



2011 ACTUARIAL REPORT

ON THE FINANCIAL OUTLOOK FOR MEDICAID



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



LETTER OF TRANSMITTAL

Washington, D.C.

March 16, 2012

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

Dear Madam Secretary:

I have the honor of transmitting to you the *2011 Actuarial Report on the Financial Outlook for Medicaid*. This report provides an analysis of past and projected national trends in Medicaid enrollment and expenditures and will also be provided to Congress for the purpose of complying with section 506(c) of the Children's Health Insurance Program Reauthorization Act of 2009.

Sincerely,

Marilyn B. Tavenner
Acting Administrator

**2011 ACTUARIAL REPORT
ON THE FINANCIAL OUTLOOK
FOR MEDICAID**

Prepared by:

Christopher J. Truffer, F.S.A.
John D. Klemm, Ph.D., A.S.A., M.A.A.A.
Christian J. Wolfe, A.S.A.
Kathryn E. Rennie

Office of the Actuary
Centers for Medicare & Medicaid Services
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STATEMENT FROM CHIEF ACTUARY

From program inception, the cost of Medicaid has generally increased at a significantly faster pace than the U.S. economy. In 1970, combined Federal and State expenditures for Medicaid represented 0.5 percent of gross domestic product (GDP), but this percentage grew to 0.9 percent in 1980, 1.2 percent in 1990, 2.1 percent in 2000, and 2.7 percent in 2010. As illustrated by the actuarial projections in this report, Medicaid costs will almost certainly continue to increase as a share of GDP in the future under current law. Although much of Medicaid's expenditure growth (both past and future) is due to expansions of eligibility criteria, the per enrollee costs for Medicaid have also increased significantly faster than per capita GDP.

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

The Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010, will substantially reduce the number of people in the U.S. without health insurance. Much of this reduction will occur as a result of expanded eligibility criteria for Medicaid, which we estimate will increase the number of Medicaid enrollees by about 26 million in 2020. Medicaid provides a relatively low-cost way to increase the number of people with health coverage, since its payment rates for health care services and health plans are low compared to other forms of health insurance. Even so, aggregate Medicaid costs will increase significantly as a result of these changes to eligibility criteria, due to the very large number of additional enrollees starting in 2014.

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

It is my opinion that (i) the techniques and methodology used herein to project the future costs of the Medicaid program are based upon sound principles of actuarial practice and are generally accepted within the actuarial profession, and (ii) the principal assumptions 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, readers should be aware that actual future Medicaid costs could differ significantly from these estimates.

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

Richard S. Foster, F.S.A., M.A.A.A.
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 Medicaid expenditures and enrollment, including the impacts of the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010.

Highlights and Findings

2010 Medicaid Information

- Total Medicaid outlays in fiscal year 2010 were \$404.1 billion; \$272.8 billion or 68 percent represented Federal spending, and \$131.3 billion or 32 percent represented State spending. The Federal government paid a relatively larger share of Medicaid than in past years, and the States a relatively smaller share, because the Federal matching rate was increased significantly in 2009 and 2010 as prescribed by the American Recovery and Reinvestment Act of 2009. Total Medicaid expenditures increased by 6.1 percent between 2009 and 2010.
- Medicaid provided health care assistance for an estimated 53.9 million people on average in 2010. An estimated total of 67.7 million people, or about one of every five persons in the U.S., were enrolled in Medicaid for at least one month in 2010. Enrollment is estimated to have grown by 6.2 percent between 2009 and 2010.
- Per enrollee spending for health services was estimated to be \$6,775 in 2010. Estimated per capita spending for children (\$2,717) and adults (\$4,314) was much lower than that for aged (\$15,495) and disabled (\$16,963) beneficiaries, reflecting the differing health status of, and use of services by, the members of these groups. Per enrollee spending was estimated to have declined by 0.3 percent between 2009 and 2010, due in large part to a relative increase in the number of children and adults enrolled in the program, who generally have lower health care costs than aged and disabled enrollees, and to a decline in estimated per enrollee spending on aged beneficiaries related to decreased nursing home expenditures.

