for newly eligible beneficiaries, ranging from 100 percent in FYs 2014, 2015, and 2016 to 90 percent by FY 2020 and beyond.

The effective participation rate of persons who would have been uninsured for a full year, but are newly eligible for Medicaid as a result of the Affordable Care Act, is assumed to be 97 percent. This assumed participation rate is significantly higher than actual Medicaid participation rates to date and is based on the anticipated impacts of sections of the Affordable Care Act intended to make the process of enrolling easier. In particular, the legislation establishes State or federally operated health insurance exchanges that, among other responsibilities, will facilitate the determination of individuals' and families' eligibility for Federal financial assistance for health insurance, either through Medicaid or through the Federal premium and cost-sharing subsidies for private health insurance plans. The exchanges are assumed to perform this role effectively and, for those found to qualify for Medicaid, to assist the application and enrollment process. In this role, the exchanges would also serve as a valuable new resource for health providers who seek assistance in enrolling eligible persons in Medicaid. In addition, we anticipate that the more widespread availability of financial assistance under the Affordable Care Act (for individuals and families with incomes up to 400 percent of FPL) will reduce any stigma associated with receipt of such assistance through Medicaid. Finally, we expect the high FMAP percentages specified by the Affordable Care Act

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<sup>22</sup> In addition to the higher level of allowable income, the Affordable Care Act expands eligibility to people under age 65 who have no other qualifying factors that would have made them eligible for Medicaid under prior law, such as being under age 18, disabled, pregnant, or parents of eligible children. As noted previously, the category of non-disabled non-aged adults is expected to have the greatest increase in enrollment in Medicaid under the Affordable Care Act, since the new law does not require individuals to be parents of eligible children.

to help reduce any hesitation that might exist on the part of States regarding the expansion of coverage.

Other factors underlying the assumed Medicaid participation rates for newly eligible individuals include (i) the exclusion of people ineligible for Medicaid due to citizenship status (who are not counted as newly eligible persons); (ii) different participation assumptions for eligible individuals with high versus low health care costs; (iii) lower assumed participation for persons who would have had part-year coverage from sources other than Medicaid; and (iv) separate, lower participation assumptions for people who would have had other forms of insurance, including individually purchased insurance and employer-sponsored coverage. Including these other factors, the estimated total number of new Medicaid enrollees resulting from the Affordable Care Act represents about 92 percent of all eligible individuals and families with incomes below 138 percent of FPL (or 83 percent of all individuals and families, including non-eligible immigrants, with incomes below 138 percent of FPL).

As indicated above, we have assumed that the Medicaid expansion will be implemented fully and effectively, consistent with the intent of the Affordable Care Act. Achieving these high rates of participation may be challenging, however, and will require significant improvements in the application and enrollment process, vigorous public outreach, and increased public awareness of the importance of health insurance coverage and the Federal subsidies available in support of such coverage. The provisions of the Affordable Care Act are designed to produce such outcomes, and we believe that they will be effective. If actual participation in Medicaid among the newly eligible population is lower than our assumption, then Medicaid costs in 2014 and later would be somewhat lower than projected in this report (and vice-versa). As noted elsewhere, numerous other factors will also affect Medicaid costs in the future, and the level of such costs remains very uncertain.

The per enrollee costs of new beneficiaries who were formerly uninsured and are without other forms of insurance are estimated to be about 85 percent of those for current beneficiaries enrolled for the entire year by eligibility group; that is, newly enrolled children are expected to have per enrollee benefit costs on average equal to about 85 percent of the average costs of currently enrolled non-disabled children, as are newly enrolled non-disabled non-aged adults relative to currently enrolled adults. This estimate includes the impact of increased utilization of health care services after individuals gain health insurance and the impact of the lower prices that Medicaid generally pays for health care services and products.

In addition to the Medicaid eligibility expansion, there are numerous other provisions of the Affordable Care Act that affect Medicaid. The net effects of these provisions on Medicaid medical benefits (excluding the effects of the eligibility

expansion) are projected to increase total expenditures over the next 10 years by about \$1 billion. State Medicaid expenditures are projected to be lower by \$30 billion, while Federal Medicaid expenditures are projected to increase by about \$31 billion. This projected difference between the Federal and State impacts is attributable mainly to several provisions that rely almost entirely on Federal funding or make further changes to the Federal matching rate. Despite these estimates that show a relatively small net impact on total Medicaid expenditures, several of the provisions have significant impacts when considered separately.

