Department of Health & Human Services

# 2014 ACTUARIAL REPORT

## ON THE FINANCIAL OUTLOOK

## FOR MEDICAID

Office of the Actuary

Centers for Medicare & Medicaid Services

United States Department of Health & Human Services

Report to Congress

# 2014 ACTUARIAL REPORT ON THE FINANCIAL OUTLOOK FOR MEDICAID

Sylvia Mathews Burwell
Secretary of Health and Human Services
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# 2014 ACTUARIAL REPORT ON THE FINANCIAL OUTLOOK FOR MEDICAID

Prepared by:

Christopher J. Truffer, FSA, MAAA
Christian J. Wolfe, ASA, MAAA
Kathryn E. Rennie, ASA

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

# STATEMENT FROM THE CHIEF ACTUARY

The Medicaid program is of critical importance to American society. It is the largest health program as measured by enrollment and represents one-sixth of the national health economy. In 2013, its outlays of $457.8 billion accounted for a sizeable portion of Federal and State budgets and were a significant source of revenue for health care providers and insurers. As importantly, Medicaid serves as a safety net for the Nation's most vulnerable populations, covering about 59 million beneficiaries in 2013. In this report, we analyze key historical Medicaid trends and include projections of expenditures and enrollment with the goal to inform the public and help policy makers gain insight into the future of the program.

Projections of health care costs are inherently uncertain. For Medicaid, such projections present an even greater challenge as enrollment and costs are very sensitive to economic conditions. The economic assumptions used to generate the Medicaid projections in this report are the same as those used by the 2014 Social Security and Medicare Boards of Trustees in their annual reports to Congress.

The projections in this report also include the expected significant effects of the Affordable Care Act. This legislation has greatly reduced the number of uninsured people in the U.S., largely as a result of expanded eligibility criteria for Medicaid. We estimate that an average of 5.7 million newly eligible adults were covered in calendar year 2014 and will increase to about 12.0 million in 2023. Medicaid costs, particularly for the federal government, which pays a greater proportion of costs for newly eligible individuals, will also grow significantly as a result of these changes. The effects of the newly eligible population are presented throughout the report.

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 and 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, actual future Medicaid costs could differ significantly from these estimates.

I would like to thank team leader Chris Truffer and team members C.J. Wolfe and Katie Rennie for their diligent efforts in preparing this report. We welcome feedback from readers; comments may be sent to Christopher.Truffer@cms.hhs.gov.

Paul Spitalnic, ASA, MAAA
Chief Actuary
Centers for Medicare & Medicaid Services

# 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 expenditures and enrollment, including the impacts of the recent eligibility changes under the Affordable Care Act. Like other projections of future health care costs and coverage, these projections are subject to uncertainty.

## HIGHLIGHTS AND FINDINGS

### *2013 Medicaid Information*

- Total Medicaid outlays in Federal fiscal year (FY) 2013 were $457.8 billion; $265.4 billion or 58 percent represented Federal spending, and $192.5 billion or 42 percent represented State spending. Medicaid outlays increased by 6.1 percent between 2012 and 2013.

- Medicaid provided health care assistance for an estimated 58.9 million people on average in 2013. An estimated total of 72.5 million people, or about one of every five persons in the U.S., were enrolled in Medicaid for at least one month in 2013. Enrollment is estimated to have grown by 1.6 percent between 2012 and 2013.

- Per enrollee spending for health goods and services is estimated to have been $6,897 in 2013. Estimated per enrollee spending for children ($2,807) and adults ($4,391) was much lower than that for aged ($15,483) and disabled ($17,352) beneficiaries, reflecting the differing health statuses of, and use of goods and services by, the members of these groups. Per enrollee spending is estimated to have increased by 2.7 percent in 2013. (These figures exclude expenditures for U.S. Territories, administration, collections and prior period adjustments, and disproportionate share hospital payments. Per enrollee spending including these expenditures increased 4.2 percent from 2012 to 2013.)

### *2014 Medicaid Estimates*

- Medicaid expenditures are estimated to have increased 9.4 percent to $498.9 billion in 2014, which includes the expenditures for newly eligible enrollees. Because the Federal government paid for 100 percent of the costs of newly eligible enrollees, the Federal share of all Medicaid expenditures is estimated to have increased to 60 percent in 2014, and Federal expenditures are estimated to have grown 13.9 percent to $299.7 billion.

- Average Medicaid enrollment is estimated to have increased 9.6 percent to 64.6 million people in 2014. Newly eligible adults are estimated to have

accounted for 4.3 million of the 5.7-million enrollee increase from 2013 to 2014.

*10-Year Medicaid Projections*

- Over the next 10 years, expenditures are projected to increase at an average annual rate of 6.2 percent and to reach $835.0 billion by 2023.

- Average enrollment is projected to increase at an average annual rate of 3.0 percent over the next 10 years and to reach 78.8 million in 2023.

*Impacts of the Eligibility Changes under the Affordable Care Act*

- Medicaid expenditures for adults newly eligible under the Affordable Care Act are projected to amount to $457 billion from 2014 through 2023, or about 7 percent of total projected Medicaid spending over the 10-year period. Most of this increase—$426 billion, or about 93 percent—is projected to be paid by the Federal government. This amount would represent growth of about 11 percent in Federal Medicaid expenditures over 2014 through 2023.

- An average of 4.3 million newly eligible adults are projected to have been enrolled in 2014, and newly eligible adult enrollment is projected to reach 12.0 million people by 2023—representing 7 percent and 15 percent, respectively, of total projected program enrollment. These estimates are based on preliminary 2014 data and the assumption that additional States would expand eligibility, such that 50 percent of potentially newly eligible enrollees reside in States that expanded Medicaid eligibility by 2015, and 60 percent reside in States that will expand eligibility by 2016 and later years.

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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. The Centers for Medicare & Medicaid Services (CMS) is the agency charged with administering Medicaid for the Federal government.

This is the sixth annual Medicaid report prepared by the Office of the Actuary (OACT) at CMS. The purpose of this report is to describe the past and projected trends for Medicaid expenditures and enrollment, including estimates for Federal fiscal years (FYs) 2013 and 2014 and projections over the next 10 years. In addition, this report discusses the impacts of the Affordable Care Act, which reflect the expansion of Medicaid eligibility beginning in 2014. 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.[1]

The Federal government establishes certain requirements for the States' Medicaid programs. 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 of the Social Security Act specifies which groups of people must be eligible, and States have the flexibility to extend coverage to additional groups. In addition to income, eligibility is typically based on several other factors, including age, disability status, other government assistance, other health or medical conditions such as pregnancy, and in some cases financial resources (or assets). Beginning January 2014, the Affordable Care Act provides the States the authority under their State plan to expand Medicaid eligibility to almost all individuals under age 65 who are living in families with income below 138 percent of the Federal poverty level (FPL) (and who are citizens or eligible legal residents), with the Federal government paying 100 percent of the costs for newly eligible adults.[2]

Title XIX specifies that certain medical services must be covered under Medicaid, while also granting the States flexibility to cover many other benefits. Services usually 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 coordinate benefits and to apply for waivers that allow the States more flexibility in developing specialized benefit packages for specific populations. With limited exceptions, States must provide the same benefit package to all core Medicaid enrollees. Exceptions to these requirements include the use of waivers, demonstration projects, and alternative benefit plans. In addition, there may be limited benefits provided for individuals who are eligible based only on medical

[1] For more information on Medicaid, including information on eligibility and covered services, see B. Klees, C. Wolfe, and C. Curtis, "Brief Summaries of Medicare & Medicaid," November 2014: http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/MedicareProgramRatesStats/Downloads/MedicareMedicaidSummaries2014.pdf.

[2] 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. California, Connecticut, the District of Columbia, Minnesota, New Jersey, and Washington State elected to expand eligibility to higher income levels prior to 2014 under the Affordable Care Act. In addition, some States continue to maintain eligibility levels above 133 percent of the FPL.

need, through Medicare savings programs, or through special family planning groups.[3] 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.[4]

The Federal government and the States share the responsibility for funding Medicaid. States pay providers or managed care organizations for Medicaid costs 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.[5] Notably, the Affordable Care Act specifies FMAPs for adult beneficiaries who are newly eligible as a result of the Medicaid expansion that began in 2014 (in States that implement the expansion). 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 goods and 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 some provider taxes), there are no dedicated revenue sources comparable to the Medicare Hospital Insurance payroll tax. Medicaid costs are met primarily by Federal and State general revenues, on an as-needed basis; the States may also rely on local government revenues to finance a portion of their share of Medicaid costs. 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

[3] The Medicare Savings Programs provide assistance to low-income aged persons and persons with disabilities for their share of Medicare costs. Different programs cover a combination of the beneficiary's Part A premium, Part B premium, Part A deductible, and Part B cost-sharing requirements.

[4] One notable exception to this requirement is for newly eligible adults added by the Affordable Care Act. While the new adult eligibility category is technically a mandatory population, the Supreme Court ruled that the Federal government cannot withhold Federal funding for the rest of the Medicaid program for States that do not expand eligibility to this group. See *National Federation of Independent Business v. Sebelius,* 132 S. Ct. 2566 (2012).

[5] In general, Title XIX specifies that the FMAP for each State cannot be lower than 50 percent or higher than 83 percent; in FY 2014, FMAPs ranged from 50.00 percent to 73.05 percent. Also, Title XIX provides for specific FMAP levels for certain States and, in some cases, for specific services or populations.

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 of the population to obtain the health care they need in an orderly way. It is also important, of course, to consider the costs to society of providing this coverage and to anticipate likely future trends in such costs. The balance of this report is intended to describe these trends.[6]

[6] This report does not cover expenditures and enrollment under the Children's Health Insurance Program (CHIP), whether operated under Title XIX or Title XXI of the Social Security Act. CHIP provides health coverage to many children in households with income above Medicaid eligibility levels. CHIP funding is only authorized through 2017. Should CHIP funding not be reauthorized, children enrolled in Medicaid expansion CHIP would be eligible for coverage in Medicaid. For the purpose of this report, CHIP is assumed to be fully funded through the entire projection period, and there are no assumed increases in expenditures or enrollment from children enrolled in CHIP becoming eligible for Medicaid as a result of the expiration of CHIP funding.

# 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 goods and services, overall economic growth, individual wage growth, and population growth. In addition, there are various "programmatic" 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 on the nature and quality of the available data on Medicaid operations. This section describes the sources and limitations 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.[7] The States provide a quarterly report of spending by type of service; this report, known as the CMS-64 or Financial Management Report (FMR), includes the separate Federal and State expenditures for all Medicaid fee-for-service programs and capitation arrangements. The CMS-64 is available on a separate "Net Services" basis, which includes all collections and prior period adjustments. These adjustments reflect payments for services that were reimbursed by the Federal government in a different quarter than the services were covered by the State, and collections reflect negative adjustments to expenditures, such as recoveries for overpayments made in previous accounting periods. In addition, in 2014 the CMS-64 began reporting monthly enrollment data by enrollment category and quarterly expenditures for newly eligible adults.[8] The Medicaid Statistical Information System (MSIS) contains both service and demographic data supplied by the States, including provider payments and enrollment counts. MSIS expenditure data include only total Medicaid expenditures and do not provide data separately for Federal or State expenditures. The MSIS data used for the analysis presented in this report are derived from two sources: the

[7] More information on these sources is available on the CMS website at http://medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Data-and-Systems/MBES/medicaid-budget-and-expenditure-system-MBES.html and http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Data-and-Systems/MSIS/Medicaid-Statistical-Information-System.html. Additional detail is provided in the Appendix.

[8] The CMS-64 reports enrollment and expenditures for enrollees in the "VIII group," which includes those persons who are eligible under the criteria of section 1902(a)(10)(A)(i)(VIII) of the Social Security Act. Most enrollees in this group are newly eligible adults, but some adults who may have been eligible under pre-2014 criteria are in this group as well. The CMS-64 provides data on both newly eligible adults and other enrollees in the VIII group separately for 2014.

Annual Person Summary (APS) files for the underlying expenditure breakdown and the MSIS State Summary Datamarts for the enrollment. 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.[9] 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 2014 annual reports to Congress on the financial status of the OASDI and Medicare programs. The Trustees' intermediate economic assumptions are also used to develop the health care service price forecasts underlying the projections in this report.[10]

The third source from which data and assumptions are derived is the Office of the Actuary Health Reform Model (OHRM), which is primarily based on the Medical Expenditure Panel Survey (MEPS) Household Component, though OHRM has also incorporated available enrollment and expenditure data for newly eligible adults from the CMS-64.[11] OACT developed and used the OHRM to estimate the impact of proposed health care reform legislation, including the Affordable Care Act as enacted, and subsequently used the model to estimate the anticipated effects of implementing this law. The estimates from the OHRM are used to develop the projections presented in this report for the increases in Medicaid expenditures and enrollment due to the expansion of Medicaid eligibility and other provisions of the

[9] *The 2014 Annual Report of the Boards of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds* (http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/ReportsTrustFunds/Downloads/TR2014.pdf) and *The 2014 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds* (http://www.ssa.gov/OACT/TR/2014/tr2014.pdf).

[10] These assumptions are different from those used for projections in the President's Fiscal Year 2016 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.

[11] More information on MEPS can be found at http://meps.ahrq.gov/mepsweb/.

Affordable Care Act. As a result, this report also relies on the data and assumptions used by the OHRM.[12]

In addition, OACT developed assumptions regarding States' decisions to implement the eligibility expansion. In *National Federation of Independent Business v. Sebelius*, 132 S. Ct. 2566 (2012) (*NFIB v. Sebelius*), the Supreme Court ruled that a State may not lose Federal funding for its existing program when it does not implement the Medicaid eligibility expansion under the Affordable Care Act. OACT estimated that 45 percent of all people who were potentially newly eligible Medicaid enrollees resided in States that elected to expand Medicaid eligibility in 2014. To develop an assumption about the effective national participation rate of the States after 2014, OACT reviewed public information and statements for each State regarding its intent to implement the expansion. Based on this information, OACT assumed that 50 percent of all people who were potentially newly eligible Medicaid enrollees in 2015 would reside in States that elected to expand Medicaid eligibility and that, for 2016 and thereafter, 60 percent of such individuals would reside in expansion States. OACT estimated that 45 percent of potentially newly eligible enrollees resided in States that expanded eligibility in 2014.

In the future, the actual participation by States could differ from these assumptions. A greater or lesser number of States could elect to expand eligibility than has been assumed, and States' decisions may change over time (either to expand if they have not already done so or to end the expansion sometime in the future). CMS policy guidance clarified that States would be required to expand eligibility completely, as prescribed by the Affordable Care Act, to receive the increased Federal matching rate; the assumptions used in this report are consistent with this policy.[13]

In addition, OACT estimated that the participation rate of persons eligible under the pre-2014 criteria also increased in 2014 and that it would continue to increase slightly thereafter. Even in States that did not expand eligibility, OACT estimated that there would be increases in participation among eligible persons but that the rate of increase would be about 20 percent less than in States that do expand eligibility.

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[12] More information is contained in the memorandum titled "Estimated Financial Effects of the Patient Protection and Affordable Care Act, as Amended," which is available on the CMS website at http://www.cms.gov/Research-Statistics-Data-and-Systems/Research/ActuarialStudies/Downloads/PPACA_2010-04-22.pdf; however, the estimates of the Affordable Care Act's impacts on Medicaid have since been updated and are presented later in the report. 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.

[13] See "Frequently Asked Questions on Exchanges, Market Reforms and Medicaid," December 10, 2012: http://medicaid.gov/State-Resource-Center/Frequently-Asked-Questions/.

The fourth source of underlying data and assumptions—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. OACT develops the NHE data and projections.[14]

It is important to note the limitations that are associated with the data described in this section. First, the most recent complete APS data available are from 2010, and 2011 data were available for 45 States and the District of Columbia at the time these projections were completed.[15]

Additional enrollment data were obtainable from other MSIS reports. The latest MSIS data available were from 2012 for 24 States and from 2011 for 48 States and the District of Columbia. Accordingly, enrollment by eligibility group (children, adults, aged, and disabled) was estimated for 2011, 2012 and 2013, incorporating information from States with data available in those years (and for 2010 for those States for which MSIS data were unavailable).[16] This is the only ready source of complete enrollment data; consequently, to relate 2012 and 2013 actual expenditures to the number of enrollees, OACT prepared estimates of Medicaid enrollment for those 2 years (as well as for the States for which 2011 APS data were not obtainable). MSIS also does not provide data on enrollment in Territory programs, and thus enrollment figures for Territories are estimated from previous data. As a result, the data have not been updated substantially from last year's report (2011 APS data were available for 29 States), and there is uncertainty

[14] More information on the NHE historical accounts and projections is available on the CMS website at http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/index.html. Also, see M. Hartman, *et al*., "National Health Spending In 2013: Growth Slows, Remains In Step With The Overall Economy," *Health Affairs*, January 2015; 34:150-160; and A. Sisko, *et al.*, "National Health Expenditure Projections, 2013-23: Faster Growth Expected With Expanded Coverage And Improving Economy," *Health Affairs*, October 2014; 33:1841-1850.

[15] One additional State had 2011 enrollment data, but not expenditure data. The figures and projections in this report include the 2011 enrollment data for that State and the 2010 expenditure data by enrollment category.

[16] In this report, child Medicaid enrollees include non-disabled children, children of unemployed parents, and foster care children; adult Medicaid enrollees include non-disabled non-aged adults, unemployed adults, and women covered under the Breast and Cervical Cancer Act expansion; and disabled Medicaid enrollees include blind or disabled persons.

regarding the estimates of the number of enrollees and expenditures by enrollment category in the most recent historical years.[17]

Another qualification is that it was only in 2014 that the CMS-64 began providing data on enrollment or spending by enrollment category (and, in the case of spending by enrollment category, only for newly eligible adults or other adults in the "VIII group").[18] In addition, the definitions of medical service categories are not consistent between the MSIS and the other CMS data sources. Adjustments are 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; accordingly, 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 are used to estimate spending by enrollment group for each Medicaid service reported in the CMS-64.[19] While every State that chose to expand its program is reporting enrollment data in the CMS-64, regular updates to these submissions indicate that the data are not yet final for 2014. OACT used data only for the number of newly eligible adults enrolled and otherwise did not rely on the enrollment data in the CMS-64 for this report.