2011 Medicaid Projections

- Medicaid expenditures are projected to increase 7.6 percent to \$432.0 billion in 2011. The Federal government is projected to pay \$272.8 billion, or about 63 percent. The decrease in the Federal share reflects the end of the

temporary increases in the Federal matching rate prescribed by the American Recovery and Reinvestment Act of 2009 and P. L. 111-226.

- Average Medicaid enrollment is projected to increase 4.0 percent to 56.1 million people in 2011.
- These Medicaid enrollment and expenditure increases are in large part the result of recent economic conditions and small improvements in the unemployment rate and economic growth since the end of the recession.

10-Year Medicaid Projections

- Over the next 10 years, expenditures are projected to increase at an average annual rate of 8.1 percent and to reach \$871.0 billion by 2020.
- Average enrollment is projected to increase at an average annual rate of 4.7 percent over the next 10 years and to reach 85.1 million in 2020.
- Both averages reflect the significant increase in Medicaid enrollment that will occur in 2014 as a result of the expansion of Medicaid eligibility under the Affordable Care Act.

Affordable Care Act Impacts

- The Affordable Care Act is projected to increase Medicaid expenditures by a total of \$619 billion for 2011 through 2020, an increase of about 11 percent over projections of Medicaid spending without the impact of the legislation. Almost all of this increase is projected to be paid by the Federal government (\$572 billion, or about 92 percent).
- The most significant change to Medicaid is the expansion of Medicaid eligibility beginning in FY 2014. This expansion, together with greater participation by individuals eligible under current rules, is projected to add 14.9 million people to enrollment in 2014 and 25.9 million people by 2020—26 percent and 44 percent, respectively, compared to pre-Affordable Care Act estimates. These increases reflect both the greater proportion of the population that will be eligible for Medicaid and an assumption that the new health insurance exchanges will be very effective in assisting enrollment in Medicaid. Of the new enrollees, about 80 percent are projected to be adults and 20 percent children, and about 82 percent are projected to be eligible only under the new rules beginning in 2014.
- The expansion is projected to increase Medicaid expenditures by a total of \$564 billion during 2014 through 2020, with the majority to be paid by the Federal government (\$500 billion, or 89 percent) due to the higher Federal matching rate provided for expenditures on behalf of newly eligible enrollees.

CONTENTS

STATEMENT FROM CHIEF ACTUARY.....	i
EXECUTIVE SUMMARY	iii
I. INTRODUCTION.....	1
II. OVERVIEW OF MEDICAID	2
III. DATA AND ASSUMPTIONS.....	4
IV. METHODOLOGY	8
V. ACTUARIAL ANALYSIS.....	11
A. FY 2010 MEDICAID OUTLAYS AND ENROLLMENT	11
B. HISTORICAL MEDICAID TRENDS.....	14
C. MEDICAID EXPENDITURES AND ENROLLMENT PROJECTIONS, FY 2011–FY 2020.....	18
D. AFFORDABLE CARE ACT AND OTHER LEGISLATIVE IMPACTS.....	30
E. COMPARISON TO 2010 REPORT PROJECTIONS	35
F. MEDICAID IN CONTEXT	37
VI. CONCLUSION.....	43
VII. APPENDIX.....	45
A. MEDICAID DATA SOURCES	45
B. DEMOGRAPHIC, ECONOMIC, AND HEALTH CARE ASSUMPTIONS	46
C. ADDITIONAL PROJECTION METHODOLOGY DETAIL	47

I. INTRODUCTION

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

This is the third annual Medicaid report from 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 fiscal years (FYs) 2010 and 2011 and projections over the next 10 years. In addition, this report provides a brief description of the estimated impacts on Medicaid of the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010 (referred to collectively as the “Affordable Care Act”). It also describes the data available on Medicaid spending and enrollment, as well as the methodology and assumptions used in the projections. Finally, this report places the Medicaid program within the context of Federal and State government spending and the U.S. health care system.