The Affordable Care Act is expected to lead to increases in Medicaid administration costs, mainly related to higher Medicaid caseloads as a result of the eligibility expansion; administration costs are projected to increase by about \$26 billion in total during FY 2010 through FY 2019, of which about \$14 billion is expected to be paid by the Federal government and about \$12 billion by the States.

The additional costs related to the Affordable Care Act increase the estimated average Medicaid expenditure growth rate for FY 2010 through FY 2019, with the greatest changes starting in 2014 with the eligibility expansion:

- During FY 2010 through FY 2013, Medicaid expenditure growth is projected to average 6.7 percent per year; excluding the impact of the Affordable Care Act, growth would be projected to be slightly lower at a rate of 6.4 percent per year. The differential results from the net impact of higher expenditures associated with long-term care demonstrations, increased access to long-term care, and temporarily increased payments to primary care physicians, partially offset by larger prescription drug rebates.
- Medicaid expenditures are projected to increase 15.1 percent in FY 2014 as a result of the eligibility expansion. Growth in expenditures without the Affordable Care Act would be projected at 6.8 percent. This is the largest 1-year difference between projected growth rates with and without the impact of the Affordable Care Act during FY 2010 through FY 2019.
- In the last 5 years of the period, Medicaid expenditures are projected to grow 8.3 percent per year on average, somewhat faster than growth would be without the impact of the Affordable Care Act (7.5 percent); this difference is mostly due to the additional new Medicaid enrollees in 2015 and 2016, as people continue to react to the new eligibility criteria.
- During FY 2010 through FY 2019, Medicaid expenditure growth is projected to be 8.3 percent per year on average, 1.3 percentage points higher than it would be if the Affordable Care Act impacts were excluded (7.0 percent average growth), reflecting all of the factors listed above.

Several other acts of legislation in the past year also affected Medicaid. The Department of Defense Appropriations Act of 2010, the Temporary Extension Act of 2010, and the Continuing Extension Act of 2010 contained provisions that delayed implementation of the annual CPI-based updates of the FPL through May 2010; these updates would have resulted in a decrease in the FPL and lowered Medicaid enrollment and expenditures, but the impact has been estimated to be relatively small.<sup>23</sup> The Preservation of Access to Care for Medicare Beneficiaries and Pension Relief Act of 2010 made several changes to Medicare, which in turn affected Medicaid expenditures for Medicare premiums; the result is that projected Medicaid expenditures are about \$3 billion lower for FY 2010 through FY 2019 after passage of this legislation than they were before. Lastly, the Education, Jobs, and Medicaid Assistance Act extended the temporary FMAP increase in ARRA through June 30, 2011; this extension added an estimated \$14.6 billion to projected Federal expenditures in FY 2011 and reduced State expenditures by the same amount.

### *E. MEDICAID IN CONTEXT*

From the estimates and analysis of health spending in the U.S. provided by the NHE accounts, additional insight can be obtained into the role of Medicaid within the total U.S. health care system.<sup>24</sup> Based on the 2008 NHE accounts (the latest available historical year), Medicaid spending for that year represented 14.7 percent of total NHE. Private health insurance was the largest source of spending on health care in 2008, accounting for 33.5 percent of total NHE, while Medicare paid for 20.1 percent.<sup>25</sup>

The historical NHE also presents health care spending by the original source of financing (or sponsor). In CY 2008, Medicaid represented 39 percent of Federal government expenditures on health services and supplies and 39 percent of such spending by State and local governments. For both the Federal and State governments, Medicaid is the largest source of general revenue-based spending on health services. Notably, Medicaid is a larger source of such Federal expenditures than Medicare. A sizeable portion of Medicare spending is funded by income from dedicated revenue sources—which include Medicare Part A payroll taxes and Part B and Part D beneficiary premiums—with the balance from Federal general revenues.

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<sup>23</sup> The FPL update for June through December of 2010 was calculated to be 0.042 percent.