Yet another limitation is the unavailability of comprehensive demographic, macroeconomic, health care, and program assumptions specific to each State. Because these State-specific assumptions are not available, it is not possible to credibly 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, although OACT reviewed the data sources used in these projections for reasonableness, OACT 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

[17] CMS is in the process of transitioning Medicaid data from MSIS to the Transformed Medicaid Statistical Information System (T-MSIS), but T-MSIS is not currently available. Until the system is operational, it is unclear what data will be available and what form the data will take. CMS is discontinuing the production of the APS files, and different approaches will likely be necessary to incorporate data for 2012 and 2013 in future reports. More information about T-MSIS is available at http://www.medicaid.gov/medicaid-chip-program-information/by-topics/data-and-systems/medicaid-and-chip-operational-data.html.

[18] The "VIII group" refers to enrollees who are eligible under section 1902(a)(10)(A)(i)(VIII) of the Social Security Act, including newly eligible adults.

[19] Certain services in the CMS-64 for which there is little to no history are combined with other services assumed to have a matching underlying distribution of spending by eligibility category.

administrative policy regarding Medicaid as of January 1, 2015.[20,21] 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, no future changes in policy are assumed (beyond those already scheduled under current law).

Like any projection of future health care costs, the Medicaid projections presented here 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. Finally, data sources that report the number of people who became eligible for and enrolled in Medicaid in 2014 and their health care costs are still incomplete; accordingly, while these estimates are more certain than those in previous reports, they should still be considered uncertain due to the relative lack of program data and experience to inform them and the uncertainty about which States will expand their eligibility standards in the future.

For these reasons, the projections shown in this report should be regarded only 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, or (iii) any further changes in the legislation governing Medicaid.

[20] The Medicare Access and CHIP Reauthorization Act of 2015 (Public Law 114-10) was signed into law after the projections in this report were completed, and the effects of the legislation are not reflected in the projections provided in the report.

[21] Medicaid expenditures in this report include Part B premiums paid for dually eligible enrollees. Consistent with the 2014 Medicare Trustees Report, the Part B estimates reflect a projected baseline scenario, which includes an assumption of a legislative override of the scheduled Medicare physician payment updates under the sustainable growth rate (SGR) system.

# IV. METHODOLOGY

This section 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 medical services:

$$E = C \times U \times P \qquad (1)$$

Direct application of equation (1) requires data on utilization and reimbursement rates for Medicaid that are not currently available or practical to maintain.[22] An alternative recursive approach is therefore used for the projections, as described below.

Instead of using equation (1), 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

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

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 Medicaid eligibility categories and categories for type of service.

With a few exceptions, caseload factors vary by eligibility category, price factors vary by type of service, and utilization factors can vary by both eligibility category and type of service. The projected caseload factors are determined by trend and regression analysis of Medicaid enrollment data. Projections of future enrollment by

[22] 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.

eligibility category are based on estimates of the change in the share of the U.S. population enrolled in Medicaid, which has historically varied with the changes in the unemployment rate. The relationship between Medicaid enrollment and unemployment reflects (i) how many people are without other forms of insurance and (ii) how many people might qualify for Medicaid based on its income requirements. Historically, this relationship has varied by eligibility category, and, in general, children and adult enrollment in Medicaid has been more sensitive to changes in the unemployment rate, while enrollment of aged persons and persons with disabilities has been relatively less sensitive.

Price changes are derived from economic forecasts produced for the 2014 Medicare Trustees Report, including forecasts for economy-wide inflation, inflation for prices of medical services, 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.[23] 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 methodology used to calculate the utilization factor for the projections in this year's report has changed. Previously, the utilization factor was calculated across all enrollees for each service. While this method was generally reliable, for some services in which expenditures were disproportionately concentrated in one or two enrollment categories, relative differences in enrollment growth among those categories affected the calculation of the changes in utilization and in some cases required adjustments to the projections. The new methodology calculates utilization by service and by enrollment category, thereby producing a more reliable calculation of utilization. For a number of services, historical utilization changes are similar by enrollment category, and the same average utilization factor is used for all enrollment categories in the projections. For other services, the utilization factor may vary by enrollment category.

The results obtained from the "Caseload, Utilization, Price" ("CUP") recursive forecast, using equation (2), are frequently adjusted to be consistent with recent expenditure data and outlay trends.

It is important to note that some of the reported expenditures in the financial data are not projected using category- or service-specific growth rates with respect to caseload, utilization, or price. Prior period adjustments and collections reported by the States are combined from the financial reporting, and the net result is projected

[23] More details on the trend residual methodology are included in the Appendix.

to increase at the underlying total Medicaid expenditure growth rate (which is calculated net of all collections and prior period adjustments).

As noted previously, estimates of the impact of the Medicaid eligibility expansion of the Affordable Care Act are derived from the results of the OHRM, as well as from currently available data on Medicaid enrollment and expenditures from the CMS-64.[24] This model is based on the MEPS, reweighted to match the spending and insurance coverage estimates of the 2013-2023 NHE projections.[25] The OHRM specifically estimates (i) the number of people who would become newly eligible for Medicaid and would enroll as a result of the eligibility expansion; (ii) 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 the application process that will result from the Affordable Care Act; and (iii) the amount of the new enrollees' per enrollee Medicaid expenditures once they enroll. The results of the OHRM are adjusted using expenditure and enrollment data for the newly eligible population on the CMS-64, which revises projected enrollment and expenditures per enrollee in 2014 to reflect the most recent data.

The ultimate 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 95 percent. For persons who would be eligible under current Medicaid criteria and would otherwise be uninsured, about 70 percent of those in States that expand Medicaid eligibility are assumed to enroll in Medicaid ultimately; in States that do not expand Medicaid eligibility, about 56 percent of non-newly eligible and otherwise uninsured persons are assumed to enroll ultimately. These projections assume that some of the increase in participation in Medicaid occurred prior to 2014 and is reflected in the growth in adult enrollment between 2010 and 2013. In 2014 and 2015, the participation rates of those newly eligible and non-newly eligible are assumed to be lower than the ultimate participation rate (about 77 percent and 90 percent of the ultimate rates, respectively).

These assumed rates are higher than actual Medicaid participation rates to date and are based on the anticipated impacts of sections of the Affordable Care Act that are intended to make the process of enrolling easier. In particular, simplified eligibility determinations enable some individuals who have steady income and who have applied for coverage to be enrolled through an expedited process using a prior

[24] More information is contained in the memorandum titled "Estimated Financial Effects of the Patient Protection and Affordable Care Act, as Amended," which is available on the CMS website at http://www.cms.gov/Research-Statistics-Data-and-Systems/Research/ActuarialStudies/Downloads/PPACA_2010-04-22.pdf. These estimates have been updated to reflect more recent data and information on the implementation of the many sections of the Affordable Care Act.

[25] A. Sisko, *et al.*, "National Health Expenditure Projections, 2013-23: Faster Growth Expected With Expanded Coverage And Improving Economy."

year's income tax return as verification of eligibility for coverage. Moreover, the legislation established State or federally facilitated Health Insurance Marketplaces, which, among other responsibilities, facilitate the determination of individuals' and families' eligibility for Federal financial assistance, either through Medicaid or through the Federal premium and cost-sharing subsidies for private health insurance plans. In addition, the more widespread availability of financial assistance under the Affordable Care Act (for individuals and families with incomes up to 400 percent of FPL) is anticipated to reduce any stigma associated with receipt of such assistance through Medicaid. While final data for 2014 are not yet available, preliminary data suggest that enrollment levels are generally consistent with these assumptions.

In *National Federation of Independent Business (NFIB) v. Sebelius*, the Supreme Court ruled that a State may not lose Federal funding for its existing program if it does not implement the Medicaid eligibility expansion under the Affordable Care Act. Based on the information currently available about the States' intentions for their Medicaid programs, it is estimated that (i) 50 percent of potentially newly eligible persons lived in States that would expand eligibility in 2015, and (ii) in 2016 and later years, 60 percent of potentially newly eligible persons will reside in States that would expand eligibility as additional States implement the eligibility expansion.

It is possible that more or fewer States may expand Medicaid eligibility than have been assumed for 2015 and later years. To the extent that the actual number of States opting for expansion differs from the assumptions used in these projections, future costs and enrollment would likely differ by a similar proportion, taking into account the sizes of the potential newly eligible populations in those States.

To estimate expenditures by service category for newly eligible Medicaid enrollees, OACT used currently available data from the CMS-64 on expenditures by service category for newly eligible adults. More details on the estimates of Medicaid impacts of the eligibility changes under the Affordable Care Act are available in the Actuarial Analysis section of this report.

# V. ACTUARIAL ANALYSIS

## *A. FY 2013 MEDICAID OUTLAYS AND ENROLLMENT*

The Federal government and the States collectively spent $457.8 billion for Medicaid in 2013. Of this amount, the Federal government paid $265.4 billion, representing about 58 percent of net program outlays, and the States paid $192.5 billion, or about 42 percent of net outlays. Medicaid outlays increased by 6.1 percent between 2012 and 2013. Table 1 summarizes total Medicaid outlays for 2013.

**Table 1—Medicaid Outlays for Fiscal Year 2013 by Type of Payment**
(in billions)

| Title XIX Outlays[1] | Federal Share | State Share | Total |
|---|---|---|---|
| Medical Assistance Payments: | | | |
| Acute Care Fee-For-Service Benefits[2] | $81.1 | $57.9 | $138.9 |
| Long-Term Care Fee-For-Service Benefits[2] | 65.4 | 49.8 | 115.2 |
| Capitation Payments and Premiums[2] | 84.7 | 62.4 | 147.1 |
| Disproportionate Share Hospital (DSH) Payments[2] | 7.4 | 5.7 | 13.2 |
| Adjustments[3] | 9.5 | 8.0 | 17.5 |
| Subtotal, Medical Assistance Payments | 248.1 | 183.8 | 431.9 |
| Administration Payments | 14.2 | 8.7 | 22.9 |
| Vaccines for Children Program | 3.6 | — | 3.6 |
| Gross Outlays | 265.9 | 192.5 | 458.4 |
| Collections[4] | −0.5 | — | −0.6 |
| Net Outlays | 265.4 | 192.5 | 457.8 |

Totals may not add due to rounding.

[1] 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.

[2] Benefit expenditures as reported on the CMS-64 (base expenditures).

[3] Adjustments include net adjustments of benefits from prior periods and the difference between expenditures and outlays.

[4] Collections from Medicare Part B for the Qualifying Individuals (QI) program and from other miscellaneous sources.

The great majority of Medicaid spending—94 percent of total outlays in 2013—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 FFS spending on nursing home services, home health care, intermediate care facility services, and home and community-based services. Capitation payments and premiums include amounts paid to Medicaid managed care plans, pre-paid health plans, other health plan premiums, and premiums for Medicare Part A and Part B. 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, capitation payments and other premiums represented the largest portion of Medicaid spending in 2013, accounting for $147.1 billion or 34 percent of Medicaid benefit expenditures. Fee-for-service acute care expenditures were nearly as large, constituting $138.9 billion or 32 percent of benefit expenditures. In 2013, for the first time in the history of the Medicaid program, spending on capitation payments and other premiums was greater than that for fee-for-service acute care. Medicaid spending for fee-for-service long-term care amounted to $115.2 billion, representing 27 percent of expenditures on benefits. DSH payments accounted for $13.2 billion, or 3 percent, of Medicaid benefits in 2013.

Medicaid outlays for program administration totaled $23.2 billion in 2013—$14.5 billion in Federal funds and $8.8 billion in State funds—and represented 5 percent of Medicaid outlays. Included in administration outlays were $3.9 billion in health information technology incentive payments to providers.[26] Medicaid also provided $3.6 billion in 2013 for the Vaccines for Children program.[27]

Enrollment is measured in two ways: (i) "person-year equivalents" (PYE), or the average enrollment over the course of a year, and (ii) "ever-enrolled" persons, or the number of people covered by Medicaid for any period of time during the year. In 2013, Medicaid enrollment was estimated to be 58.9 million PYE (including enrollment in the U.S. Territories). An estimated 72.5 million people, or slightly more than one in five in the U.S. or U.S. Territories, were ever-enrolled.

Table 2 shows estimated enrollment by eligibility group for 2013 (excluding Territory programs). Historically, children have been the largest group of Medicaid enrollees. In 2013, this group is estimated to have represented 27.9 million PYE, or

[26] Health information technology incentive payments were provided for by the American Recovery and Reinvestment Act of 2009 and are paid entirely by the Federal government. This figure does not include payments to States to administer the health information technology incentive payment program.

[27] 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. All Vaccine for Children program costs are paid by the Federal government.

47 percent of overall Medicaid enrollment. Adults made up an estimated 14.7 million PYE (25 percent), while disabled enrollees and aged enrollees are estimated to have accounted for 10.1 million and 5.3 million PYE (17 percent and 9 percent, respectively). Another 1 million enrollees were estimated for the five U.S. Territories (Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, and the Northern Mariana Islands).

**Table 2—2013 Estimated Enrollment, Expenditures, and Estimated Per Enrollee Expenditures, by Enrollment Group[1]**

| Eligibility Group | Enrollment[2] (in millions) | Expenditures (in billions) | Per enrollee spending |
|---|---|---|---|
| Children | 27.9 | $78.2 | $2,807 |
| Adults | 14.7 | 64.5 | 4,391 |
| Disabled | 10.1 | 175.2 | 17,352 |
| Aged | 5.3 | 81.5 | 15,483 |
| Total | 57.9 | 399.3 | 6,897 |

Totals may not add due to rounding.

[1] Does not include DSH expenditures, Territorial enrollees or payments, or adjustments.

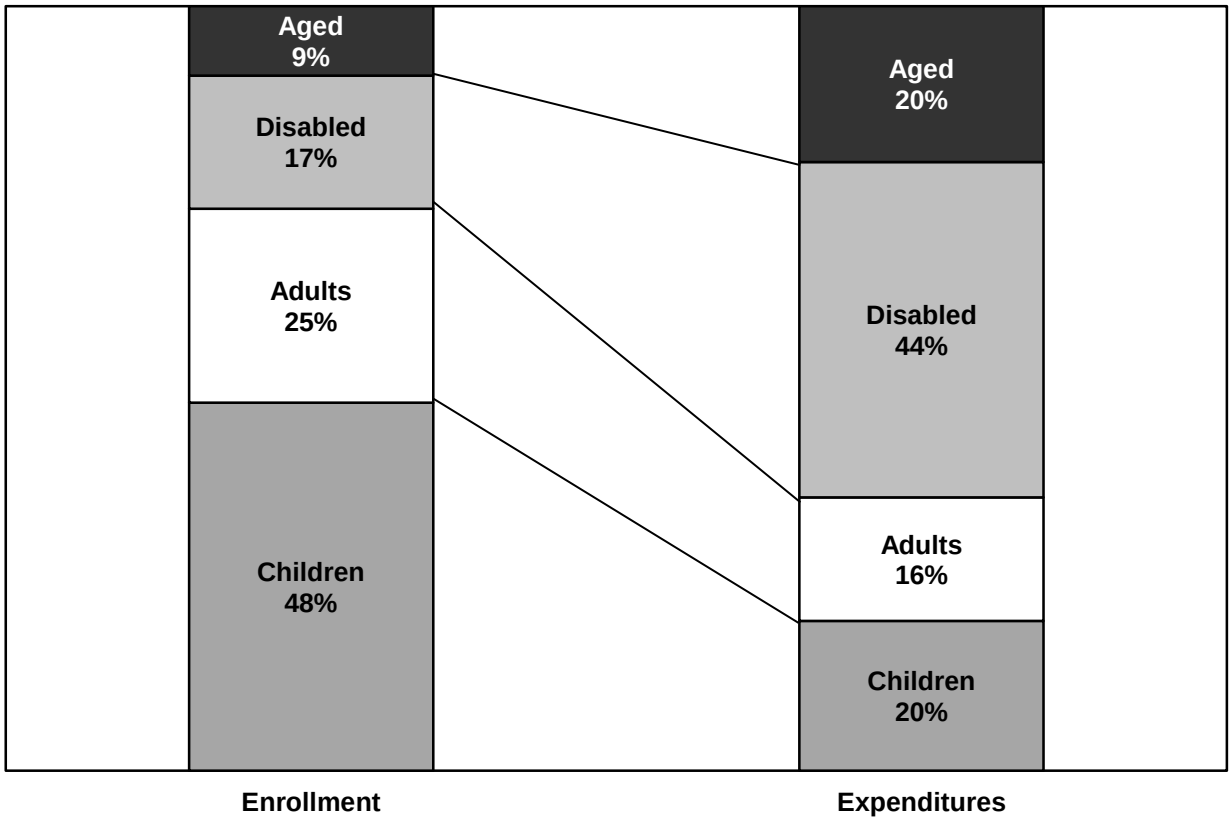
[2] Measured in person-year equivalents.

The average per enrollee cost for 2013 is estimated to have been $6,897 (based on PYE enrollment and excluding DSH outlays, Territorial enrollees and costs, adjustments, and administration costs). Children in Medicaid received an estimated $2,807 in benefits on average in 2013, and adults received an estimated average of $4,391 in benefits. In both instances, these average costs reflect the relatively favorable health status of the enrollment groups; however, among adult enrollees, a significant number are pregnant women, whose costs are on average relatively greater. As would be expected, expenditures are substantially greater for the aged and enrollees with disabilities; aged beneficiaries received an estimated $15,483 in benefits on average, and disabled beneficiaries are estimated to have received an average of $17,352 in benefits.[28]

Figure 1 shows each enrollment group's relative share of enrollment and expenditures in Medicaid in 2013. While disabled enrollees and aged enrollees are the smallest enrollment groups in Medicaid, they account for the majority of spending. Conversely, children and adults are the largest enrollment groups in Medicaid, but they receive a relatively smaller share of expenditures.

[28] The average per enrollee costs may also vary substantially among States. These variations may reflect differences in State Medicaid programs (for example, eligibility levels, benefits offered, provider reimbursement rates, or program design) and differences in the overall health care market across States.

**Figure 1—Estimated Medicaid Enrollment and Expenditures by Enrollment Group, as Share of Total, Fiscal Year 2013**




Note: Totals and components exclude DSH expenditures, Territorial enrollees and expenditures, and adjustments. Totals may not add to 100 percent due to rounding.