II. OVERVIEW OF MEDICAID

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

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

Eligibility for enrollment in Medicaid is determined by both Federal and State law. Title XIX 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 financial resources (or assets), age, disability status, other government assistance, and other health or medical conditions such as pregnancy. Beginning in 2014, the Affordable Care Act expands Medicaid eligibility to almost all individuals under age 65 in families with income below 138 percent of the Federal Poverty Level (FPL).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—such as the use of waivers, demonstration projects, and benchmark benefit plans—States must provide the same benefit package to all Medicaid enrollees. Additionally, States must extend eligibility to all mandatory populations and cover all mandatory services defined by Title XIX in order to receive Federal matching funds for their Medicaid programs.

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

¹ For more information on Medicaid, including information on eligibility and covered services, see Klees, Wolfe, and Curtis, "Brief Summaries of Medicare & Medicaid," November 2010: http://www.cms.hhs.gov/MedicareProgramRatesStats/02_SummaryMedicareMedicaid.asp.

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.

calculated annually for each State based on a statutory formula that takes into account State per capita income with some adjustments prescribed by legislation.³ Notably, the Affordable Care Act specifies FMAPs for beneficiaries who are newly eligible as a result of the Medicaid expansion beginning in 2014. Additionally, the Federal government pays for a portion of each State's administration costs. Beneficiary cost sharing, such as deductibles or co-payments, and beneficiary premiums are very limited in Medicaid and do not represent a significant share of the total cost of health care services for Medicaid enrollees.

In contrast to the Federal Medicare program, Medicaid's financial operations are not financed through trust funds. Other than a very small amount of premium revenue from enrollees, as noted above, and some other sources of State revenue (such as provider taxes), there are no dedicated revenue sources comparable to the Medicare Hospital Insurance payroll tax. Medicaid costs are met 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 reserve, and, unlike Medicare, the "financial status" of the program is not in question from an actuarial perspective.

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

³ In general, Title XIX specifies that the FMAP for each State cannot be lower than 50 percent and cannot be higher than 83 percent; in 2010, FMAP ranged from 50 percent to 76 percent, prior to the impact of temporary increases in FMAP prescribed by legislation, as described below. Also, Title XIX overrides the normal formula and sets specific FMAP levels for certain States. The American Recovery and Reinvestment Act of 2009 (ARRA) and P.L. 111-226 (sometimes called the Education, Jobs, and Medicaid Assistance Act of 2010) provided temporary increases to the FMAP for 2009, 2010, and part of 2011; the impact of these increases is described in the Actuarial Analysis section of this report. Additionally, the Affordable Care Act specifies different FMAP for certain sections of the Act. Most significantly, expenditures for newly eligible beneficiaries are covered at a greater FMAP than are those for currently eligible beneficiaries starting in 2014; States that already covered adults up to 100 percent of the FPL are eligible for some FMAP increases; and the temporary increase in primary care physician payments in 2013 and 2014 is paid for entirely by the Federal government.

III. DATA AND ASSUMPTIONS

Projections of Medicaid expenditures and enrollment are highly dependent on both demographic and economic assumptions. The most important such assumptions are those regarding the growth of health care prices, growth in the use of health care services, overall economic growth, individual wage growth, and population growth. In addition, there are various “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 importantly on the nature and quality of the available data on Medicaid operations. This section describes the sources of data and assumptions that are used to generate the Medicaid projections shown in this report.

The data and assumptions on which these Medicaid projections are based are derived from four major sources. The first source is CMS data, which are submitted by the States to CMS on a regular basis.⁴ The States provide a quarterly report of spending by type of service; this report, known as the CMS-64, comprises expenditures for all Medicaid fee-for-service programs and capitation arrangements. The Medicaid Statistical Information System (MSIS) contains both service and demographic data supplied by the States, including provider payments and enrollment counts. The States also submit quarterly to CMS 2-year forecasts of spending by service, known as the CMS-37. Spending data are reported at both the Federal and State levels in the CMS-64 and CMS-37; MSIS expenditure data are reported as total Medicaid (Federal and State spending combined). OACT makes several adjustments to these data to merge them together for use in preparing projections.⁵

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

⁴ More information on these sources is available on the CMS website at http://www.cms.hhs.gov/MedicaidBudgetExpendSystem/01_Overview.asp#TopOfPage. Additional detail is provided in the Appendix.