<sup>24</sup> The historical Medicaid spending data and projections presented in this report differ slightly from the NHE estimates and projections in several ways. Some of the differences are as follows: (i) the data and projections featured in this report are shown on a fiscal year basis, whereas the NHE amounts are on a calendar year basis; (ii) the NHE accounts make several adjustments to Medicaid, such as classifying Medicaid spending for Medicare premiums as Medicare spending and classifying spending for the Children's Health Insurance Program (CHIP) through Medicaid expansion programs as Medicaid; and (iii) the NHE accounts use somewhat different definitions of services than do the data presented in this report.

<sup>25</sup> Hartman, *et al.*, "Health Spending Growth at a Historic Low in 2008."

In contrast, Medicaid does not have any dedicated Federal revenue source; all Federal spending on Medicaid comes from general revenue.<sup>26</sup>

Medicaid is also larger than Medicare in terms of the number of people covered. In FY 2009, Medicaid was estimated to have covered 50.1 million PYE, and 62.9 million people were enrolled in the program at some point during the year. In comparison, Medicare covered an average of 46.3 million people during CY 2009. Within these totals, there are substantial differences between the programs in the number and nature of people covered. For example, Medicare automatically covers nearly all people over age 65 (38.7 million beneficiaries in 2009), but only those aged individuals with very low incomes—and who apply for the coverage—become Medicaid enrollees (estimated at 4.8 million PYE). Disabled enrollment was more similar between the two programs; Medicaid covered an estimated PYE average of 9.0 million blind or disabled persons in 2009, while Medicare covered 7.6 million disabled beneficiaries. Although the definition of disability is essentially the same for the two programs, the other eligibility criteria are entirely different, and the similarity of the enrollment numbers is somewhat coincidental.<sup>27</sup> Finally, as noted earlier, a majority of Medicaid enrollees are either children or certain adults in families with low incomes. Medicare does not have comparable categories of beneficiaries. Dual-eligible individuals accounted for 8.5 million enrollees in each program in 2009.<sup>28</sup>

Among the different types of health care services, Medicaid plays the largest role in the funding of long-term care. According to the 2008 NHE, Medicaid is estimated to have paid for 34.7 percent of all freestanding home health care and 40.6 percent of all freestanding nursing home care in the U.S.<sup>29</sup> Medicaid has a major responsibility for providing long-term care because the program covers some aged and many disabled persons, who tend to be the most frequent and most costly users of such care, and because private health insurance and Medicare often furnish only limited coverage for these benefits, particularly for nursing homes. Many people who pay for nursing home care privately become impoverished due to the expense; as a result, these people eventually become eligible for Medicaid. Figure 6 shows the percentage of total spending for the major health care services that Medicaid covers.

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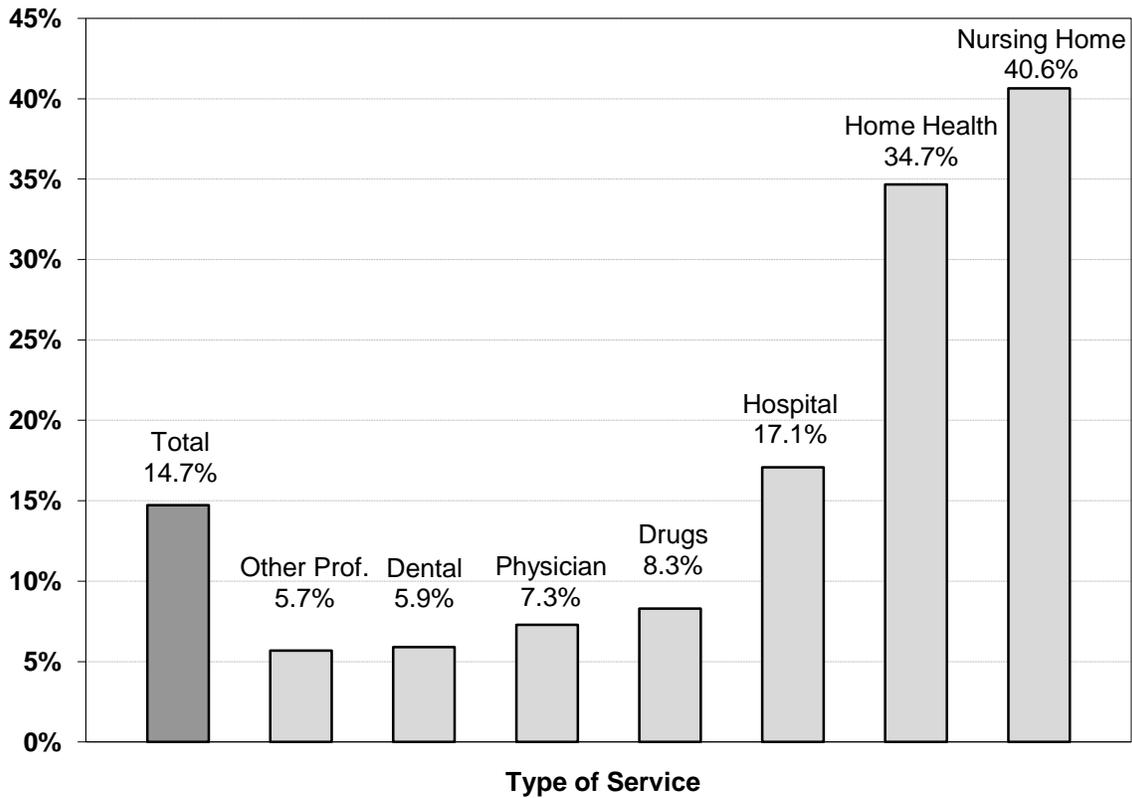
<sup>26</sup> *Ibid.* There are some State dedicated revenues for Medicaid. For more detail on this analysis of health care spending by sponsor, see the methodology paper at <http://www.cms.gov/NationalHealthExpendData/downloads/dsm-08.pdf>.