Combined, spending on aged and disabled beneficiaries constituted 64 percent of Medicaid benefit expenditures in 2013, but these groups accounted for only 27 percent of all enrollees. Children and adults represented 73 percent of all enrollees in 2013, while only 36 percent of benefit expenditures were for enrollees in these two groups.

These differences between the relative shares of enrollment and expenditures result from per enrollee costs that vary dramatically among the enrollment groups. The 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 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.[29]

Expenditures for Medicaid increased 5.8 percent in 2013, while enrollment is estimated to have grown 1.6 percent, resulting in an increase in the per enrollee cost of 4.2 percent.[30] This was the highest rate of per enrollee growth and the lowest rate of enrollment growth since 2007. Growth in Medicaid expenditures was driven in part by an increase in the net of prior period adjustments and collections from $10.4 billion in 2012 to $18.8 billion in 2013, a difference that accounted for about one-third of the overall increase in Medicaid expenditures.[31] In addition, the effects of the Affordable Care Act are estimated to have accounted for about $3 billion of the growth (or 12 percent), reflecting the start of the temporary increases in payments to primary care physicians and a decrease in prescription drug rebates collected. (In 2012, a large amount of rebates were collected that were attributed to 2010 and 2011—an occurrence that otherwise reduced expenditures in 2012.) The vast majority of the growth in Medicaid benefit expenditures was in capitated payments and premiums, which accounted for 93 percent of the increase in benefit expenditures (after excluding collections and prior period adjustments).

[29] In 2010, Medicaid expenditures for persons eligible for Medicare and full Medicaid benefits (full-benefit dual-eligible beneficiaries) amounted to $112.6 billion, and Medicare expenditures for these persons were $134.7 billion, for a total of $247.3 billion in expenditures between both programs. Medicaid accounted for about 46 percent of the total spending on dual-eligible beneficiaries. In addition, for persons eligible for Medicare and limited Medicaid benefits (generally payments for Medicare premiums or cost sharing), Medicaid benefits are typically an even smaller proportion of their total benefits ($2.0 billion of $37.2 billion, or about 5 percent, in 2010). (These amounts generally do not include lump-sum supplemental payments to providers that, in some states, account for a significant amount of Medicaid expenditures. See *Data Book: Beneficiaries Dually Eligible for Medicare and Medicaid*, Medicare Payment Advisory Commission and Medicaid and CHIP Payment and Access Commission, 2015.

[30] There are some differences between Medicaid outlays and Medicaid expenditures, mainly due to timing differences between States paying for services and States receiving Federal funds. Thus, the levels and trends in outlays and expenditures differ slightly.

[31] California has historically reported some of the highest net prior period adjustments and collections of any State, both in the amount reported and in the share of its total program (31 percent of California's expenditures in 2013). Of the $8.4 billion increase in the net of prior period adjustments and collections nationally between 2012 and 2013, $7.1 billion of the increase was from California.

## *B. HISTORICAL MEDICAID TRENDS*

Since the start of the program, the year-to-year growth rates of total Medicaid expenditures (Federal and State expenditures combined) and enrollment have varied substantially, as can be seen in figure 2 and figure 3. The growth in expenditures over time reflects growth in the number of enrollees in the program and growth in the cost per enrollee. 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. Similarly, per enrollee costs vary 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 State Medicaid programs.

**Figure 2—Historical and Projected Medicaid Expenditures and Annual Growth Rates, FY 1966–FY 2023**

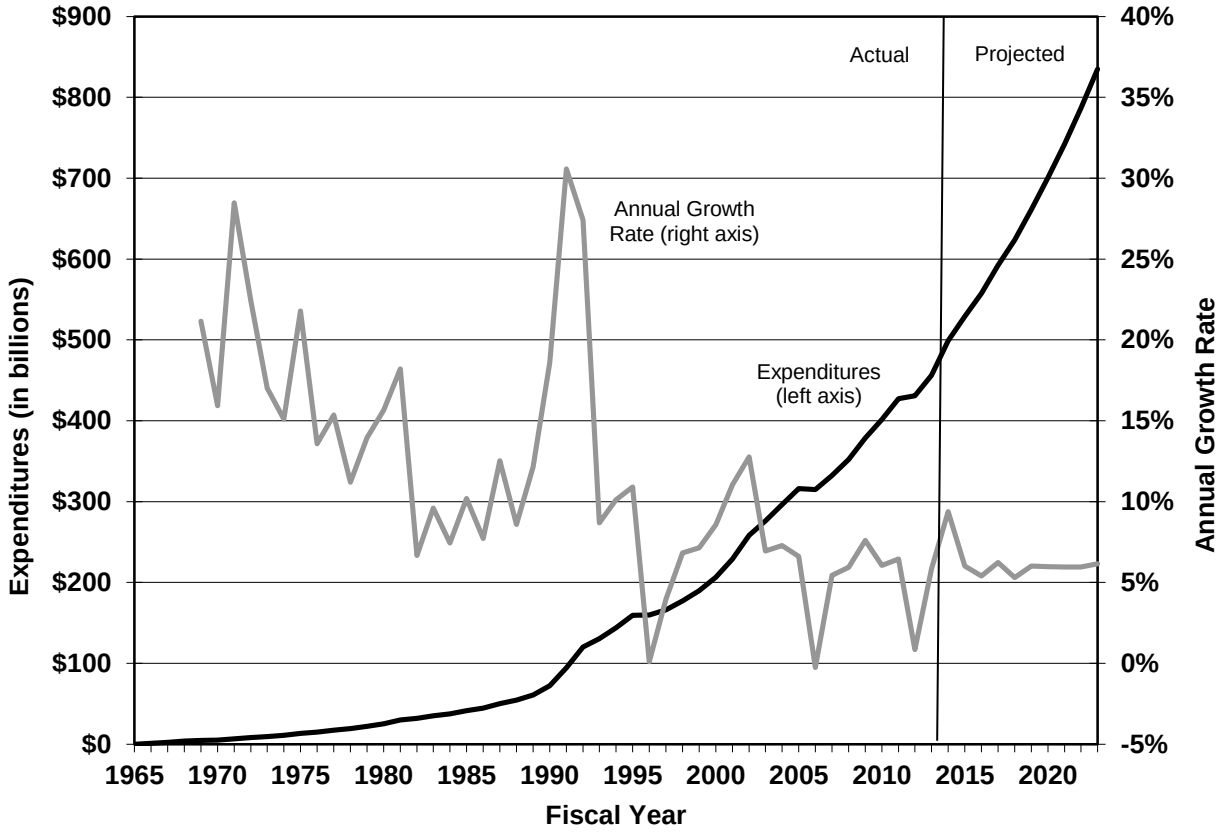
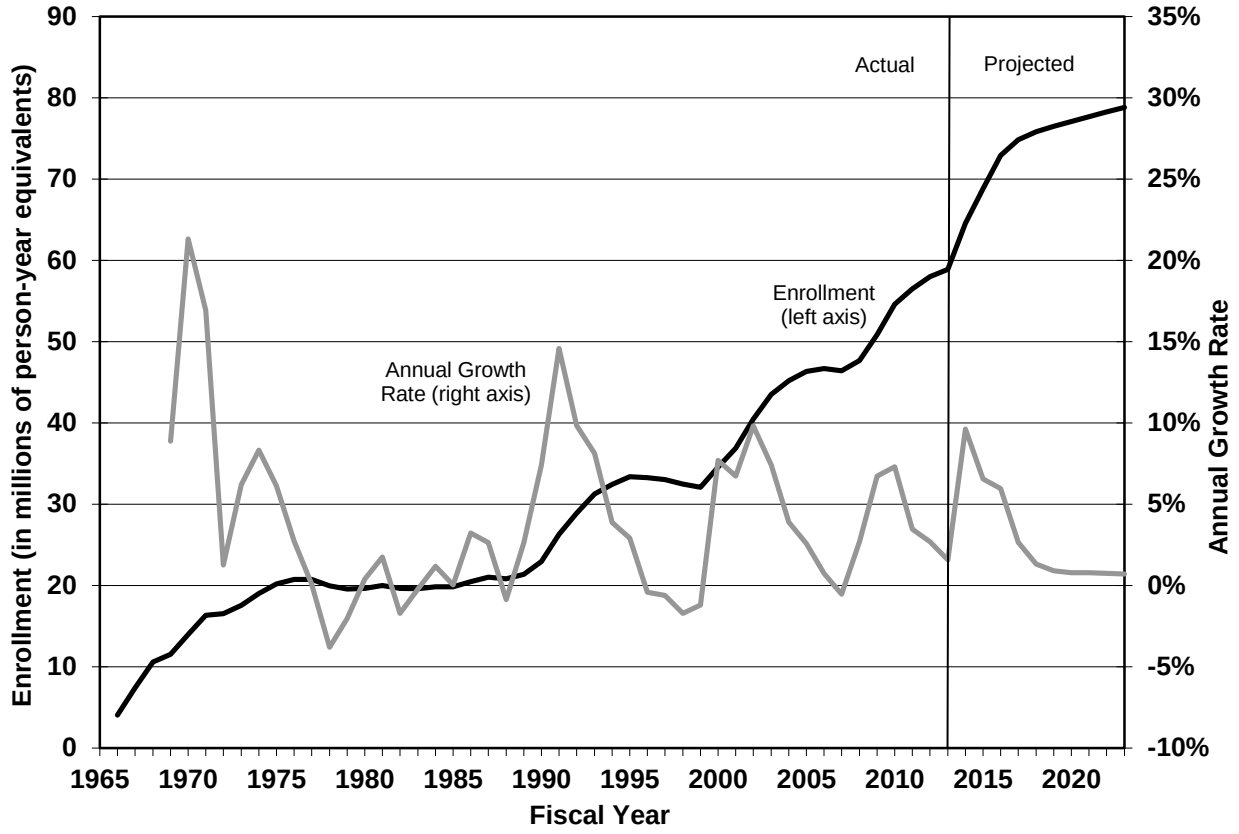


**Figure 3—Historical and Projected Medicaid Enrollment and Annual Growth Rates, FY 1966–FY 2023**




From 2004 to 2013, Medicaid expenditures grew at an average annual rate of 5.1 percent, but annual growth rates varied substantially over the last 10 years (from −0.3 percent in 2006 to 7.6 percent in 2009). Growth in health care expenditures is driven primarily by several key factors: growth in the population, changes in the use of health care services, and changes in the prices of health care services. In addition to these, there are several other factors that affected Medicaid expenditure trends in recent history.

Federal legislation had a significant effect on historical expenditure trends. The Medicare Modernization Act of 2003 created the Medicare Part D program, and in 2006 most prescription drug coverage for dual-eligible beneficiaries (those eligible for both Medicaid and Medicare) shifted from Medicaid to Medicare Part D. All dual-eligible beneficiaries were automatically enrolled in Part D, and Medicare served as the primary source of their prescription drug coverage. As a result of this shift in coverage, Medicaid drug spending (net of rebates) decreased 44 percent from 2005 to 2006, and aggregate Medicaid spending was 0.3 percent *lower* than in 2005, decreasing for the first time in the program's history.

The American Recovery and Reinvestment Act of 2009 provided for temporary increases in the Federal share of Medicaid payments in 2009, 2010, and 2011, as

well as for health information technology incentive payments that were funded entirely by the Federal government. While the increase in the Federal share of Medicaid payments was significant, it is not estimated to have affected total Medicaid expenditure growth in those years.

The Affordable Care Act also had a number of provisions that affected Medicaid starting in 2010; however, most of the changes to the Medicaid program through 2013 are estimated to have had only minor effects on Medicaid expenditure growth rates.

Medicaid expenditure growth is also affected by States' decisions in operating their programs. In the past, States took steps to control the costs of their Medicaid programs, especially during periods of relatively faster growth, and many States have taken such steps to slow the rate of expenditure growth in recent history.[32] Common methods have included provider reimbursement rate freezes or reductions and limiting or curtailing optional health care benefits.

Medicaid enrollment grew at an average annual rate of 3.1 percent from 2004 to 2013. Annual growth rates varied substantially, from a low of −0.5 percent in 2007 to a high of 7.3 percent in 2010. Changes in Medicaid enrollment were generally driven by population growth and by changes in economic growth and unemployment rates. In general, Medicaid enrollment increases more quickly during economic recessions, and growth slows as the economy expands. Faster Medicaid enrollment growth in turn typically leads to increases in expenditure growth. Medicaid enrollment and expenditure trends followed these historical patterns during the 2001 recession and the 2007-2009 recession and during the subsequent economic recoveries.

[32] These changes are described in detail in surveys of State Medicaid programs by the Kaiser Family Foundation; see V. Smith, *et al.*, "Medicaid in an Era of Health & Delivery System Reform: Results from a 50-State Medicaid Budget Survey for State Fiscal Years 2014 and 2015," Kaiser Family Foundation, October 2014.

### *C. MEDICAID EXPENDITURES AND ENROLLMENT PROJECTIONS, FY 2014–FY 2023*

The projections presented in this report focus on Medicaid medical assistance payments (or "benefit" expenditures) and Medicaid enrollment; administration costs are also included and are based on the projections from the President's Fiscal Year 2016 Budget.[33] Other Title XIX expenditures (such as the Vaccines for Children program) are not included. Historical and projected Medicaid enrollment and expenditures for medical assistance payments and administration are shown in table 3.[34,35]

[33] The projections of administration expenditures are based on the projected trends for Medicaid administration outlays in the President's Budget, but are adjusted to be consistent with the expenditures reported in the CMS-64; in addition, total expenditures are also projected for administration, whereas the President's Budget only projects Federal outlays.

[34] In table 3, enrollment and expenditure data for the period 1966–1976 have been revised to be consistent with the current definition of the Federal fiscal year (October-September).

[35] There are some differences between Medicaid outlays and Medicaid expenditures, mainly due to timing differences between States paying for services and States receiving Federal funds. Thus, the levels and trends in outlays and expenditures differ slightly, and the amounts shown in table 3 differ from those shown in table 1.

**Table 3—Historical and Projected Medicaid Enrollment and Expenditures and Average Federal Share of Expenditures, Selected Years**

(Enrollment in millions of person-year equivalents, expenditures in billions of dollars)

| Fiscal Year | Enrollment | Total Expenditures | | | Benefit Expenditures | | | Administration Expenditures | | | Avg. Federal Share |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Total | Federal | State | Total | Federal | State | Total | Federal | State | |
| Historical: | | | | | | | | | | | |
| 1966 | 4.0 | $0.9 | $0.5 | $0.4 | $0.9 | $0.4 | $0.4 | $0.0 | $0.0 | $0.0 | 50% |
| 1970 | 14.0 | 5.1 | 2.8 | 2.3 | 4.9 | 2.6 | 2.2 | 0.2 | 0.1 | 0.1 | 54% |
| 1975 | 20.2 | 13.1 | 7.3 | 5.9 | 12.6 | 6.9 | 5.6 | 0.6 | 0.3 | 0.3 | 55% |
| 1980 | 19.6 | 25.2 | 14.0 | 11.2 | 24.0 | 13.3 | 10.7 | 1.2 | 0.7 | 0.5 | 55% |
| 1985 | 19.8 | 41.3 | 22.8 | 18.4 | 39.3 | 21.7 | 17.6 | 2.0 | 1.2 | 0.8 | 57% |
| 1990 | 22.9 | 72.2 | 40.9 | 31.3 | 68.7 | 38.9 | 29.8 | 3.5 | 2.0 | 1.5 | 57% |
| 1995 | 33.4 | 159.5 | 90.7 | 68.8 | 151.8 | 86.5 | 65.3 | 7.7 | 4.2 | 3.4 | 57% |
| 2000 | 34.5 | 206.2 | 117.0 | 89.2 | 195.7 | 111.1 | 84.6 | 10.6 | 5.9 | 4.7 | 57% |
| 2005 | 46.3 | 315.9 | 180.4 | 135.5 | 300.7 | 172.1 | 128.7 | 15.1 | 8.3 | 6.8 | 57% |
| 2006 | 46.7 | 315.1 | 179.3 | 135.8 | 299.0 | 170.6 | 128.5 | 16.0 | 8.7 | 7.3 | 57% |
| 2007 | 46.4 | 332.2 | 189.0 | 143.2 | 315.8 | 180.0 | 135.8 | 16.4 | 9.0 | 7.5 | 57% |
| 2008 | 47.7 | 351.9 | 200.2 | 151.7 | 334.2 | 190.6 | 143.6 | 17.7 | 9.6 | 8.1 | 57% |
| 2009 | 50.9 | 378.6 | 246.3 | 132.3 | 360.3 | 236.3 | 124.0 | 18.3 | 10.0 | 8.3 | 65% |
| 2010 | 54.6 | 401.5 | 269.8 | 131.7 | 383.6 | 260.0 | 123.6 | 17.9 | 9.8 | 8.1 | 67% |
| 2011 | 56.5 | 427.4 | 270.7 | 156.7 | 407.9 | 259.8 | 148.1 | 19.5 | 10.9 | 8.6 | 63% |
| 2012 | 58.0 | 431.0 | 248.8 | 182.2 | 408.8 | 235.1 | 173.7 | 22.2 | 13.7 | 8.4 | 58% |
| 2013 | 58.9 | 456.1 | 263.1 | 193.0 | 433.2 | 248.9 | 184.3 | 22.9 | 14.2 | 8.7 | 58% |
| Projections: | | | | | | | | | | | |
| 2014 | 64.6 | 498.9 | 299.7 | 199.2 | 474.5 | 284.5 | 190.0 | 24.4 | 15.2 | 9.2 | 60% |
| 2015 | 68.9 | 529.0 | 320.0 | 209.0 | 503.1 | 303.7 | 199.4 | 25.9 | 16.3 | 9.6 | 60% |
| 2016 | 72.9 | 557.6 | 336.4 | 221.2 | 532.4 | 320.8 | 211.5 | 25.2 | 15.5 | 9.7 | 60% |
| 2017 | 74.8 | 592.3 | 356.8 | 235.5 | 567.2 | 341.8 | 225.4 | 25.1 | 15.1 | 10.0 | 60% |
| 2018 | 75.8 | 623.6 | 375.3 | 248.3 | 597.9 | 360.1 | 237.8 | 25.8 | 15.2 | 10.5 | 60% |
| 2019 | 76.5 | 661.1 | 397.5 | 263.6 | 634.4 | 381.8 | 252.5 | 26.7 | 15.7 | 11.1 | 60% |
| 2020 | 77.1 | 700.6 | 418.4 | 282.2 | 672.7 | 402.1 | 270.6 | 27.9 | 16.3 | 11.6 | 60% |
| 2021 | 77.7 | 742.3 | 442.7 | 299.6 | 713.1 | 425.7 | 287.5 | 29.2 | 17.0 | 12.2 | 60% |
| 2022 | 78.2 | 786.6 | 468.8 | 317.7 | 756.0 | 451.1 | 304.9 | 30.6 | 17.8 | 12.8 | 60% |
| 2023 | 78.8 | 835.0 | 497.4 | 337.5 | 802.9 | 478.8 | 324.1 | 32.1 | 18.6 | 13.4 | 60% |

Note: Enrollment is projected for 2011, 2012, and 2013.