⁵ It is important to note that there is a known problem with the data in MSIS regarding the data elements related to the Children’s Health Insurance Program (CHIP). It was recently discovered that there were errors in the MSIS data related to CHIP enrollment and expenditures for past years. We believe that the impacts of these errors on the estimates and projections in this report are small and are unlikely to result in material differences once the data have been properly revised. Given the size of CHIP, as measured by both enrollment and expenditures, the relative influence on any Medicaid estimates is expected to be correspondingly small. Additionally, because the expenditure data and projections are based on the CMS-64, total expenditures are not affected by this error; any revisions would be limited to enrollment and expenditures per enrollee among different enrollment categories. More information about these data errors can be found at <http://msis.cms.hhs.gov/>.

assumptions.⁶ 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 2011 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.⁷

The third source is the Office of the Actuary Health Reform Model (OHRM), which is primarily based on the Medical Expenditure Panel Survey (MEPS) Household Component. The OHRM was developed and used by OACT to estimate the impact of proposed health care reform legislation, including the Affordable Care Act as enacted. The projections presented in this report for the increases in Medicaid expenditures and enrollment due to the expansion of Medicaid eligibility under the Affordable Care Act are derived from the OHRM estimates. As a result, this report also relies on the data and assumptions used by the OHRM.⁸

The fourth source—National Health Expenditure (NHE) historical data and projections—is used for comparing Medicaid expenditures and enrollment with

⁶ *The 2011 Annual Report of the Boards of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds and The 2011 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Federal Disability Insurance Trust Funds.*

⁷ These assumptions are different from those used for projections in the President's FY 2012 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.

⁸ More information is available in the memorandum titled "Estimated Financial Effects of the Patient Protection and Affordable Care Act, as Amended" on the CMS website at http://www.cms.gov/ActuarialStudies/Downloads/PPACA_2010-04-22.pdf; 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. Given that Medicaid generally pays the lowest prices for health care services and that Medicaid enrollment is expected to increase, it is possible that meeting all additional demand would be difficult, especially in the early years of the coverage expansion.

Medicare, private health insurance, and total health care spending in the United States. The NHE data and projections are developed by OACT.⁹

It is important to note the limitations that are associated with the data described in this section. First, the most recent MSIS data available are from 2009, and the MSIS is the only available source of complete enrollment data. Consequently, to relate 2010 actual expenditures to the number of enrollees, estimates of Medicaid enrollment must be made for 2010. Another qualification is that the CMS-64 does not provide data on enrollment or spending by enrollment category, and the definitions of medical service categories are not consistent between the MSIS and the other CMS data sources. Adjustments need to be made to develop a data set that contains not only service-level expenditures that match the CMS-64 data but also expenditures by enrollment group; 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 is used to estimate spending by enrollment group for each Medicaid service. New services added to the CMS-64 reports in 2010 have provided additional detail of Medicaid expenditures; in some cases, this additional information has been used to adjust prior estimates of expenditures by enrollment group.

Yet another limitation is the unavailability of demographic, macroeconomic, health care, and program assumptions specific to each State. Because these State-specific assumptions are not available, it is not possible to 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 OACT has reviewed the data sources used in these projections but has relied on CMS program components and the States to ensure the quality of the data.