<sup>27</sup> As with other enrollment categories, Medicaid eligibility for disabled individuals is based on income and asset criteria. Medicare eligibility generally depends on an individual's sufficient participation in the paid work force prior to disability. Despite these different requirements, a significant number of disabled people qualify for coverage under both Medicaid and Medicare.

<sup>28</sup> *2009 Medicaid Managed Care Enrollment Report*. Dual-eligible beneficiaries are included in the aged or disabled enrollment groups based on their eligibility for Medicaid.

<sup>29</sup> Hartman, *et al.*, "Health Spending Growth at a Historic Low in 2008."

**Figure 6—Medicaid Expenditures as Percentage of Total U.S. Health Expenditures, by Service Category, CY 2008<sup>1</sup>**



<sup>1</sup> Hartman, *et al.*, “Health Spending at a Historic Low in 2008.”

It is also important to note that Medicaid represents a significant share of the Federal and State budgets. In FY 2009, out of a total of \$3,518 billion spent by the Federal government, \$251 billion (or 7 percent) can be attributed to Medicaid.<sup>30</sup>

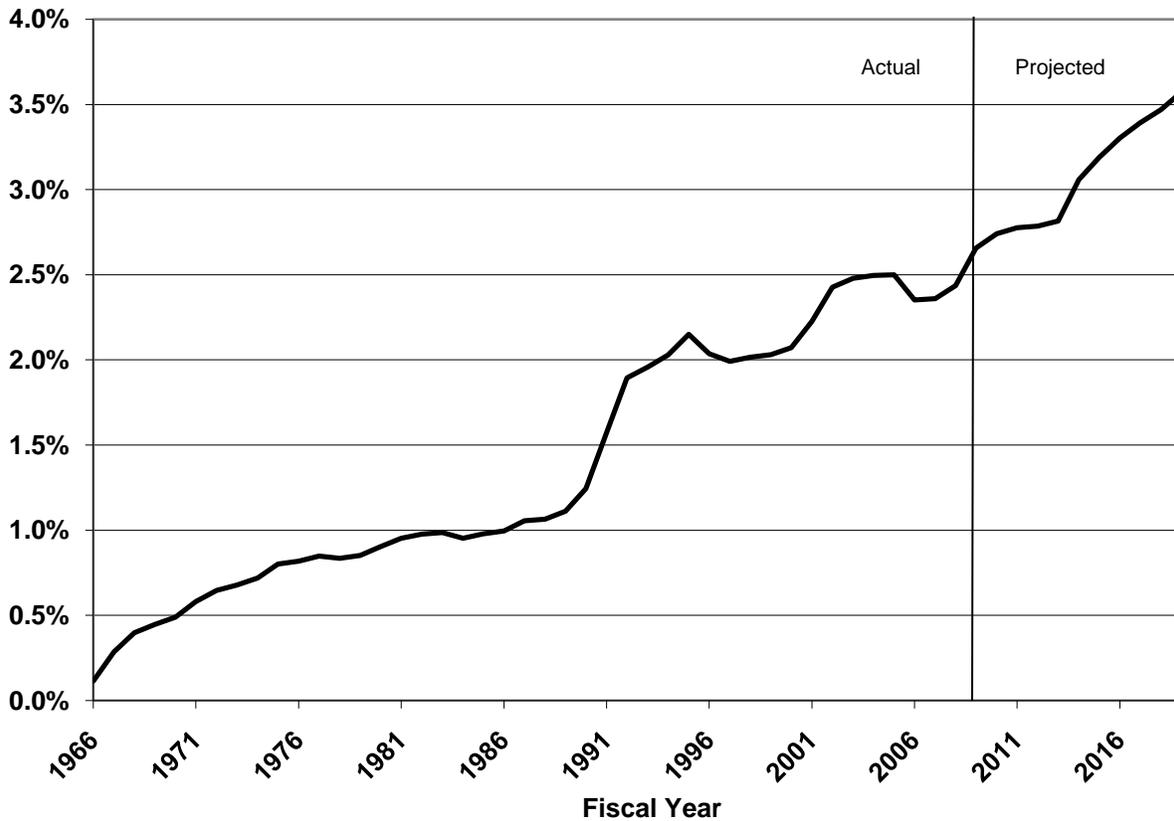
According to the National Association of State Budget Officers (NASBO), in State fiscal year 2009, Medicaid represented an estimated 21.0 percent of all State government spending.<sup>31</sup> This amount, however, includes all Federal contributions to State Medicaid spending, as well as spending from State general revenue funds and other State funds (which for Medicaid consists of “provider taxes, fees, donations, assessments, and local funds”). According to NASBO, Medicaid was the largest program for State spending from 2003 through 2006, until it was surpassed by elementary and secondary education in 2007. In 2009, Medicaid is estimated to remain slightly smaller than elementary and secondary education. When only State general revenues are considered, however, Medicaid spending constitutes an estimated 16.2 percent of expenditures in 2009, placing it well behind education.

<sup>30</sup> More information on the Federal budget is available in *Analytical Perspectives, Budget of the United States Government, Fiscal Year 2011*.