Expenditures

Total Medicaid expenditures (Federal and State combined) for medical assistance payments and administration are estimated to have grown 9.4 percent in 2014 to $498.9 billion and are projected to reach $835.0 billion by 2023, increasing at an average rate of 6.2 percent per year over the next 10 years. Federal government spending on Medicaid medical assistance payments and administration costs is estimated to have increased by 13.9 percent to $299.7 billion in 2014, representing about 60 percent of total Medicaid benefit expenditures. Federal spending on Medicaid is projected to reach $497.4 billion by 2023, or about 60 percent of total spending. Total State Medicaid expenditures for benefits and administration are estimated to have increased to $199.2 billion in 2014, a growth rate of 3.2 percent, and are projected to reach $337.5 billion by 2023.

The Affordable Care Act contains many Medicaid provisions, most of which were implemented by 2014 and are expected to have a significant influence on future Medicaid expenditure trends. Included in these provisions is a substantial increase in Medicaid eligibility that began in 2014. The impacts of this increase are presented in more detail in the next section.

In recent history, the average annual Federal share of Medicaid expenditures has been about 57 percent of total expenditures, with several years of greater Federal shares due to changes specified in legislation. The average Federal share was 57.7 percent in 2013. It is estimated to have risen in 2014 due mainly to the higher FMAP for newly eligible Medicaid beneficiaries as required in the Affordable Care Act. The average Federal share is estimated to have increased to about 60 percent in 2014 and is projected to remain at that level through 2023.

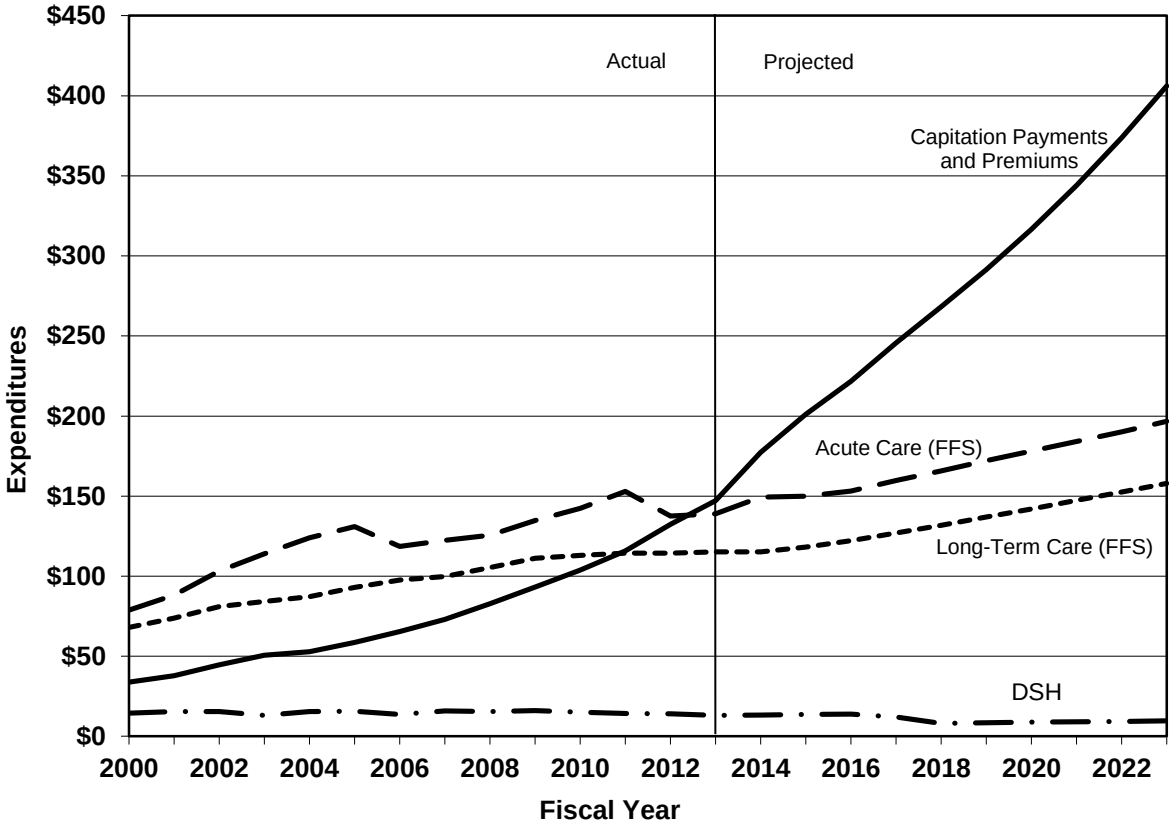
Total Medicaid expenditures (Federal and State combined) for medical assistance payments (excluding administration) are estimated to have grown 9.5 percent in 2014 to $474.5 billion. This would be a significant acceleration in expenditure growth, increasing from 6.0 percent in 2013 and from only 0.2 percent in 2012. Medicaid expenditures on such payments are projected to reach $802.9 billion by 2023, growing at an average rate of 6.4 percent per year over the next 10 years. Federal government spending on these Medicaid payments is estimated to have amounted to $284.5 billion in 2014 and is projected to grow to $478.8 billion by 2023.

Growth in Medicaid benefit expenditures in 2014 is largely attributable to the start of the Medicaid eligibility expansion that occurred on January 1, 2014 under the Affordable Care Act. The majority of the projected acceleration was driven by new expenditures for newly eligible enrollees, but the projected increase in the growth rate also reflects additional enrollment among non-newly eligible persons.

Figure 4 shows historical and projected Medicaid benefit expenditures by four major categories of services: acute care fee-for-service, long-term care, capitation payments and premiums, and DSH.

**Figure 4—Past and Projected Medicaid Expenditures for Medical Assistance Payments, by Type of Payment, FY 2000–FY 2023[36]**

(in billions)




Over the next 10 years, expenditures for capitation payments and premiums are expected to grow the fastest of the major Medicaid service categories, as shown in figure 4. These expenditures are projected to grow 10.7 percent per year on average from 2014 to 2023, which would be 4.3 percentage points faster than overall Medicaid benefit growth. Relatively faster projected growth in these payments is in part the result of the Medicaid eligibility expansion under the Affordable Care Act, since most of the new enrollees are expected to be enrolled in managed care plans. Moreover, expenditures for capitation payments and premiums have grown substantially more quickly than other service expenditures in recent history.[37] From 2001 to 2013, Medicaid payments for managed care plans and other premiums grew on average 11.9 percent per year, faster than overall Medicaid benefit expenditures (6.0 percent).

[36] The data for this graph can be found in table 14 of Appendix E.

[37] Centers for Medicare & Medicaid Services, 2011 *Medicaid Managed Care Enrollment Report*.

Acute care fee-for-service Medicaid expenditures are projected to grow at an average rate of 3.5 percent per year over the next decade. In 2014, these expenditures are estimated to have grown by 7.4 percent—a sharp increase that was partly due to the increase in adult enrollees related to the eligibility expansion, as some of their costs were covered through fee-for-service programs (although the majority of the expenditures are expected to be paid under managed care). In addition, the 2014 growth rate reflects the temporarily increased primary care physician payment rates provided by the Affordable Care Act.[38]

Medicaid spending on fee-for-service long-term care is projected to grow by 3.2 percent on average for 2014 through 2023. Aged and disabled enrollees receive the vast majority of long-term care services, and growth in these expenditures is driven in part by growth in enrollment among these beneficiaries. Newly eligible adults, along with other adults and children, are expected to need very few long-term care services. In recent history, Medicaid expenditures on these services have increased very slowly; from 2009 to 2013, long-term care expenditures grew at an average rate of only 1.8 percent per year. This limited growth reflects relatively slower growth in reimbursement rates and utilization of long-term care services. Additionally, there has been increased use of managed care for long-term care in Medicaid over the last several years, which has slowed fee-for-service expenditure growth in the program. As a result, the projected growth rate of long-term care expenditures through fee-for-service programs is notably slower than in last year's report.[39]

Medicaid DSH expenditures are typically expected to grow at the same rate as the Medicaid Federal DSH allotments, which are based on the Consumer Price Index (CPI). The Affordable Care Act, however, prescribes reductions in Medicaid DSH allotments, and subsequent legislation has extended those reductions through

[38] Based on a review of the most recently available data, it appears that most of the payments related to the primary care physician payment rate increases that were incurred in 2013 were paid and reported in 2014.

[39] Use of home and community-based services can substantially reduce expenditures for enrollees who would otherwise have had to enter a nursing home or who transition from institutional to community settings. Conversely, the expanding use of these services, by those who would not otherwise have had nursing home care, adds to overall program costs. Growth in the use of home and community long-term care reflects the increase in the number of home and community-based waivers in Medicaid. In addition, in *Olmstead v. L.C.*, 119 S. Ct. 2176 (1999), the Supreme Court ruled that under the Americans with Disabilities Act of 1990, States must provide community-based placement for persons with mental disabilities when appropriate and consistent with consumer wishes. This ruling is also expected to have led to an increase in non-institutional long-term care expenditures in Medicaid.

2025.[40] Thus, the average growth rate for DSH spending is projected to be −1.9 percent over the next 10 years.

Administration costs are estimated to have amounted to $24.4 billion in 2014, reflecting an increase of 6.5 percent. This growth follows a smaller increase in 2013 of 3.5 percent. The projected growth is expected to have been driven by additional administration costs associated with the increase in enrollment and expenditures in 2014, while health information technology incentive payments are expected to have decreased slightly. Administration costs are projected to reach $32.1 billion by 2023, growing at an average annual rate of 3.4 percent. These projected costs include additional administration expenditures related to the Medicaid eligibility expansion under the Affordable Care Act.

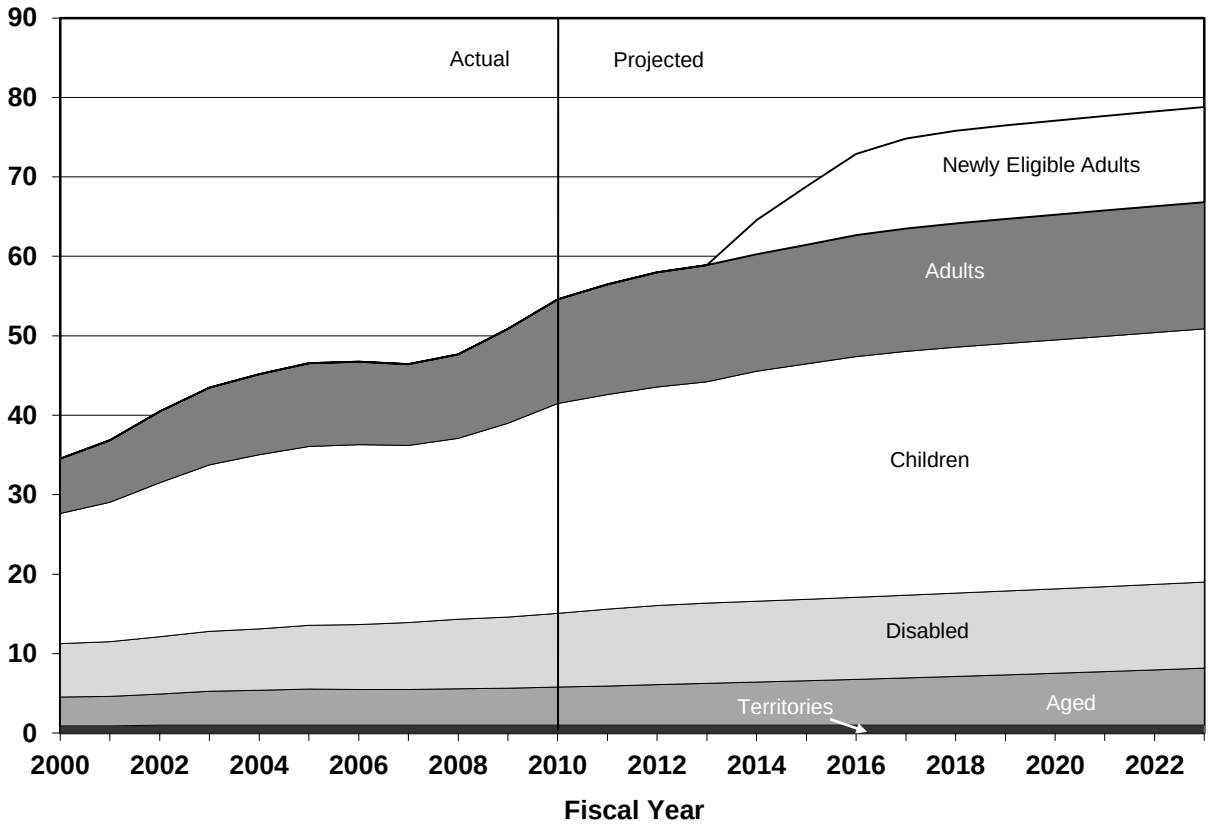
Enrollment

Increasing levels of Medicaid enrollment are expected to contribute to expenditure growth over the next 10 years. Historical and projected Medicaid enrollments are shown by category in figure 5.

[40] Reductions to DSH allotments were prescribed for 2017 through 2024 under prior law. The Medicare Access and CHIP Reauthorization Act of 2015 (Public Law 114-10) delayed the first year of the reductions until 2018, made changes to the annual reduction amounts, and extended the reductions through 2025. The effects of this legislation are not included in the projections shown in this report.

**Figure 5—Past and Projected Numbers of Medicaid Enrollees, by Category, FY 2000–FY 2023[41]**

(in millions of person-year equivalents)




Total enrollment is estimated to have increased from 58.9 million PYE in 2013 (including 1.0 million enrollees in the U.S. Territories) to 64.6 million PYE in 2014, and it is projected to increase to 78.8 million PYE by 2023.

Enrollment in 2014 is estimated to have increased by 9.6 percent, primarily due to the start of the Medicaid eligibility expansion. Excluding the newly eligible adults, enrollment in 2014 is estimated to have increased by 2.3 percent (faster than the rate of 1.6 percent estimated in 2013) and is driven in part by expected increases in participation in Medicaid due to outreach efforts and enrollment simplifications.

The majority of the increase in Medicaid enrollees attributable to the eligibility expansion is assumed to occur during the period 2014–2016, with most of the increase taking place in 2014. Enrollment growth in 2015 and 2016 is estimated to average 6.3 percent per year, reflecting increased enrollee participation and assumed increases in the number of States expanding Medicaid eligibility after 2014.

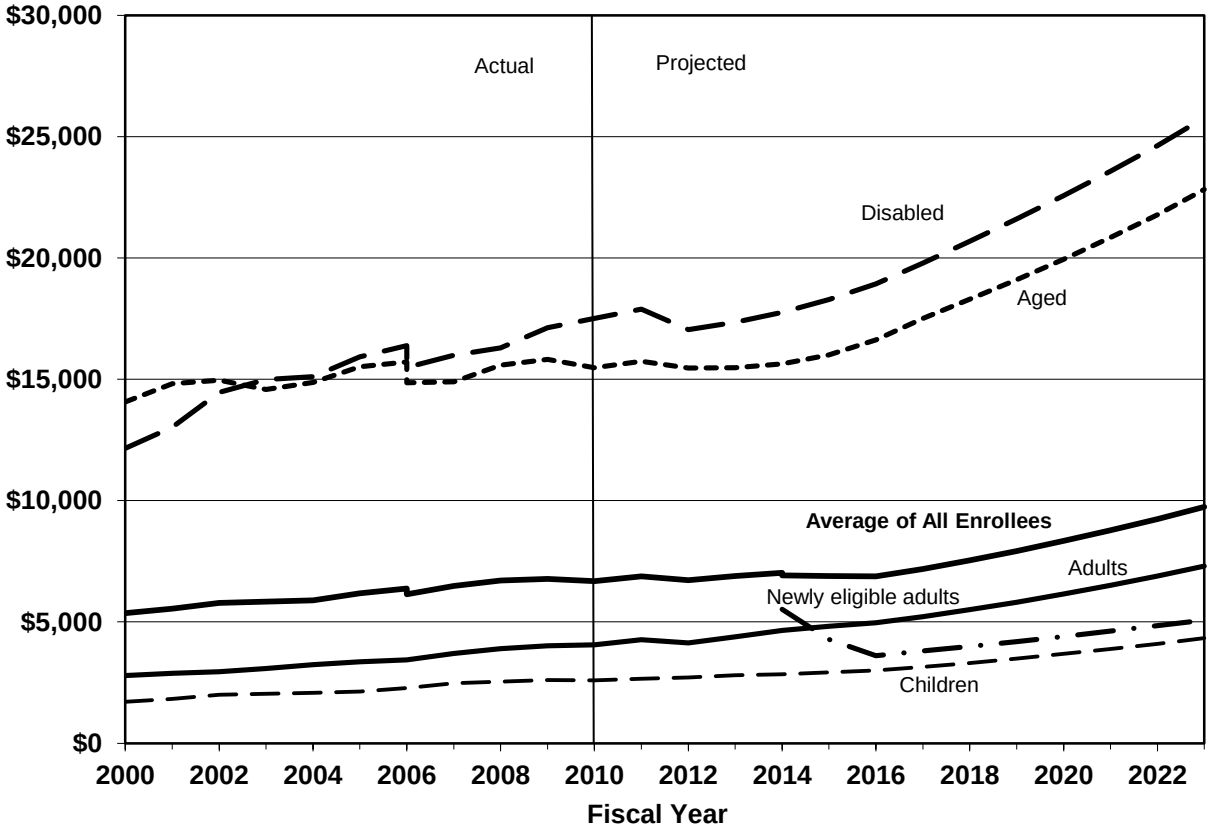
[41] The data for this graph can be found in table 15 of Appendix E.