The Medicaid expenditure and enrollment projections shown in this report are based on current law; that is, they are consistent with current legislation and administrative policy regarding Medicaid as of December 19, 2011. 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

⁹ More information on the NHE historical accounts and projections is available on the CMS website at <http://www.cms.hhs.gov/NationalHealthExpendData/>. Also, see A. Martin, *et al.*, “Recession Contributes to Slowest Annual Rate of Increase in Health Spending in Five Decades,” *Health Affairs*, January 2011; 30:11-22; and S. Keehan, *et al.*, “National Health Spending Projections Through 2020: Economic Recovery and Reform Drive Faster Spending Growth,” *Health Affairs*, August 2011; 30:1594-1605.

and enrollment over history, we do not assume any future changes in policy (beyond those already scheduled under current law).

Like any projection of future health care costs, the Medicaid projections 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. The actual number of people who will become eligible for and enroll in Medicaid in 2014 is unknown, as are their health care costs; accordingly, these estimates should be considered more uncertain than other projections of Medicaid enrollment and expenditures under current eligibility criteria due to the lack of experience and program data to inform them.

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

IV. METHODOLOGY

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

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

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

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

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

Direct application of equation (1) requires data on utilization and reimbursement rates for Medicaid that are not currently available or practical to maintain.¹⁰ 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

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

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

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

¹⁰ 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.

Projections of future enrollment by eligibility category are based on estimates of the change in the share of the U.S. population enrolled in Medicaid. The most important factors are the unemployment rate and percentage of the U.S. population with private health insurance; these factors (while exhibiting some correlation between themselves) correlate strongly with the percentage of the U.S. population enrolled in Medicaid, as they reflect (1) how many people are without private health insurance and (2) how many people might qualify for Medicaid based on its income requirements. Price changes are derived from economic forecasts produced for the 2011 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.¹¹ The residual factor, while termed “utilization,” reflects not only the change in the average number of services per enrollee but also changes in the “intensity” or average complexity of the services. In addition, any errors in the measurement of the number of enrollees and price per service are implicitly included in the residual.

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

As noted previously, estimates of the impact of the Medicaid eligibility expansion under the Affordable Care Act are derived from the results of the OHRM.¹² This model is based on the MEPS, reweighted to match the spending and insurance coverage estimates of the NHE projections in 2011.¹³ The OHRM specifically estimates (1) the number of people who would become newly eligible for Medicaid and would enroll as a result of the eligibility expansion; (2) the number of people who are already eligible for Medicaid, but are not enrolled, and who would now enroll in the program as a result of the publicity and new assistance with application that will result from the Affordable Care Act; and (3) the amount of the new enrollees’ per capita Medicaid expenditures once they enroll. To estimate expenditures by service category for new Medicaid enrollees, it was assumed that such expenditures would be in the same proportion as that for currently enrolled Medicaid enrollees by eligibility category. (For example, if 50 percent of Medicaid spending for currently enrolled children is attributable to acute care fee-for-service,

¹¹ More details on the trend residual methodology are included in the Appendix.

¹² More information is available in the memorandum titled “Estimated Financial Effects of the Patient Protection and Affordable Care Act, as Amended” on the CMS website at http://www.cms.gov/ActuarialStudies/Downloads/PPACA_2010-04-22.pdf. These estimates have been updated to reflect more recent data and more recent information on the implementation of the many sections of the Affordable Care Act.

¹³ Keehan, *et al.*, “National Health Spending Projections Through 2020: Economic Recovery and Reform Drive Faster Spending Growth.”

then an equal share would be expected to be spent on acute care fee-for-service for newly eligible children.) Estimates of the other sections of the Affordable Care Act that affect Medicaid were developed separately by OACT and have been added to the Medicaid expenditure and enrollment projections. More details on the estimates of Medicaid impacts of the Affordable Care Act are available in the Actuarial Analysis section of this report.

V. ACTUARIAL ANALYSIS

A. FY 2010 MEDICAID OUTLAYS AND ENROLLMENT

The Federal government and the States collectively spent \$404.1 billion for Medicaid in 2010. Of this amount, the Federal government paid \$272.8 billion, representing about 68 percent of net program outlays, and the States paid \$131.3 billion, or about 32 percent of net outlays. Table 1 summarizes total Medicaid outlays for 2010.