<sup>31</sup> *FY 2008 State Expenditure Report*, National Association of State Budget Officers, Fall 2009.

As shown in figure 7, Medicaid represented about 2.7 percent of GDP in FY 2009, exceeding the previous highpoint of 2.5 percent in 2005. Medicaid declined in share of GDP during FY 2006 as Medicaid expenditures decreased 0.3 percent, a result of the shift of prescription drug coverage for dual-eligible beneficiaries to Medicare. This decrease was only the second substantial reduction in Medicaid’s share of GDP. As a result of the recent economic recession, which increased enrollment in Medicaid while also suppressing GDP growth, the program’s share of GDP increased somewhat in 2008 and significantly in 2009.

**Figure 7—Past and Projected Medicaid Expenditures as Share of GDP, FY 1966–FY 2019**



Medicaid is projected to increase somewhat faster than GDP during FY 2010, reflecting the continuing effects of the recent recession. During FY 2011 through FY 2013, as the economy is assumed to recover, Medicaid expenditures as a percentage of GDP are projected to be nearly flat. Starting in FY 2014 through FY 2016, of course, as the new Affordable Care Act provisions expand eligibility to many people, Medicaid costs will increase significantly relative to GDP. As seen in figure 7, the program’s expenditures are projected to grow to 3.6 percent of GDP over the next 10 years. Medicaid expenditures are projected to increase about 3.2 percentage points faster than GDP on average per year through FY 2019, with much of this growth attributable to the eligibility expansion.

## VI. CONCLUSION

Medicaid expenditures are projected to reach \$404.9 billion in 2010 and \$840.4 billion by 2019. Medicaid is expected to grow about 8.3 percent per year on average—which would be much faster than the projection of average annual GDP growth of 5.1 percent. If these Medicaid trends continue as projected under current law—even after accounting for the increase associated with covering newly eligible beneficiaries in 2014—a steadily increasing share of both Federal and State budgets would be devoted to Medicaid absent other changes to the program, other budget expenditures, or budget revenues.