The total number of Medicaid enrollees is projected to increase during 2017 through 2023 at about 1.1 percent per year, reflecting population growth, stable economic assumptions, and an increase in the number of aged enrollees as baby boomers continue to reach age 65. Excluding the newly eligible enrollment groups, growth in the number of aged adults is expected to be faster than for the other categories of enrollment; the average annual increase for aged adults is estimated to be 3.2 percent over the next 10 years, as compared to 1.1 percent for other non-newly eligible enrollment groups.

Per Enrollee Costs

In addition to increases in Medicaid enrollment, the average costs of benefits for all enrollees are projected to increase over the next 10 years. Figure 6 displays historical and projected average Medicaid benefit expenditures per enrollee for all enrollees collectively and by eligibility group.

**Figure 6—Past and Projected Medicaid Expenditures on Medical Assistance Payments Per Enrollee, by Enrollment Category, FY 2000–FY 2023**[42]




Note: Per enrollee amounts for 2011, 2012, and 2013 are based on actual expenditures and estimated enrollment.

[42] The data for this graph can be found in table 16 of Appendix E.

Per enrollee benefits costs are projected to grow somewhat faster over 2014 to 2023 than they did in the previous 10-year period. Aged Medicaid enrollee benefit costs (which grew at an average annual rate of 0.6 percent from 2004 to 2013 and are projected to grow at an average annual rate of 4.0 percent from 2014 to 2023) and disabled Medicaid enrollee benefit costs (with average annual growth of 1.5 percent over 2004 to 2013 and 4.0 percent over 2014 to 2023) are projected to exhibit the largest differences between the prior 10-year period and the next 10 years.

These differences are in part due to historical events that led to slower increases in expenditure growth. The largest change was the start of the Medicare prescription drug benefit in 2006, which shifted prescription drug coverage from Medicaid to Medicare for persons enrolled in both programs (dual-eligible beneficiaries). This change significantly reduced per enrollee costs in 2006 for aged and disabled enrollees, as many were dually eligible. In addition, the slow rate of growth of long-term care expenditures in recent history contributed to limited growth in the benefit costs for aged and disabled enrollees, as these individuals receive the vast majority of long-term care services. Expenditures for institutional long-term care (primarily nursing facility services) grew very slowly, while costs for community long-term care (including home and community-based waiver services) grew relatively quickly, although the growth rate has decelerated more recently. Slow cost growth for long-term care through fee-for-service programs was partially offset by increasing managed care expenditures, especially for managed long-term care services. During and immediately after the 2007-2009 recession, States took stronger actions to limit Medicaid expenditure growth, including freezing or reducing provider reimbursement rates.[43]

Aged and disabled enrollees are projected to experience the lowest average benefit cost growth over the next 10 years compared to other enrollee groups due in large part to projected relatively slower growth in the cost of long-term care services. States are expected to continue to use more home and community-based long-term care to postpone enrollees' need for long-term care facilities as long as possible. In addition, States are projected to shift long-term care expenditures from fee-for-service programs into managed care. As a result, managed care expenditures are expected to grow more quickly and to constitute a larger share of benefits for aged and disabled enrollees.

While average benefit cost growth is expected to be slower for aged and disabled enrollees over the next 10 years compared to other populations in Medicaid, it is nevertheless expected to be faster than in recent history. In addition to the deceleration of historical growth by legislative changes that affected Medicaid, States have instituted fewer provider reimbursement rate freezes and reductions

[43] V. Smith, *et al.*, "Medicaid in an Era of Health & Delivery System Reform: Results from a 50-State Medicaid Budget Survey for State Fiscal Years 2014 and 2015," Kaiser Family Foundation, October 2014.

and have allowed for more rate increases, and it is expected that these increases will continue in the future.[44]

Benefit costs per enrollee for adults (excluding newly eligible adults) are projected to grow somewhat faster over the next 10 years (from 3.6 percent on average during the period 2004 to 2013 to 5.2 percent on average during 2014 to 2023), as are benefit costs per enrollee for children (from 3.3 percent on average over 2004 to 2013 to 4.4 percent on average over 2014 to 2023). Similar to the experience for aged and disabled enrollees, in the past several years States have taken steps to control the Medicaid expenditure growth that occurred during and after the 2007-2009 recession, especially in limiting or reducing provider reimbursement rates.[45]

Spending for managed care represented over half of Medicaid expenditures for adults and children in 2013, and, for these enrollees, this type of care is expected to be the fastest growing service category over the next 10 years. More recently, States have made fewer provider reimbursement rate reductions and are instituting more rate increases, and together these factors are anticipated to contribute to somewhat faster expenditure growth.[46]

Although the estimated average benefit costs for newly eligible adults are expected to be greater than those for other adults in 2014, such expenditures are projected to ultimately be lower over the next several years. More detail on these projections is provided in the next section of this report.

Enrollment Mix

The growth in average Medicaid benefit expenditures per enrollee for all enrollment categories is significantly affected by the relative proportion of enrollment across these categories. In this report, the "enrollment mix" is defined as the contribution of the change in these relative proportions to the growth in Medicaid benefit expenditures per enrollee. This concept is similar to "age-gender mix" effects in other health care plans or programs (which measure the contribution to health care expenditures of changes in the relative proportion of enrollees by age and by gender in a plan). The enrollment mix differs in that it does not specifically consider gender and considers age in only broad ranges, but does take into account the disability status of enrollees.

The enrollment mix is an important consideration in analyzing and projecting Medicaid benefit expenditures. While the effects of age-gender mix on other programs are usually relatively small and do not change significantly from year to year, the effect of enrollment mix on Medicaid expenditures can be substantially

[44] *Ibid.*
[45] *Ibid.*
[46] *Ibid.*

larger or smaller and may vary greatly each year. This variation can occur because Medicaid enrollment categories experience substantially different average costs—aged and disabled enrollees' average Medicaid costs are much greater than those of child and adult enrollees—and because the enrollment growth for these groups may vary among categories and may fluctuate annually.

For this report, the enrollment mix is measured as the difference between the increase in Medicaid benefit expenditures per enrollee and the increase in Medicaid benefit expenditures per enrollee if enrollment were held constant each year. To calculate this difference, enrollment was set at 2010 levels for each enrollment category.[47]

From 2004 to 2013, Medicaid benefit expenditures per enrollee grew at an average annual rate of 1.7 percent. The effects of changes in enrollment mix over this time period reduced spending by an average of 0.2 percentage point per year; that is, excluding the impacts of changes in enrollment, Medicaid benefit expenditures per enrollee would have grown 1.9 percent per year. The effects of the changes in enrollment mix on spending ranged from −2.4 percent to 1.4 percent over these 10 years. The negative effects of the changes in enrollment mix were the result of relatively faster enrollment growth for children and adults than for aged and disabled enrollees, especially from 2008 to 2010.

Medicaid benefit expenditures per enrollee are estimated to have increased 0.3 percent in 2014. Excluding the impact of the change in the enrollment mix, Medicaid benefit expenditures per enrollee are estimated to have increased 3.1 percent, which would be faster than any single-year growth rate since 2009. As described previously in this section, this relatively faster rate of growth is expected to have been driven by States' actions to increase provider payment rates and program benefits, following years in which States took more actions to limit the rate of program expenditure growth. In addition, the increase in benefit expenditures per enrollee (excluding the impact of changes in the enrollment mix) is attributable to sections of the Affordable Care Act other than the eligibility expansion (notably greater expenditures for the temporary increase in primary care physician payments).

While Medicaid benefit expenditures per enrollee are projected to grow more rapidly over the next 10 years at an average annual rate of 3.5 percent, changes in enrollment mix are projected to decrease per enrollee Medicaid expenditure growth by an average of 0.5 percentage point per year over this time period; thus, excluding the effect of changes in the enrollment mix, Medicaid benefit expenditures per

[47] 2010 was selected as the base year for enrollment because it was the latest year for which complete Medicaid enrollment data were available. A review of the measurement of enrollment mix using other years as the base year showed no significant differences in results.

enrollee are projected to grow at an average annual rate of 4.1 percent.[48] This difference in the per enrollee growth rate is largely the result of the addition of newly eligible adult enrollees and increases in the enrollment of non-newly eligible adult and child enrollees that began in 2014 under the Affordable Care Act. As the benefit costs for these enrollees are projected to be less than the average benefit costs of all Medicaid enrollees (substantially less than the costs of aged and disabled enrollees and, on average, somewhat less than the costs of current adult enrollees after 2015), the addition of these new enrollees is expected to slow growth in expenditures per enrollee in the next several years. The effect of the new enrollees due to the Affordable Care Act is partially offset by relatively faster growth in the number of aged Medicaid enrollees, as the oldest members of the baby boom generation reach age 65.

Excluding the effects of changes in the enrollment mix, Medicaid benefit expenditures per enrollee grew at an average annual rate of 1.9 percent per year from 2004 through 2013. From 2014 to 2023, Medicaid benefit expenditures per enrollee, minus the effects of estimated changes in the enrollment mix, are projected to increase 4.1 percent per year on average. This difference is driven in part by several recent legislative acts (the most significant of which was the Medicare Modernization Act of 2003) that generally provided for one-time reductions to the rate of Medicaid expenditures per enrollee. Moreover, efforts by States to limit Medicaid expenditure growth (most notably, in 2011 and 2012) are not projected to continue with the same intensity into the future. Finally, medical price inflation is also projected to be modestly faster in the next 10 years than in recent history.

Impacts of Recent Legislation

In addition to the effects of the Affordable Care Act, the impacts of the following legislative actions are also reflected in these projections:

- The American Taxpayer Relief Act (Public Law 112-240) extended the qualifying individuals (QI) program and transitional medical assistance (TMA) into 2014;

- The Bipartisan Budget Act (Public Law 113-67) provided additional extensions for the QI program and TMA and strengthened Medicaid's third-party liability enforcement;

- The Protecting Access to Medicare Act of 2014 (Public Law 113-93) further extended the QI program and TMA and adjusted future DSH allotments by decreasing reductions to the allotments through 2019 and then increasing the reductions in 2024; and

[48] These figures do not sum due to rounding.

- The Veterans Access, Choice, and Accountability Act (Public Law 113-146) provided for additional Veterans Administration (VA) funding, which is expected to reduce Medicaid expenditures in 2015 and 2016, and made changes to VA pension rules, which are expected to increase Medicaid enrollment and expenditures in the future.

The net impact of these laws on Medicaid expenditures from 2014 through 2023 is projected to be an increase of $3.5 billion, with costs attributed to the extensions of the QI program and TMA and changes to VA pensions, offset in part by savings related to adjustments to DSH allotments. These changes to the program are projected to have a negligible effect on Medicaid enrollment.[49]

[49] The effects of the Medicare Access and CHIP Reauthorization Act of 2015 (Public Law 114-10) are not included in the projections in this report.

### *D. IMPACTS OF THE MEDICAID ELIGIBILITY EXPANSION*

With respect to Medicaid, the most significant provision of the Affordable Care Act is the expansion of Medicaid eligibility, beginning in 2014, to almost all persons under age 65 who are living in families with incomes below 138 percent of the FPL (and who are citizens or eligible legal residents).[50] This expansion is estimated to have added 4.3 million PYE to enrollment during the 9 months that the new eligibility rules were in effect for FY 2014 and is expected to add 12.0 million PYE by 2023 (represented by adults who have met the definition of "newly eligible" in section 1905(y)(2) of the Social Security Act).[51]

Expenditures for newly eligible adults are estimated to have amounted to $23.7 billion in 2014 and are projected to total $460 billion over 2014 through 2023. Of these costs, the majority are expected to be paid by the Federal government—$430 billion, or about 93 percent—and the States are anticipated to spend an additional $30 billion. The Affordable Care Act specifies a much higher Federal matching rate for newly eligible beneficiaries, decreasing from 100 percent in 2014, 2015, and 2016 to 90 percent by 2020 and beyond.

In 2014, the average benefit costs of newly eligible adult enrollees are expected to have been substantially greater than those for non-newly eligible adult enrollees in the program. Newly eligible adults are estimated to have had average benefit costs of $5,517 in 2014, 19 percent greater than non-newly eligible adults' average benefit costs of $4,650. These estimates are significantly different from those in previous

[50] While previous reports presented estimates of Medicaid expenditures and enrollment for all sections of the Affordable Care Act, this report presents estimates for only the eligibility expansion sections of the legislation. Moreover, these estimates do not include costs for persons who were eligible under previous eligibility criteria and would not have been enrolled (and thus are not newly eligible).

[51] 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 "Adults" is expected to have the greatest increase in enrollment in Medicaid under the Affordable Care Act, since the law does not require individuals to be parents of eligible children. "Newly eligible" individuals are persons between the ages of 19 and 64 who, beginning in 2014, are enrolled in the new adult group and who would not have been eligible for full Medicaid benefits, benchmark coverage (described in subparagraph (A), (B), or (C) of section 1937(b)(1) of the Social Security Act), or benchmark-equivalent coverage (described in section 1937(b)(2) of the Social Security Act) as of December 1, 2009. An individual may also be newly eligible if he or she would have been eligible but could not have been enrolled for such benefits or coverage because the applicable Medicaid waiver or demonstration had limited or capped enrollment as of December 1, 2009. The estimates of Medicaid enrollment and expenditures due to the eligibility expansion also include State programs that have received waivers to cover newly eligible enrollees in qualified health plans on the Health Insurance Marketplaces.

reports, in which average benefit costs for newly eligible adults in 2014 were estimated to be 1 percent lower than those of non-newly eligible adults.[52]

There are several explanations for the difference between the estimates in this year's report and those in previous reports. First, most of the States that implemented the eligibility expansion are covering newly eligible adults in Medicaid managed care programs, and on average the capitation rates for the newly eligible adult enrollees were significantly greater than the projected average costs previously calculated. In particular, two assumptions varied significantly. In many States, the capitation rates for managed care plans included significant adjustments to reflect a higher level of acuity or morbidity among newly eligible adults compared to non-newly eligible adults. In most States, this adjustment was positive (in other words, that newly eligible adults had a higher level of acuity than non-newly eligible adults), and in some cases the adjustment was substantial. In last year's report, the level of acuity for newly eligible adults was estimated to be less than the acuity level of non-newly eligible adults; for persons who were previously uninsured and are newly eligible for Medicaid, the costs were projected ultimately to be about 30 percent less than those for non-newly eligible adults. A significant amount of the per-enrollee cost difference estimated in last year's report is likely due to many pregnant women being included with non-newly eligible adults, as the health care costs of pregnant women are typically greater than those of other non-disabled non-aged adults in Medicaid. However, the modeling results suggest that the acuity level of newly eligible adults would on average be lower than that of non-newly eligible adults, even after adjusting for the health care costs for pregnant women.[53]

Second, the capitation rates for newly eligible adults also included other adjustments. A number of States projected increased costs due to pent-up demand, anticipating that many enrollees would have been previously uninsured and would use additional services in the first several months of coverage. The rates in some States also included adjustments for adverse selection with the expectation that the

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[52] *2013 Actuarial Report on the Financial Outlook for Medicaid*: http://www.medicaid.gov/medicaid-chip-program-information/by-topics/financing-and-reimbursement/downloads/medicaid-actuarial-report-2013.pdf.

[53] It is difficult to generalize about the adjustments that the States have estimated for several reasons. States may have defined differently the non-newly eligible adult population that served as the basis for comparison for the newly eligible adults. (For example, States may have compared the newly eligible adults to only non-newly eligible childless adults or to childless adults and parents or caretaker adults, or States may have compared the newly eligible adults to only non-disabled adults or to non-disabled adults and some adults with disabilities.) Most States also removed from the comparison pregnant women who are non-newly eligible for Medicaid, but the projections in this report include pregnant women among non-newly eligible adults; thus, it is difficult to compare the assumptions the States made with the projections and analysis in this report directly. In addition, States used various methodologies to develop this adjustment and in some cases combined it with other adjustments (for example, for adverse selection or pent-up demand).

persons who were most likely to enroll in the first year would be those with the greatest health care needs. In previous reports, the projections were adjusted in 2014 to account for these effects, increasing the projected expenditures per enrollee by about 12 percent. In many cases, the capitated rates included adjustments for these factors that were substantially greater than this percentage.

Data for newly eligible adults are still limited. While CMS has reported some enrollment and expenditure data for this group, data on claims and managed care encounters, along with data on the health status and demographics of these enrollees, are not yet available. Thus, there is still considerable uncertainty about the health care costs of newly eligible adults in 2014, as well as for future years.

Given the uncertainty inherent in covering a large new population in Medicaid (many of whom were expected to have been previously uninsured), most States that implemented the eligibility expansion included risk-sharing arrangements in their contracts with managed care plans for newly eligible adults in 2014.[54] The most common approaches were to use a risk corridor or to use a minimum medical loss ratio. Under a risk corridor, the managed care plans would return some payments to the State and the Federal government if the average benefits per enrollee or loss ratio fell below a certain level or ratio, and the plans would receive additional payments from the State and the Federal government if the average benefits per enrollee or loss ratio exceeded a certain level or ratio. In States requiring a minimum medical loss ratio, the managed care plans would return some payments to the State and the Federal government if the loss ratio fell below a certain level, but the plans would not receive additional funding if the loss ratio was higher than expected. Most of these arrangements are expected to continue into 2015 as well.

As a result of these arrangements, there is the potential that the ultimate payments for newly eligible adults in 2014 could be notably greater than or less than those currently reported. The settlement of these provisions will not be completed until later in 2015. Based on the comparison to the projections in prior reports, there is a greater likelihood that funds would be returned to the States and the Federal government than that the States and Federal government would be required to provide additional funds to the plans. It is also possible that the amount returned to the States and the Federal government could represent a significant portion of the payments made in 2014; however, since data are not yet available, the projections in this report assume that there will be no net payments due to these arrangements.