**Table 1—Medicaid Outlays for Fiscal Year 2010 by Type of Payment
(In billions)**

Title XIX Outlays ¹	Federal Share	State Share	Total
Medical Assistance Payments:			
Acute Care Benefits ²	\$98.5	\$44.2	\$142.7
Long-Term Care Benefits ²	76.3	36.7	113.0
Capitation Payments and Premiums ²	71.5	32.4	103.9
Disproportionate Share Hospital (DSH) Payments ²	8.7	6.5	15.2
Adjustments ³	4.7	3.6	8.3
Subtotal, Medical Assistance Payments	259.7	123.4	383.1
Administration Payments	10.1	8.0	18.1
Vaccines for Children Program	3.8	—	3.8
Gross Outlays	273.5	131.4	404.9
Collections ⁴	-0.8	-0.1	-0.9
Net Outlays	272.8	131.3	404.1

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—95 percent of total outlays in 2010—was for medical assistance payments. In table 1, these payments are divided into four major categories: acute care, long-term care, capitation payments, and disproportionate share hospital (DSH) payments.

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

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

Of these four categories, acute care represented the largest portion of Medicaid spending in 2010, accounting for \$142.7 billion or 37 percent of Medicaid expenditures on benefits. Medicaid spending amounted to \$113.0 billion for long-term care and \$103.9 billion for managed care and other premiums in 2010, representing 29 percent and 27 percent of expenditures on benefits, respectively. DSH accounted for \$15.2 billion, or 4 percent, of Medicaid benefits in 2010.

Medicaid spending on program administration totaled \$18.1 billion in 2010—\$10.1 billion in Federal expenditures and \$8.0 billion in State expenditures, together representing 4 percent of Medicaid outlays. Medicaid also provided \$3.8 billion of funding in 2010 for the Vaccines for Children program (all Federal funding).¹⁴

At the time this report was prepared, the latest Medicaid enrollment data available were from 2009 (with the exception of Massachusetts, Utah, and Wisconsin, which had not yet reported this data).¹⁵ Accordingly, enrollment by eligibility group (children, adults, aged, and disabled) has been estimated for 2010.¹⁶

Enrollment is measured in two ways: (1) “person-year equivalents” (PYE), or the average enrollment over the course of a year, and (2) “ever-enrolled” persons, or the number of people covered by Medicaid for any period of time during the year. In 2010, Medicaid enrollment was estimated to be 53.9 million PYE (including enrollment in the U.S. territories). An estimated 67.7 million people, or slightly more than one person in five in the U.S., were ever-enrolled.

Table 2 shows estimated enrollment by eligibility group for 2010. Historically, children have been the largest group of Medicaid enrollees. In 2010, this group is estimated to have represented 26.8 million PYE, or about 51 percent of overall Medicaid enrollment (excluding Territory programs). Adults made up an estimated 11.9 million PYE (23 percent), while disabled enrollees and aged enrollees are estimated to have accounted for 9.5 million and 4.8 million PYE (18 percent and 9 percent, respectively). Another 1 million enrollees were projected for the five U.S.

¹⁴ 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.

¹⁵ Enrollment data for the missing States were estimated for 2009 based on projections of 2008 data.

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.

territories (Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, and the Northern Mariana Islands).

Table 2—2010 Estimated Enrollment, Expenditures, and Estimated Per Enrollee Expenditures, by Enrollment Group¹

Eligibility Group	Enrollment ² (in millions)	Expenditures (in billions)	Per Enrollee Spending
Children	26.8	\$72.8	\$2,717
Adults	11.9	51.4	4,314
Disabled	9.5	160.7	16,963
Aged	4.8	73.7	15,495
Total	52.9	358.5	6,775