The expansion of Medicaid eligibility under the Affordable Care Act will broaden Medicaid's role as part of the U.S. health care system. This growing importance, however, also increases the likelihood that health care-related issues and concerns will necessarily involve Medicaid to a greater extent than in the past.

As the program's costs are projected to increase over the next 10 years, similar to the expenditure projections for private health insurance and Medicare, any efforts to slow the cost of health care spending will likely have some direct or indirect impact on Medicaid. Whether such efforts are focused on the payment or management of health care specific to certain programs, or on the delivery or practice of health care generally, it will be important to consider the potential effects across all health-care payers, including Medicaid. Particular attention may need to be given to the ways in which Medicaid is different from other types of health care coverage—for example, in administration, the benefits offered, the populations covered, and the ways in which it pays for health care. Further attention may need to be given to provider participation, Medicaid payment rates, and beneficiary access to services.

Because Medicaid does not have any dedicated revenue source at the Federal level or a trust fund approach to financing, the solvency of the program is not an issue; the expenditures of each State (or Territory) program are covered by the State's revenues plus Federal matching general revenues. However, even without solvency as a concern, Medicaid constitutes a significant portion of spending by both Federal and State governments and thus is important to evaluate as part of the budget.

The economic recession has added a considerable amount of financial stress to the States' Medicaid programs, and its effects are expected to continue to increase Medicaid caseloads while at the same time putting pressure on government revenues. Although the Federal government is able to borrow to help finance its current expenditures and maintain its share of Medicaid costs, most States are not able to spend if doing so would create a budget deficit. Additional Federal funding

provided by the American Recovery and Reinvestment Act of 2009 and the Education, Jobs, and Medicaid Assistance Act of 2010 has alleviated some pressure on the States, but it is apparent that the Medicaid program is large enough to place serious strain on many States' budgets.

Lastly, it should be noted that many of the provisions of the Affordable Care Act that affect Medicaid have not yet been implemented. These provisions are expected to affect spending across numerous services and beneficiary categories and to expand Medicaid enrollment substantially, but, until they take effect and can be evaluated, their impacts can only be estimated; the actual effects could differ significantly from the estimates underlying this report.

## **VII. APPENDIX**

### *A. MEDICAID DATA SOURCES*

The primary sources for Medicaid statistical data used in the projections of Medicaid expenditures and enrollment are the Medicaid Statistical Information System (MSIS) and the CMS-64 and CMS-37 reports.

#### **Medicaid Statistical Information System (MSIS)**

MSIS is the basic source of State-submitted eligibility and claims data on the Medicaid population, its demographic characteristics, utilization of health care services, and payments. The purpose of MSIS is to collect, manage, analyze, and disseminate information on eligibles, beneficiaries, utilization, and payment for services that are covered. States provide CMS with quarterly computer files consisting of specified data elements for persons covered by Medicaid and adjudicated claims for medical services reimbursed with Title XIX funds. Four types of claims files representing inpatient, long-term care, prescription drugs, and non-institutional services are submitted. Claims records contain information on the types of services used, providers, service dates, costs, and types of reimbursements. Eligibility characteristics, such as basis-of-eligibility and maintenance assistance status, are the foundation of OACT's demographic projections; specifically, the primary basis-of-eligibility categories include aged persons, blind or disabled persons, non-disabled children, and non-aged non-disabled adults.

#### **CMS-64 and CMS-37 Reports**

The CMS-64 and CMS-37 reports are products of the Medicaid and CHIP Budget and Expenditure Systems (MBES/CBES). These reports are submitted by the States quarterly. The CMS-64 provides current fiscal year spending, while the CMS-37 provides State budgeted amounts for the next 2 fiscal years. The expenditure amount shown on the CMS-64 report is a summary of expenditures for the various mandatory and optional services covered by the Medicaid State programs.