For 2015, the total projected expenditures were adjusted to reflect about 50 percent of the relative difference between the model projections and the preliminary actual

[54] Of the States that did not use a risk-sharing arrangement, several covered newly eligible adults under fee-for-service arrangements, and one covered enrollees through private health insurance plans using premium assistance. Several other States chose not to use risk-sharing arrangements.

expenditures from the CMS-64 reports in 2014. This adjustment is based on two assumptions: (i) that the effects of pent-up demand and adverse selection are substantially less in the second year of the eligibility expansion and (ii) that preliminary data and additional analysis would be incorporated into the development of capitation rates for Medicaid managed care plans. As capitation rates for 2015 plans are not yet available for all States, it is not known what amounts States have projected for these costs in 2015, and the actual costs per enrollee could differ significantly with these projections and assumptions. The projected per enrollee costs for newly eligible adults in 2015 are about 11 percent less than those for other adults in 2015.

For 2016 through 2023, the projected expenditures from the OHRM are used in this report. Based on those projections, per enrollee costs for newly eligible adults are between 27 percent and 30 percent less than per enrollee costs for other adults.

The estimates for newly eligible adult enrollees in 2014 have also increased since the 2013 report. In this year's report, enrollment for this group is estimated to have been 4.3 million PYE in fiscal year 2014, which is equivalent to about 5.7 million enrollees over the calendar year. Preliminary enrollment data suggest that monthly enrollment increased substantially over the course of the year and that enrollment reached about 7 million by September 2014.[55] In the 2013 report, the estimate for newly eligible adult enrollment in 2014 was lower: 3.7 million PYE, or the equivalent of about 4.9 million enrollees over the calendar year.

There are several reasons for the differences between the projections in the 2013 report and this year's projections, which are based on preliminary enrollment data. For example, there may have been more people eligible under the new criteria than estimated previously, or there may have been a greater participation rate among newly eligible persons than previously assumed. In addition, there may have been more persons enrolled in Medicaid through 2013 who were technically newly eligible in 2014 (either persons who were covered as part of a limited-benefit waiver but were considered newly eligible under the 2014 criteria, or persons who were covered in States that expanded eligibility after the Affordable Care Act was enacted but prior to 2014).

Due to the limited data on newly eligible enrollees in 2014 and the uncertainties regarding both their health care costs and enrollment in the program, the estimates and projections regarding this population may differ significantly from the projections shown in this report, as they depend on a number of factors that are unknown at this point in time.

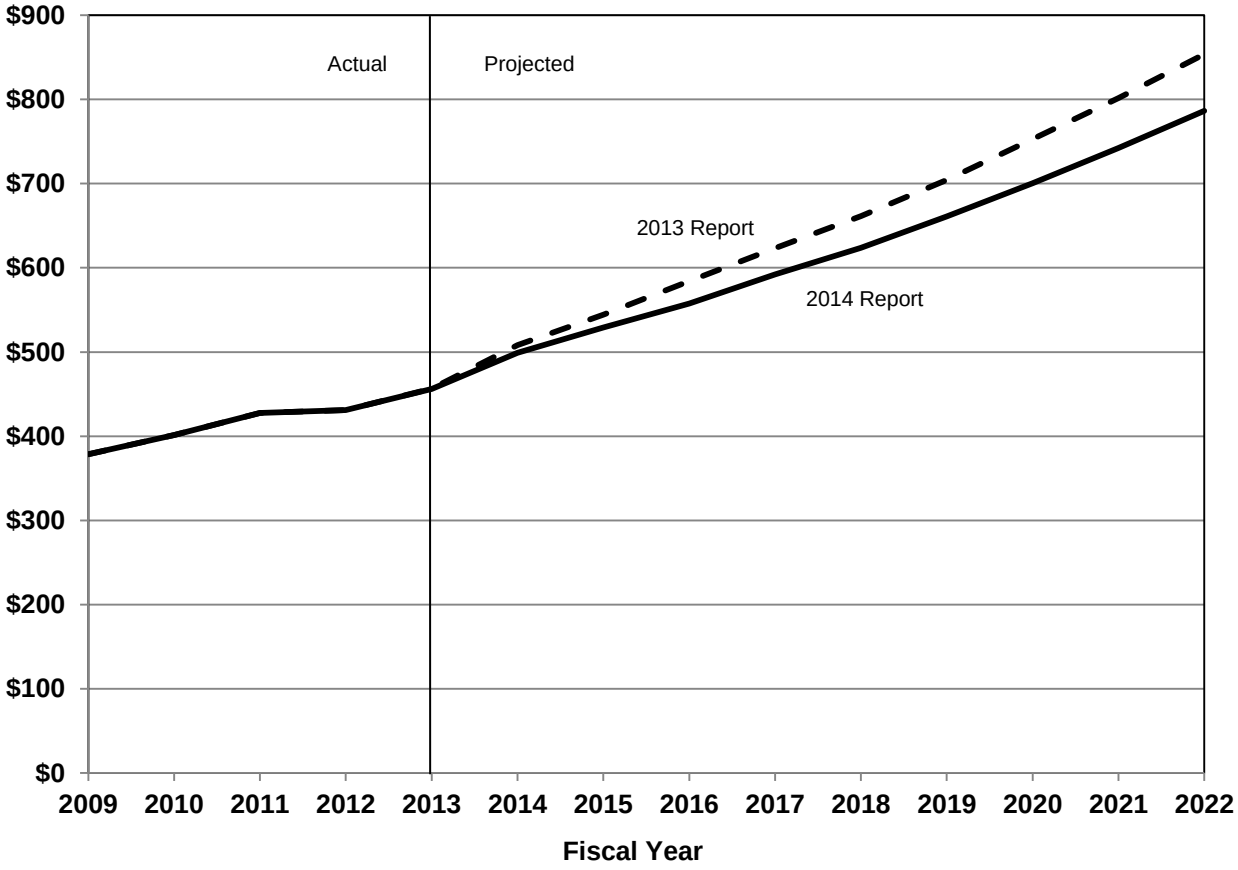
[55] These figures are based on preliminary 2014 data available from the CMS-64.

### *E. COMPARISON TO 2013 REPORT PROJECTIONS*

The projections of Medicaid expenditures in this report are slightly lower than in the *2013 Actuarial Report on the Financial Outlook for Medicaid*. Figure 7 compares the 2014 projections of total Medicaid expenditures (including Federal and State) to those in last year's report.

**Figure 7—Projected Medicaid Expenditures: Comparison of 2013 versus 2014 Actuarial Reports on the Financial Outlook for Medicaid, FY 2009–FY 2022[56]**

(in billions)




Projected spending of $786.6 billion in 2022 is 7.9 percent lower than the corresponding amount in last year's report ($853.6 billion). In total, the 10-year projections from 2013 through 2022 are $341.6 billion, or 5.3 percent, lower.

This reduction is the result of several factors. First, 2014 expenditures in this year's report ($498.9 billion) were estimated to be lower than in last year's report ($508.0 billion), representing a 1.8-percent difference. Most of the difference is attributable to slower per enrollee expenditure growth for the non-newly eligible

[56] The data for this graph can be found in table 17 of Appendix E.

enrollees in 2014 than projected last year, with States continuing to try to control cost growth. This decrease is partly offset by greater expenditures for newly eligible adults than previously projected. Lower expenditures in 2014 for non-newly eligible Medicaid populations, along with a decrease in estimated costs for newly eligible adults after 2014, result in lower projected expenditures in each year through 2022.

The projected increases in utilization (or the residual factors) were slower in this year's report than in last year's. As recent historical expenditures have grown more slowly, the outlook for future utilization growth in the program has become more negative. In addition, the assumption regarding how many States would expand Medicaid in the future has been reduced (from States covering 65 percent of potentially newly eligible adults to 60 percent), and this modification also contributes to lower projected expenditures by 2022.

Medicaid enrollment is expected to be somewhat lower by 2022 than projected in the 2013 report for the same year. Enrollment is projected to reach 78.2 million PYE by 2022, whereas enrollment was projected to be 80.9 million by 2022 in last year's report (a difference of 3.3 percent). This difference is due to updated partial enrollment data for 2011, partial enrollment data for 2012, and the assumption that fewer States would elect to implement the eligibility expansion than assumed last year. Medicaid enrollment from 2013 to 2022 is projected to grow at an average rate of 3.0 percent, which is lower than last year's projection of 3.3 percent over the same period.

### *F. 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.[57] Medicaid spending in the 2013 NHE accounts represented 15.4 percent of total NHE. Private health insurance was the largest source of spending on health care in 2013, accounting for 32.9 percent of total NHE, while Medicare paid for 20.1 percent.[58]

The historical NHE also presents health care spending by the original source of financing (or sponsor). In calendar year (CY) 2013, Medicaid represented 35.3 percent of Federal government expenditures on health services and supplies and 38.6 percent of such spending by State and local governments. Medicaid is slightly smaller than Medicare as a share of Federal government expenditures on health services and supplies (Medicare accounted for 36.2 of Federal expenditures in 2013). Medicaid is the largest source of Federal general revenue-based spending on health services. 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 mostly from Federal general revenues. In contrast, Medicaid does not have any dedicated Federal revenue source; all Federal spending on Medicaid comes from general revenue. For State governments, Medicaid is the largest source of general revenue-based spending on health services, although spending on all other health programs in 2009 exceeded spending on Medicaid, largely because of the temporary increases to the FMAP.[59]

Medicaid has a greater number of enrollees than Medicare. In FY 2013, Medicaid was estimated to have covered 58.9 million PYE (including persons residing in U.S. Territories), and 72.5 million people were enrolled in the program at some point during the year. In comparison, Medicare covered an average of 52.3 million people

[57] 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 (iii) the NHE accounts use somewhat different definitions of services than do the data presented in this report.

[58] Hartman, *et al*., "National Health Spending In 2013: Growth Slows, Remains In Step With The Overall Economy."

[59] *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/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Downloads/dsm-11.pdf.

during CY 2013.[60] 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 (43.5 million beneficiaries in 2013), but only those aged individuals with very low incomes—and who apply for the coverage—become Medicaid enrollees (estimated at 5.3 million PYE). Enrollment for persons with disabilities was more similar between the two programs; Medicaid covered an estimated PYE average of 10.1 million blind or disabled persons in 2013, while Medicare covered 8.8 million disabled beneficiaries. Although the definition of disability is essentially the same for the two programs, the other eligibility criteria are entirely different.[61] 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 an estimated $146.1 billion of total Medicaid expenditures in 2013, or 34 percent of benefits.[62]

Among the different types of health care services, Medicaid plays the largest role in the funding of long-term care. According to the 2013 NHE, Medicaid is estimated to have paid for 36.5 percent of all freestanding home health care and 30.1 percent of all freestanding nursing home care in the U.S. In addition, Medicaid covered an estimated 55.7 percent of other health, personal, and residential care in 2013, including payments for intermediate care facilities and for home and community-based waivers.[63] Medicaid has a major responsibility for providing long-term care because the program covers some aged and many persons with disabilities, 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 8 shows the percentage of total spending for the major health care services that Medicaid covers.

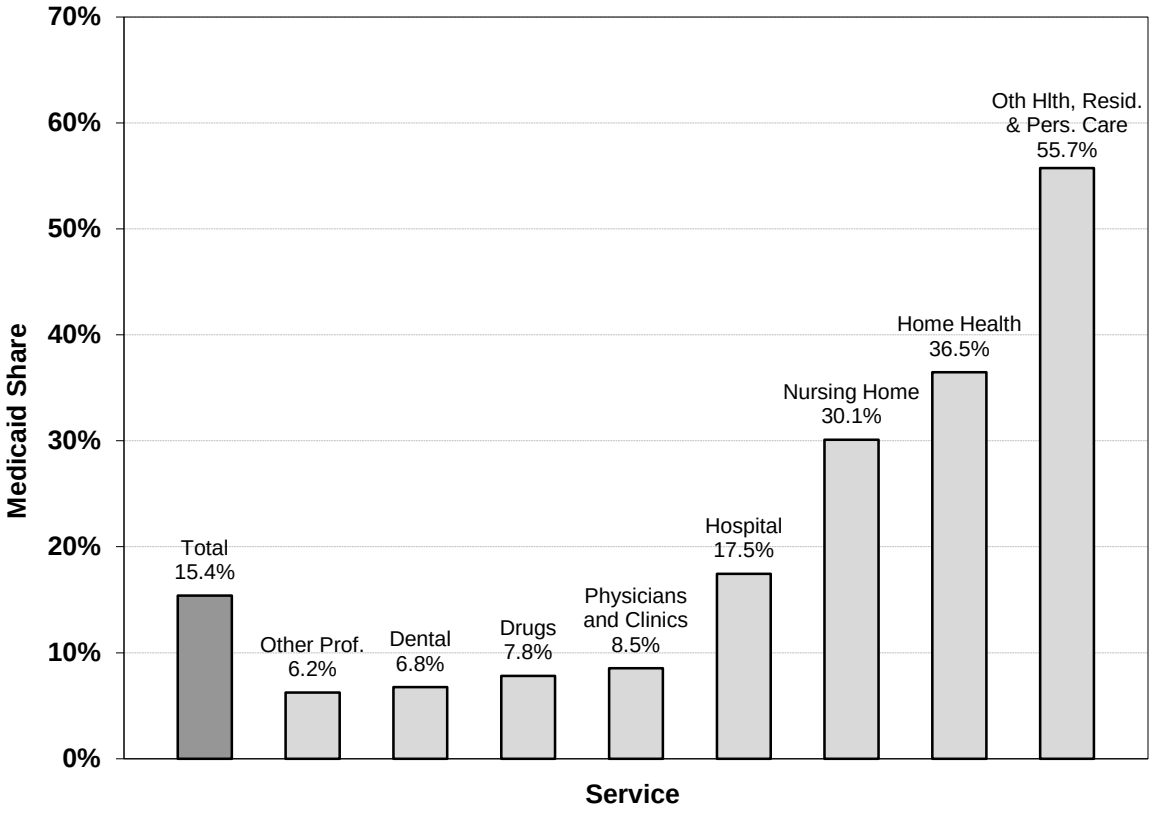
[60] *The 2014 Annual Report of the Boards of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds*. http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/ReportsTrustFunds/downloads/tr2014.pdf.

[61] Medicaid eligibility for individuals with disabilities is based on income and asset criteria (among other measures). 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 persons with disabilities qualify for coverage under both Medicaid and Medicare.

[62] These figures reflect actual 2013 reported expenditures from the CMS-64 and projected 2013 enrollment and expenditure information that are based on 2010 and 2011 APS data.

[63] Hartman, *et al*., "National Health Spending In 2013: Growth Slows, Remains In Step With The Overall Economy."

**Figure 8—Medicaid Expenditures as Percentage of Total U.S. Health Expenditures, by Service Category, CY 2013**




Medicaid represents a significant share of the Federal and State budgets. In FY 2014, out of a total of $3,506 billion spent by the Federal government for all purposes, $301 billion (or 8.6 percent) can be attributed to Medicaid. Under the President's Fiscal Year 2016 Budget, Federal outlays on Medicaid are projected to account for 8.9 percent of all Federal outlays by 2023.[64]

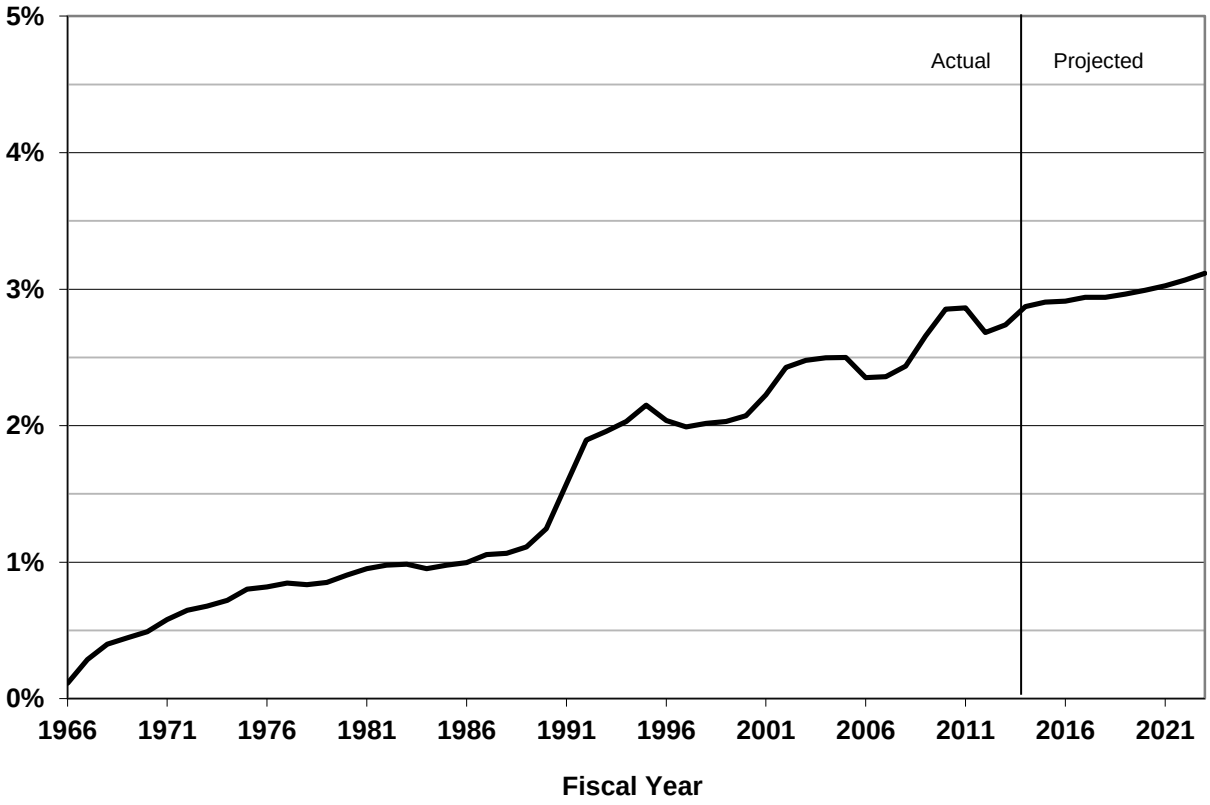
According to the National Association of State Budget Officers (NASBO), Medicaid represented an estimated 24.5 percent of all State government spending in State fiscal year 2013.[65] This amount, however, includes all Federal contributions to State Medicaid spending, as well as expenditures from State general revenue funds and other State funds (which for Medicaid may include provider taxes, fees, donations, assessments, and local funds). According to NASBO, Medicaid was the largest program in 2013. When only State general revenues are considered, however, Medicaid spending constituted an estimated 18.9 percent of State expenditures in 2013, placing it well behind elementary and secondary education. The share of

[64] More information on the Federal budget is available in *Analytical Perspectives, Budget of the United States Government, Fiscal Year 2016*.
[65] *State Expenditure Report: Examining Fiscal 2012–2014 State Spending*, National Association of State Budget Officers, 2014.