The mandatory services contained in the CMS-64 and CMS-37 reports include inpatient and outpatient hospital care, physician services, nursing facility care for individuals aged 21 or older, family planning services, rural health clinic services, home health care, laboratory and x-ray tests, other practitioner services, federally qualified health centers, and early and periodic screening, diagnostic, and treatment services for children under 21 (EPSDT). Among the many reported optional services that States may provide are clinic services, prescription drugs, intermediate care facilities for the mentally retarded, hospice care, home and community-based care to certain persons with chronic impairments, and targeted

case management services. Additionally, these reports capture expenditures for disproportionate share hospital (DSH) payments, offsets to drug spending through rebates, Medicare Parts A and B premiums paid for those dually eligible for both Medicare and Medicaid, premiums paid for Medicaid-only capitated arrangements, and expenditures for home and community-based waiver programs.

Users of Medicaid data may note discrepancies between the expenditure information captured in MSIS and the CMS-64. For example, DSH payments and Medicare premiums do not appear in MSIS. Whereas actual payments are reflected in the CMS-64, in MSIS adjudicated claims data are used. Service definitions vary in these two sources, as well. Territorial data for American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, and the Virgin Islands appear in the CMS-64, but not in MSIS. Each State has a different system for capturing statistical (MSIS) and financial (CMS-64/37) data.

### *B. DEMOGRAPHIC, ECONOMIC, AND HEALTH CARE ASSUMPTIONS*

The primary demographic, economic, and health cost inflation assumptions underlying the Medicaid projections shown in this report are the same as those used by the OASDI and Medicare Boards of Trustees in their annual reports to Congress. Growth in the number of Medicaid enrollees in each eligibility category—aged, blind or disabled, child, and non-aged non-disabled adult—is initially projected based on past growth trends. These growth rates are assumed to gradually transition to rates comparable to the general population by the end of the 10-year projection period. The Trustees’ population projections depend on assumed future birth rates, mortality rates, and net immigration rates.<sup>32</sup>

The principal economic assumptions include growth in average wages and the consumer price index (CPI). These and other assumptions are used to generate health care service input price indices (or “market baskets”) for inpatient hospital and home health care services. These indices serve as indicators of increases in Medicaid payments per service. (See next section.)

Projected Medicaid costs for paying Medicare Part A premiums on behalf of enrollees who do not directly qualify for Medicare based on their work in covered employment, and for paying Part B premiums for dual beneficiaries, are available directly from the projections prepared by OACT for the Medicare Board of Trustees.

The proportion of enrollees in Medicaid managed care plans and the cost of capitation payments to such plans are projected based on historical growth trends.

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<sup>32</sup> Further information on the Trustees’ population projections and economic assumptions is available in the 2010 OASDI and Medicare Trustees Reports.

### *C. ADDITIONAL PROJECTION METHODOLOGY DETAIL*

This section provides additional detail concerning the “residual” cost growth assumptions for the Medicaid projections in this report. The trend residual approach to projecting Medicaid expenditures begins with an analysis of historical Medicaid expenditures per enrollee on a service-by-service basis. The annual percent change in these per capita expenditures is compared to changes in the applicable price indicator (listed below), and the differential, or residual, is calculated. This residual measures the collective impact of changes in utilization and “intensity” (average complexity) of services, case mix effects, and other factors. The price indicator may be lagged in order to obtain a residual that is as small and stable as possible. The residual is typically assumed to remain constant at its historical average value and is then combined with caseload growth and the Medicare Trustees’ forecast of change in the applicable price indicator to obtain projected expenditures, as indicated in section IV, equation (2).

The table below displays the price indicators currently used to produce Medicaid expenditure projections.

<b>Type of Service</b>	<b>Price Indicator</b>
Inpatient and outpatient hospital	Medicare hospital input price index (market basket), before the application of productivity adjustment
Physician, clinic, and related	Average wage increase
Institutional long-term care	Maximum of CPI increase and average wage increase
Community long-term care	Medicare home health input price index, before the application of productivity adjustment
Prescription drugs	CPI increase

One exception to the trend residual methodology occurs in the case of capitated services and other premiums. Expenditures for capitation payments are projected by trend analysis of average per capita payments for Medicaid capitated services. Costs for other premiums for Medicare are based on the Trustees’ projected premium rates for Medicare Parts A and B (excluding, in the latter instance, any adjustments related to the “hold-harmless” provision of the Social Security Act). The proportions of aged and blind or disabled enrollees who are “bought into” Medicare by the States or the Federal government through premium payments are assumed to remain at historical levels.