State general revenues devoted to Medicaid decreased from 2012 to 2013 (from 19.2 percent to 18.9 percent). Overall in 2013, State general revenue expenditures for Medicaid increased by 2.8 percent, which was slower than the overall State general revenue growth rate of 4.3 percent.

As shown in figure 9, Medicaid represented about 2.7 percent of GDP in 2013—the same as the share in 2012. This increase corresponds with the typical historical trend in Medicaid growth as a share of GDP.

**Figure 9—Past and Projected Medicaid Expenditures as Share of GDP, FY 1966–FY 2023[66]**




In 2014, GDP is estimated to have grown at a rate of 4.3 percent, while Medicaid spending is expected to have increased by 9.4 percent due to the coverage expansion under the Affordable Care Act. While GDP is anticipated to grow more rapidly in 2015 and 2016, the continuing effects of the eligibility expansion are expected to contribute to faster Medicaid growth and further increases in Medicaid's share of GDP. By 2016, Medicaid spending is projected to reach 2.9 percent of GDP.

As seen in figure 9, the program's expenditures are projected to continue to grow to 3.1 percent of GDP by 2023. From 2014 through 2023, Medicaid expenditures are projected to increase about 1.4 percentage points faster than GDP on average per

[66] The data for this graph can be found in table 18 of Appendix E.

year. Much of this difference is expected to be due to the eligibility expansion, which accounts for 0.8 percentage point, or about two-thirds, of the difference between projected Medicaid expenditure and GDP growth rates over the 10 years.

This projection of Medicaid spending as a share of GDP is less than the projection included in last year's report. The share of GDP devoted to Medicaid in 2022 is projected to be 3.1 percent, about 0.2 percentage point lower than in the 2013 projection. Medicaid expenditures are projected to grow more slowly than previously projected, driven primarily by lower 2014 per enrollee expenditure growth and a reduction in the assumption about the number of States that would expand eligibility.

# VI. CONCLUSION

Medicaid expenditures are estimated to have grown 9.4 percent in 2014 and to have reached $498.9 billion. Faster growth is estimated to have been strongly driven by the eligibility expansion that started on January 1, 2014 under the Affordable Care Act. Growth is expected to slow after 2014, but the expansion of eligibility by additional States is projected to contribute to some additional increases in expenditures and enrollment of newly eligible adults. Total Medicaid expenditures are projected to grow to $835.0 billion by 2023. The projected annual average growth rate of Medicaid expenditures from 2014 to 2023 is 6.2 percent—notably faster than the projection of average annual GDP growth of 4.9 percent. Should these trends continue as projected under current law, Medicaid's share of both Federal and State budgets would continue to expand.

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

While some data are available on the number of newly eligible adults enrolled in Medicaid and their health care costs, there is still a considerable amount of uncertainty regarding the projections of the eligibility expansion impacts. Along with the expansion of Medicaid eligibility, other significant changes occurred in 2014, including the conversion of the income eligibility criteria to a modified adjusted gross income (MAGI) basis and the start of the Health Insurance Marketplaces. Accordingly, the actual expenditures, enrollment, and effects of the Affordable Care Act may differ significantly from the estimates and projections presented in this report.

The proportion of Medicaid expenditures for capitation payments and premiums has been increasing, as are the number of enrollees that receive all or some of their Medicaid benefits through a managed care plan. This trend is expected to accelerate due to the coverage by many States of newly eligible enrollees through managed care plans in 2014. In addition, States have expanded the use of managed care to cover aged and disabled enrollees and long-term care services. Thus, understanding how the use of managed care in Medicaid will affect future expenditure growth—and how fee-for-service expenditures for acute care and long-term care will also be affected—will be an important consideration for Medicaid programs in the future.

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.

Typically the cost growth rates of different payers and programs, such as Medicare, Medicaid, and private health insurance plans, are related. Attempts by one payer or program to affect costs can have a direct or indirect impact on other payers and programs. 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 not just on Medicaid but across all health care payers. Programs and demonstrations that focus on health care provided for persons enrolled in both Medicare and Medicaid (dual-eligible beneficiaries), or that focus on Medicare but also include some dual-eligible beneficiaries, may have some effects on the costs and quality of care paid for by Medicaid.

This report includes projections of the current-law Medicaid program. As policy makers consider changes or reforms to the program, for Medicaid specifically or for the broader health care system, particular attention may need to be paid to the ways in which Medicaid differs from other types of health care coverage—for example, in its administration, the benefits offered, the populations covered, and the ways in which it pays for health care. Other important issues for consideration, as Medicaid's role continues to evolve, are provider participation, Medicaid payment rates, and beneficiary access to services.

# 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 eligible individuals, beneficiaries, utilization, and payment for services that are covered. States provide CMS with quarterly 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 (including foster care children), and non-aged non-disabled adults (including women eligible under the Breast and Cervical Cancer Act eligibility expansion). MSIS data are made available in several different files; generally, the analysis presented in this report has relied on the Annual Person Summary (APS) files.

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 age 21 (EPSDT). Among the many reported optional services that States may provide are clinic services, prescription drugs,

intermediate care facilities for the intellectually disabled, hospice care, home and community-based care to certain persons with chronic impairments, and targeted case management services. Additionally, these reports capture expenditures for 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) 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 Social Security and Medicare Boards of Trustees in their 2014 report to Congress.[67]

Price Assumptions

The price assumptions used to develop the Medicaid expenditure projections are derived from the Social Security and Medicare Trustees Report assumptions. While these price assumptions are specifically meant to measure the changes in the prices that Medicare would pay providers, they also generally reflect the projected growth in the prices of health care services.

As noted in section IV of this report, there is no single data source available that tracks all Medicaid prices or price changes. In addition, there are no specific or consistent forecasts of the changes in the prices for health care services that can be used across all Medicaid programs since States do not have a prescribed methodology for updating provider reimbursement rates. Accordingly, we rely on other forecasts from Medicare, which we believe are reasonable projections of the underlying growth in health care prices that States would consider when changing provider reimbursement rates within their Medicaid programs.

The principal economic assumptions include growth in average wages and the 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.

It is important to note that these price assumptions may not accurately measure the underlying changes in the prices paid by Medicaid programs year to year. States have significant discretion in setting reimbursement rates, and in any given year the changes in rates paid to providers may differ from the changes in the price assumptions that are used to project future price changes for Medicaid expenditures. Thus, while these price forecasts are expected to reasonably estimate the changes in prices over time, they may not be precise measures of the actual changes in prices in any State Medicaid program. Moreover, to the extent that any specific price assumption is not an accurate assessment of the change in the price paid for any particular service, the difference between the actual change in price and the change in the price assumption would be reflected in the residual factor.

[67] Further information on the Trustees' population projections and economic assumptions is available in the 2014 Social Security and Medicare Trustees Reports: http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/ReportsTrustFunds/downloads/tr2014.pdf.

While in general the residual factor is meant to represent changes in utilization, it would also incorporate errors in the measurement of prices.

Enrollment Projections and Demographic Assumptions

Medicaid enrollment is projected by eligibility category: aged, disabled, children, and adults. Enrollment for newly eligible adults is projected separately as part of the OHRM. The model measures enrollment by eligibility category as a percentage of the U.S. population by relevant age group (aged—U.S. population aged 65 and over; disabled—U.S. population aged 0-64; children—U.S. population aged 0-19; and adults—U.S. population aged 20-64). Historical enrollment is measured for 1992 through 2010—the period for which reliable enrollment data exist in the MSIS.[68]

The relationship between the change in the share of the U.S. population enrolled in Medicaid by eligibility category and the change in the national U.S. unemployment rate is measured using a regression model. Analysis conducted in developing this enrollment model has shown that the unemployment rate is the most meaningful factor in analyzing changes in historical Medicaid enrollment. Other economic variables are either not statistically significant or do not improve the accuracy of the model. In addition, changes in the unemployment rate have a strong theoretical relationship with Medicaid enrollment. As the unemployment rate increases, fewer people have jobs, leading in turn to a greater number of people with lower incomes and more individuals likely eligible for Medicaid. In addition, a decrease in the number of people with jobs is likely to lead to fewer people with private health insurance, and as a result more people may enroll in Medicaid for health care coverage. Conversely, as the unemployment rate decreases, an increase in the number of people with jobs is likely to lead to increases in income and more people with private health insurance, and as a result enrollment growth in Medicaid may be slower.

The change in the share of the U.S. enrolled population is projected forward using the results of the regression model and forecasts of the unemployment rate from the 2014 Social Security Trustees Report for each eligibility category. Enrollment is projected using those results and the forecasts of the U.S. population from the 2014 Trustees Report. The projections from the model may be adjusted, in particular for estimates of enrollment in recent years (in this report, enrollment is estimated for

[68] Medicaid enrollment data have lagged by as much as 2 years in recent history, and this lag has increased substantially during the transition to the new Medicaid data system. CMS is in the process of transitioning Medicaid data from MSIS to the Transformed Medicaid Statistical Information System (T-MSIS), but T-MSIS is not currently available. Until the system is operational, it is unclear what data will be available and what form the data will take. CMS is discontinuing the production of the APS files, and different approaches will likely be necessary to incorporate data for 2012 and 2013 in future reports. More information about T-MSIS is available at http://www.medicaid.gov/medicaid-chip-program-information/by-topics/data-and-systems/medicaid-and-chip-operational-data.html.

2011, 2012, and 2013); in estimating historical enrollment, other information or data is often used to adjust the results from the Medicaid enrollment models. Typically, other sources do not provide enrollment at the same level of detail as shown in MSIS or in this report, but such sources may inform the overall level of enrollment or the growth rate of total enrollment in those historical years.

Residual Analysis and Utilization Assumptions

Changes in the utilization of services and other changes in expenditures not reflected in changes in enrollment or prices are reflected in the "residual" factors in the model. 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 enrollee expenditures is compared to the change 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, and it is calculated by service and by eligibility category. For the purpose of developing projected expenditures, the residual may be calculated as the average across all eligibility categories (typically when the residuals across eligibility categories have similar values, or when the amount of spending for one or more eligibility categories is relatively small and there are potential concerns about the credibility of the residual factor). The basis of the projected residual is the historical average of the residual value (either as a weighted average or an unweighted average over the previous several years), but the residual may be adjusted by gradually increasing or decreasing the residual toward the average residual for a broader category of services (such as all acute care, all long-term care, or all medical services).

The residuals are adjusted to limit the value of any particular service from significantly increasing or decreasing more than the value of all services (or broader categories of services). In general, the residual of all services (or broader categories of services) tends to be more stable, but it is necessary to use residuals by service to account for changes in the Medicaid program as well. Often, these adjustments are made to reflect areas where there has likely been a shift between services or categories of services in recent history, but projecting those changes to continue at the same rate over 10 years would not necessarily be the best estimate of future expenditures.

One key example concerns the historical shifts of Medicaid expenditures from fee-for-service programs (especially acute care services, such as hospital services, physician and other professional services, and prescription drugs) to managed care. As part of the adjustment, managed care expenditures as a share of total expenditures were reviewed by State and by eligibility category. This review provided more detailed information on the use of managed care across States, as well as some evidence regarding the extent to which recent expenditure growth in

managed care programs was driven by the States' expansion of their use of these programs. The analysis suggested that managed care expenditures were likely to continue to grow relatively quickly but, over time, were more likely to slow, as the rate at which States shift expenditures to managed care programs slows. Similarly, the analysis suggested that the residuals for acute care services in general would increase over the same period as the shift from fee-for-service programs decelerates.

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

| Type of Service | Price Indicator |
|---|---|
| Inpatient and outpatient hospital | Medicare hospital input price index (market basket), before the application of productivity adjustment |
| Physician, clinic, and related services | Medical CPI increase |
| Institutional long-term care | Maximum of CPI increase and average wage increase |
| Community long-term care and home and community-based waiver services | Medicare home health input price index, before the application of productivity adjustment |
| Prescription drugs | CPI increase |
| Managed care | Medical CPI increase |

One exception to the trend residual methodology occurs in the case of some premiums. Costs for other premiums for Medicare are based on the Trustees' projected premium rates for Medicare Parts A and B. 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.

Utilization Factors for Selected Services by Medicaid Population

This section provides the results of the residual analysis used to calculate the utilization factors for the projections. The following tables show the historical utilization factors and the projected values by eligibility category and by service for the largest five services by eligibility category (as measured by total 2013 expenditures).

**Table 5—Historical and Projected Utilization Factors for Aged Enrollees, Selected Services, FY 2006–FY 2023**

| Fiscal Year | Nursing facility | Managed care | Home and community-based waivers | Personal care | Inpatient hospital |
|---|---|---|---|---|---|
| Historical data: | | | | | |
| 2006 | −3.2% | −23.8% | 3.7% | 8.0% | -5.8% |
| 2007 | −6.4% | 13.1% | 6.2% | 9.0% | 1.4% |
| 2008 | −2.5% | 38.8% | 7.1% | −7.5% | 0.4% |
| 2009 | 0.2% | 8.4% | −1.2% | 0.0% | −2.0% |
| 2010 | −5.7% | 22.8% | −9.7% | −8.2% | −4.3% |
| 2011 | −4.9% | 19.1% | −1.1% | −12.7% | 19.4% |
| 2012 | −5.7% | 19.2% | −1.8% | −5.0% | −11.5% |
| 2013 | −3.2% | 9.7% | −0.2% | −15.5% | 1.0% |
| Projections: | | | | | |
| 2014 | −4.1% | 16.0% | 0.3% | −7.8% | −0.1% |
| 2015 | −3.8% | 14.1% | 0.3% | −7.2% | −0.1% |
| 2016 | −3.6% | 12.2% | 0.3% | −6.6% | −0.2% |
| 2017 | −3.3% | 10.3% | 0.3% | −5.9% | −0.2% |
| 2018 | −3.0% | 8.4% | 0.3% | −5.3% | −0.3% |
| 2019 | −2.8% | 6.5% | 0.3% | −4.7% | −0.4% |
| 2020 | −2.8% | 6.5% | 0.3% | −4.7% | −0.4% |
| 2021 | −2.8% | 6.5% | 0.3% | −4.7% | −0.4% |
| 2022 | −2.8% | 6.5% | 0.3% | −4.7% | −0.4% |
| 2023 | −2.8% | 6.5% | 0.3% | −4.7% | −0.4% |

These are the largest six services for aged enrollees based on estimates of 2013 expenditures, and they constituted 82 percent of total estimated Medicaid expenditures for aged enrollees, as shown in table 6. (Medicare Part B premiums are shown below, but utilization factors are not calculated for Medicare premiums.)

**Table 6—FY 2013 Selected Service Expenditures for Aged Enrollees**
(in billions)

| Service | 2013 Expenditures |
|---|---|
| Nursing Facility | $38.3 |
| Managed Care | 10.7 |
| Home and Community-Based Waivers | 5.5 |
| Medicare Part B Premiums | 5.0 |
| Personal Care | 3.5 |
| Inpatient Hospital | 3.4 |
| Total Aged Enrollees Expenditures | 81.5 |

**Table 7—Historical and Projected Utilization Factors for Disabled Enrollees, Selected Services, FY 2006–FY 2023**

| Fiscal Year | Home and community-based waivers | Managed care | Inpatient hospital | Nursing facility | Prescription drugs |
|---|---|---|---|---|---|
| Historical data: | | | | | |
| 2006 | 9.0% | −4.7% | −2.2% | −2.3% | −34.9% |
| 2007 | 1.2% | 17.4% | −0.1% | −6.5% | −23.1% |
| 2008 | 1.9% | 12.2% | −3.4% | −2.3% | −2.9% |
| 2009 | 4.2% | 7.5% | −1.5% | 3.0% | 1.7% |
| 2010 | 3.0% | 2.9% | 3.2% | −4.6% | −2.4% |
| 2011 | −4.6% | 11.6% | 3.4% | −3.8% | 2.1% |
| 2012 | −1.9% | 9.1% | −10.5% | −6.1% | −15.2% |
| 2013 | 1.1% | 11.6% | −1.3% | −2.6% | −16.3% |
| Projections: | | | | | |
| 2014 | 0.3% | 9.3% | −2.0% | −3.3% | −4.7% |
| 2015 | 0.3% | 8.3% | −1.8% | −3.2% | −4.3% |
| 2016 | 0.3% | 7.3% | −1.7% | −3.0% | −3.9% |
| 2017 | 0.3% | 6.3% | −1.6% | −2.8% | −3.5% |
| 2018 | 0.3% | 5.3% | −1.4% | −2.6% | −3.1% |
| 2019 | 0.3% | 4.3% | −1.3% | −2.4% | −2.7% |
| 2020 | 0.3% | 4.3% | −1.3% | −2.4% | −2.7% |
| 2021 | 0.3% | 4.3% | −1.3% | −2.4% | −2.7% |
| 2022 | 0.3% | 4.3% | −1.3% | −2.4% | −2.7% |
| 2023 | 0.3% | 4.3% | −1.3% | −2.4% | −2.7% |

This is the list of residuals for the top five services for persons with disabilities based on estimates of 2013 expenditures, and these services constituted 66 percent of total estimated Medicaid expenditures for disabled enrollees, as shown in table 8. (Prescription drug expenditures do not include Medicaid prescription drug rebates.)

**Table 8—FY 2013 Selected Service Expenditures for Disabled Enrollees**

(in billions)

| Service | 2013 Expenditures |
|---|---|
| Home and Community-Based Waivers | $32.6 |
| Managed Care Organizations | 31.6 |
| Inpatient Hospital | 28.0 |
| Nursing Facility | 12.6 |
| Prescription Drugs | 11.4 |
| Total Disabled Enrollees Expenditures | 175.2 |

**Table 9—Historical and Projected Utilization Factors for Child Enrollees, Selected Services, FY 2006–FY 2023**

| Fiscal Year | Managed care | Inpatient hospital | Prescription drugs | Physician | Outpatient hospital |
|---|---|---|---|---|---|
| Historical data: | | | | | |
| 2006 | 17.9% | −4.5% | −0.3% | −2.8% | −10.6% |
| 2007 | 11.2% | 5.4% | 0.5% | −7.0% | 7.7% |
| 2008 | −2.4% | 1.0% | 1.2% | 0.2% | −10.8% |
| 2009 | 2.1% | −4.7% | −0.2% | −1.9% | 6.8% |
| 2010 | −0.9% | −9.5% | 0.8% | −5.7% | −4.9% |
| 2011 | 5.0% | −1.5% | 7.6% | −0.2% | 6.6% |
| 2012 | 14.4% | −11.4% | −15.9% | −13.9% | −19.9% |
| 2013 | 10.5% | −1.0% | −19.4% | −10.4% | 3.9% |
| Projections: | | | | | |
| 2014 | 6.8% | −4.4% | −4.7% | −5.3% | −3.2% |
| 2015 | 5.0% | −3.4% | −3.7% | −4.2% | −2.6% |
| 2016 | 3.1% | −2.5% | −2.7% | −3.0% | −1.9% |
| 2017 | 3.1% | −2.5% | −2.7% | −3.0% | −1.9% |
| 2018 | 3.1% | −2.5% | −2.7% | −3.0% | −1.9% |
| 2019 | 3.1% | −2.5% | −2.7% | −3.0% | −1.9% |
| 2020 | 3.1% | −2.5% | −2.7% | −3.0% | −1.9% |
| 2021 | 3.1% | −2.5% | −2.7% | −3.0% | −1.9% |
| 2022 | 3.1% | −2.5% | −2.7% | −3.0% | −1.9% |
| 2023 | 3.1% | −2.5% | −2.7% | −3.0% | −1.9% |

This is the list of residuals for the top five services for the child population based on estimates of 2013 expenditures, and these services constituted 80 percent of total estimated Medicaid expenditures for children, as shown in table 10. (Prescription drug expenditures do not include Medicaid prescription drug rebates.)

**Table 10—FY 2013 Selected Service Expenditures for Child Enrollees**

(in billions)

| Service | 2013 Expenditures |
|---|---|
| Managed Care Organizations | $41.1 |
| Inpatient Hospital | 10.9 |
| Prescription Drugs | 4.1 |
| Physician Services | 3.3 |
| Outpatient Hospital | 2.9 |
| Total Children Expenditures | 78.2 |

**Table 11—Historical and Projected Utilization Factors for Adult Enrollees, Selected Services, FY 2006–FY 2023**

| Fiscal Year | Managed care | Inpatient hospital | Outpatient hospital | Prescription drugs | Physician |
|---|---|---|---|---|---|
| Historical data: | | | | | |
| 2006 | 13.4% | −5.1% | −10.6% | −17.1% | −2.9% |
| 2007 | 11.5% | 0.6% | 7.7% | −8.6% | −7.8% |
| 2008 | 5.4% | −3.6% | −10.8% | −0.4% | −3.8% |
| 2009 | 1.5% | −7.4% | 6.8% | 4.8% | −5.9% |
| 2010 | 4.4% | −8.6% | −4.9% | 9.9% | −6.8% |
| 2011 | 6.7% | 7.5% | 6.6% | 15.0% | −2.4% |
| 2012 | 10.9% | −15.5% | −19.9% | −16.7% | −14.5% |
| 2013 | 8.5% | 1.8% | 3.9% | −12.7% | −8.4% |
| Projections: | | | | | |
| 2014 | 7.3% | −4.1% | −3.2% | −4.7% | −6.6% |
| 2015 | 5.3% | −3.2% | −2.6% | −3.7% | −5.1% |
| 2016 | 3.4% | −2.4% | −1.9% | −2.7% | −3.6% |
| 2017 | 3.4% | −2.4% | −1.9% | −2.7% | −3.6% |
| 2018 | 3.4% | −2.4% | −1.9% | −2.7% | −3.6% |
| 2019 | 3.4% | −2.4% | −1.9% | −2.7% | −3.6% |
| 2020 | 3.4% | −2.4% | −1.9% | −2.7% | −3.6% |
| 2021 | 3.4% | −2.4% | −1.9% | −2.7% | −3.6% |
| 2022 | 3.4% | −2.4% | −1.9% | −2.7% | −3.6% |
| 2023 | 3.4% | −2.4% | −1.9% | −2.7% | −3.6% |

This is the list of residuals for the top five services for the adult population based on estimates of 2013 expenditures, and these services constituted 90 percent of total estimated Medicaid expenditures for adults, as shown in table 10. (Prescription drug expenditures do not include Medicaid prescription drug rebates.)

**Table 12—FY 2013 Selected Service Expenditures for Adult Enrollees**
(in billions)

| Service | 2013 Expenditures |
|---|---|
| Managed Care Organizations | $34.9 |
| Inpatient Hospital | 11.9 |
| Outpatient Hospital | 4.3 |
| Prescription Drugs | 3.8 |
| Physician Services | 3.1 |
| Total Adults Expenditures | 64.5 |

**Table 13—Historical and Projected Price Factors and Unemployment Rates, FY 2006–FY 2023**

| Fiscal Year | Medical consumer price index | Consumer price index | Home health input price index | Inpatient price index | Wages | Unemployment rate (CY) |
|---|---|---|---|---|---|---|
| Historical data: | | | | | | |
| 2006 | 3.3% | 3.7% | 3.5% | 3.7% | 4.4% | 4.6% |
| 2007 | 3.5% | 2.3% | 3.4% | 3.4% | 4.6% | 4.6% |
| 2008 | 3.7% | 4.4% | 3.1% | 3.3% | 2.9% | 5.8% |
| 2009 | 3.3% | −0.3% | 2.9% | 3.6% | −0.4% | 9.3% |
| 2010 | 3.4% | 1.7% | 2.2% | 2.1% | 1.6% | 9.6% |
| 2011 | 3.1% | 2.7% | 2.1% | 2.6% | 2.9% | 8.9% |
| 2012 | 3.5% | 2.0% | 2.3% | 3.0% | 2.7% | 8.1% |
| 2013 | 2.8% | 1.6% | 2.3% | 2.6% | 1.9% | 7.4% |
| Projections: | | | | | | |
| 2014 | 2.4% | 1.6% | 2.3% | 2.5% | 3.2% | 6.9% |
| 2015 | 3.4% | 1.9% | 2.8% | 2.7% | 4.0% | 6.7% |
| 2016 | 3.8% | 2.2% | 3.3% | 3.3% | 4.2% | 6.5% |
| 2017 | 4.0% | 2.4% | 3.4% | 3.7% | 4.3% | 6.2% |
| 2018 | 4.2% | 2.6% | 3.5% | 3.9% | 4.3% | 5.9% |
| 2019 | 4.3% | 2.7% | 3.6% | 4.0% | 4.2% | 5.8% |
| 2020 | 4.3% | 2.7% | 3.5% | 3.8% | 4.0% | 5.6% |
| 2021 | 4.3% | 2.7% | 3.5% | 3.8% | 3.8% | 5.6% |
| 2022 | 4.3% | 2.7% | 3.4% | 3.8% | 3.6% | 5.6% |
| 2023 | 4.3% | 2.7% | 3.4% | 3.8% | 3.6% | 5.6% |

## *C. DATA POINTS FOR SELECTED FIGURES*

The following tables provide the data points underlying selected figures in the report.

**Table 14—Past and Projected Medicaid Expenditures for Medical Assistance Payments, by Type of Payment, FY 2000–FY 2023**

(in billions)

| Fiscal Year | Acute care FFS | Long-term care FFS | Capitation payments & premiums | Disproportionate share hospital payments |
|---|---|---|---|---|
| Historical data: | | | | |
| 2000 | $78.8 | $67.9 | $33.9 | $14.4 |
| 2001 | 88.2 | 73.9 | 37.8 | 15.5 |
| 2002 | 103.2 | 81.1 | 44.7 | 15.4 |
| 2003 | 114.0 | 84.2 | 50.7 | 13.0 |
| 2004 | 124.0 | 87.3 | 52.7 | 15.4 |
| 2005 | 131.0 | 93.0 | 58.5 | 15.6 |
| 2006 | 118.5 | 97.6 | 65.4 | 13.7 |
| 2007 | 122.4 | 99.9 | 73.1 | 15.8 |
| 2008 | 125.6 | 105.5 | 82.8 | 15.4 |
| 2009 | 134.7 | 111.2 | 93.3 | 16.1 |
| 2010 | 142.4 | 113.0 | 103.9 | 15.1 |
| 2011 | 152.9 | 114.3 | 115.8 | 14.3 |
| 2012 | 137.5 | 114.4 | 132.4 | 14.1 |
| 2013 | 138.9 | 115.2 | 147.1 | 13.2 |
| Projections: | | | | |
| 2014 | 149.3 | 115.3 | 177.3 | 13.4 |
| 2015 | 149.9 | 118.1 | 201.1 | 13.6 |
| 2016 | 153.2 | 122.2 | 221.7 | 13.8 |
| 2017 | 159.7 | 127.0 | 245.7 | 12.1 |
| 2018 | 165.8 | 131.8 | 268.3 | 8.1 |
| 2019 | 172.2 | 136.9 | 291.5 | 8.4 |
| 2020 | 178.2 | 142.0 | 316.7 | 8.9 |
| 2021 | 184.0 | 147.3 | 344.1 | 9.2 |
| 2022 | 190.1 | 152.6 | 373.7 | 9.3 |
| 2023 | 196.6 | 158.0 | 406.2 | 9.8 |

**Table 15—Past and Projected Numbers of Medicaid Enrollees, by Category, FY 2000–FY 2023**

(in millions of person-year equivalents)

| Fiscal Year | Aged | Disabled | Children | Adults | Newly eligible adults | Territories |
|---|---|---|---|---|---|---|
| Historical data: | | | | | | |
| 2000 | 3.6 | 6.7 | 16.4 | 6.9 | n/a | 0.9 |
| 2001 | 3.7 | 6.9 | 17.5 | 7.8 | n/a | 0.9 |
| 2002 | 3.9 | 7.2 | 19.4 | 9.0 | n/a | 1.0 |
| 2003 | 4.3 | 7.5 | 21.0 | 9.7 | n/a | 1.0 |
| 2004 | 4.4 | 7.7 | 21.9 | 10.1 | n/a | 1.0 |
| 2005 | 4.5 | 8.0 | 22.5 | 10.5 | n/a | 1.0 |
| 2006 | 4.5 | 8.2 | 22.6 | 10.4 | n/a | 1.0 |
| 2007 | 4.5 | 8.4 | 22.3 | 10.2 | n/a | 1.0 |
| 2008 | 4.6 | 8.8 | 22.8 | 10.6 | n/a | 1.0 |
| 2009 | 4.7 | 9.0 | 24.4 | 11.9 | n/a | 1.0 |
| 2010 | 4.8 | 9.3 | 26.4 | 13.1 | n/a | 1.0 |
| 2011 | 4.9 | 9.7 | 27.0 | 13.9 | n/a | 1.0 |
| Projections: | | | | | | |
| 2012 | 5.1 | 10.0 | 27.5 | 14.4 | n/a | 1.0 |
| 2013 | 5.3 | 10.1 | 27.9 | 14.7 | n/a | 1.0 |
| 2014 | 5.4 | 10.2 | 28.9 | 14.7 | 4.3 | 1.0 |
| 2015 | 5.6 | 10.2 | 29.6 | 15.0 | 7.4 | 1.0 |
| 2016 | 5.8 | 10.3 | 30.3 | 15.3 | 10.2 | 1.0 |
| 2017 | 5.9 | 10.4 | 30.7 | 15.5 | 11.3 | 1.0 |
| 2018 | 6.1 | 10.5 | 30.9 | 15.6 | 11.7 | 1.0 |
| 2019 | 6.3 | 10.6 | 31.1 | 15.7 | 11.8 | 1.0 |
| 2020 | 6.5 | 10.6 | 31.3 | 15.8 | 11.8 | 1.0 |
| 2021 | 6.7 | 10.7 | 31.5 | 15.8 | 11.9 | 1.0 |
| 2022 | 7.0 | 10.8 | 31.7 | 15.9 | 11.9 | 1.0 |
| 2023 | 7.2 | 10.8 | 31.9 | 15.9 | 12.0 | 1.0 |

**Table 16—Past and Projected Medicaid Expenditures on Medical Assistance Payments Per Enrollee, by Enrollment Category, FY 2000–FY 2023**

(in dollars per person-year equivalent enrollee)

| Fiscal Year | Aged | Disabled | Children | Adults | Newly eligible adults | Average of all enrollees |
|---|---|---|---|---|---|---|
| Historical data: | | | | | | |
| 2000 | $14,068 | $12,156 | $1,714 | $2,797 | n/a | $5,359 |
| 2001 | 14,817 | 13,022 | 1,831 | 2,879 | n/a | 5,545 |
| 2002 | 14,960 | 14,466 | 1,997 | 2,954 | n/a | 5,779 |
| 2003 | 14,585 | 14,982 | 2,036 | 3,081 | n/a | 5,833 |
| 2004 | 14,872 | 15,108 | 2,073 | 3,237 | n/a | 5,893 |
| 2005 | 15,513 | 15,921 | 2,137 | 3,356 | n/a | 5359 |
| 2006 | 14,863 | 15,490 | 2,276 | 3,436 | n/a | 6,136 |
| 2007 | 14,903 | 15,989 | 2,471 | 3,694 | n/a | 6,483 |
| 2008 | 15,576 | 16,290 | 2,537 | 3,893 | n/a | 6,703 |
| 2009 | 15,821 | 17,126 | 2,604 | 4,011 | n/a | 6,779 |
| 2010 | 15,481 | 17,504 | 2,593 | 4,054 | n/a | 6,684 |
| 2011 | 15,737 | 17,886 | 2,665 | 4,269 | n/a | 6,882 |
| Projections: | | | | | | |
| 2012 | 15,461 | 17,042 | 2,707 | 4,140 | n/a | 6,716 |
| 2013 | 15,483 | 17,352 | 2,807 | 4,391 | n/a | 6,897 |
| 2014 | 15,630 | 17,755 | 2,844 | 4,650 | $5,517 | 6,921 |
| 2015 | 15,999 | 18,285 | 2,926 | 4,817 | 4,281 | 6,890 |
| 2016 | 16,626 | 18,927 | 3,002 | 4,964 | 3,606 | 6,885 |
| 2017 | 17,505 | 19,790 | 3,144 | 5,220 | 3,806 | 7,184 |
| 2018 | 18,296 | 20,682 | 3,307 | 5,504 | 3,989 | 7,535 |
| 2019 | 19,098 | 21,609 | 3,492 | 5,816 | 4,189 | 7,925 |
| 2020 | 19,946 | 22,573 | 3,685 | 6,152 | 4,403 | 8,340 |
| 2021 | 20,838 | 23,577 | 3,884 | 6,509 | 4,620 | 8,776 |
| 2022 | 21,784 | 24,630 | 4,099 | 6,889 | 4,843 | 9,240 |
| 2023 | 22,827 | 25,771 | 4,334 | 7,299 | 5,076 | 9,745 |

**Table 17—Projected Medicaid Expenditures: Comparison of 2013 versus 2014 Actuarial Reports on the Financial Outlook for Medicaid, FY 2000–2023**

(in billions of dollars)

| Fiscal Year | 2014 Report | 2013 Report |
|---|---|---|
| Historical data: | | |
| 2000 | $206.2 | $206.2 |
| 2001 | 229.0 | 229.0 |
| 2002 | 258.2 | 258.2 |
| 2003 | 276.2 | 276.2 |
| 2004 | 296.3 | 296.3 |
| 2005 | 315.9 | 315.9 |
| 2006 | 315.1 | 315.1 |
| 2007 | 332.2 | 332.2 |
| 2008 | 351.9 | 351.9 |
| 2009 | 378.6 | 378.6 |
| 2010 | 401.5 | 401.5 |
| 2011 | 427.4 | 427.4 |
| 2012 | 431.0 | 431.0 |
| 2013 | 456.1 | 456.4 |
| Projections: | | |
| 2014 | 498.9 | 508.0 |
| 2015 | 529.0 | 544.4 |
| 2016 | 557.6 | 584.0 |
| 2017 | 592.3 | 623.2 |
| 2018 | 623.6 | 661.2 |
| 2019 | 661.1 | 704.2 |
| 2020 | 700.6 | 752.8 |
| 2021 | 742.3 | 801.8 |
| 2022 | 786.6 | 853.6 |
| 2023 | 835.0 | n/a |

**Table 18—Past and Projected Medicaid Expenditures as Share of GDP, FY 1966–FY 2023, Selected Years**

(in billions of dollars)

| Fiscal Year | Total expenditures | Expenditures as share of GDP |
|---|---|---|
| Historical data: | | |
| 1966 | $0.9 | 0.1% |
| 1970 | 5.1 | 0.5% |
| 1975 | 13.1 | 0.8% |
| 1980 | 25.2 | 0.9% |
| 1985 | 41.3 | 1.0% |
| 1990 | 72.2 | 1.2% |
| 1995 | 159.5 | 2.2% |
| 2000 | 206.2 | 2.1% |
| 2001 | 229.0 | 2.2% |
| 2002 | 258.2 | 2.4% |
| 2003 | 276.2 | 2.5% |
| 2004 | 296.3 | 2.5% |
| 2005 | 315.9 | 2.5% |
| 2006 | 315.1 | 2.4% |
| 2007 | 332.2 | 2.4% |
| 2008 | 351.9 | 2.4% |
| 2009 | 378.6 | 2.7% |
| 2010 | 401.5 | 2.9% |
| 2011 | 427.4 | 2.9% |
| 2012 | 431.0 | 2.7% |
| 2013 | 456.1 | 2.7% |
| Projections: | | |
| 2014 | 498.9 | 2.9% |
| 2015 | 529.0 | 2.9% |
| 2016 | 557.6 | 2.9% |
| 2017 | 592.3 | 2.9% |
| 2018 | 623.6 | 2.9% |
| 2019 | 661.1 | 3.0% |
| 2020 | 700.6 | 3.0% |
| 2021 | 742.3 | 3.0% |
| 2022 | 786.6 | 3.1% |
| 2023 | 835.0 | 3.1% |