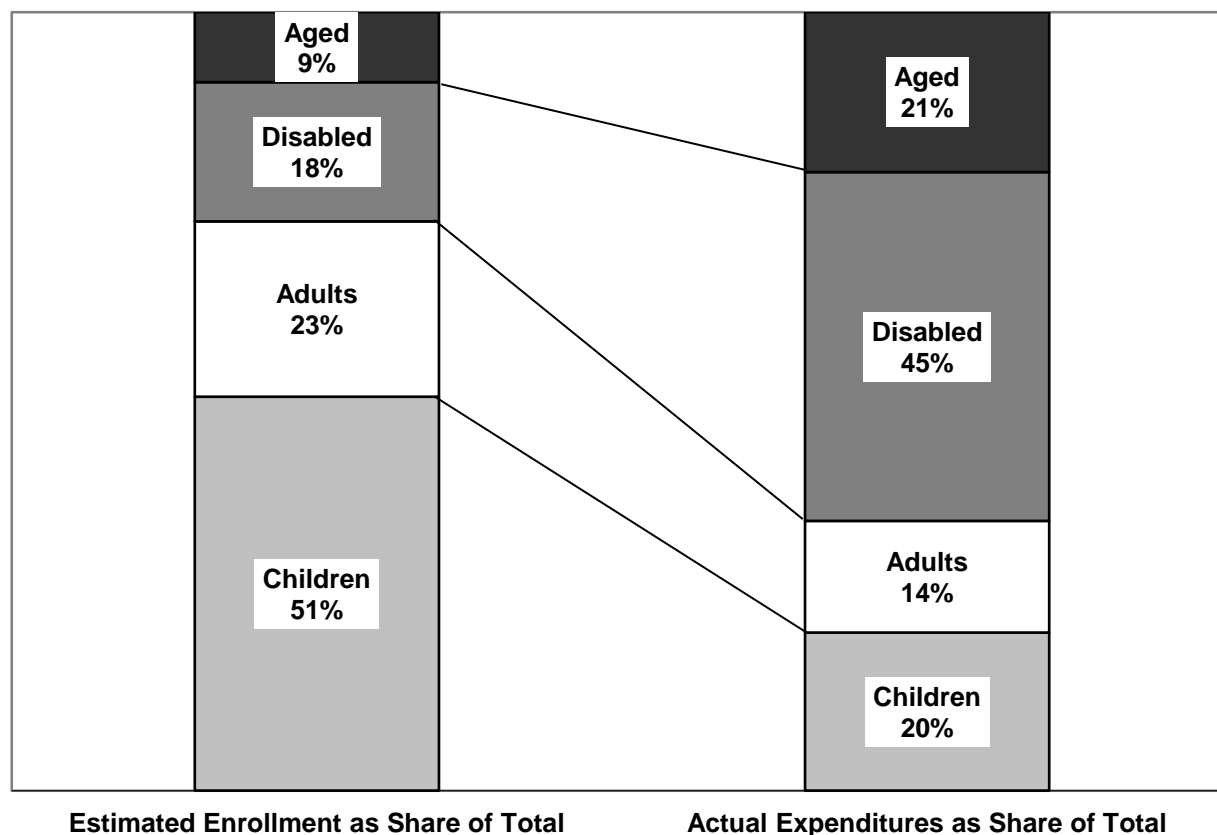
¹ Does not include DSH expenditures, territorial enrollees or payments, or adjustments.

² Measured in person-year equivalents.

The average per enrollee cost for 2010 was estimated to be \$6,775 (excluding DSH outlays, territorial enrollees and costs, adjustments, and administration costs). Children in Medicaid received an estimated \$2,717 in benefits on average in 2010, and adults received an estimated average of \$4,314 in benefits (based on PYE enrollment). In both instances, these average costs reflect the relatively favorable health status of the enrollment groups, although a large portion of the adults are pregnant women. As would be expected, expenditures are substantially greater for the aged and the disabled; that is, aged beneficiaries received an estimated \$15,495 in benefits on average, and disabled beneficiaries are estimated to have received an average of \$16,963 in benefits.

Figure 1 shows each enrollment group's relative share of enrollment and expenditures in Medicaid in 2010. While disabled enrollees and aged enrollees are the smallest enrollment groups in Medicaid, they are projected to 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.

**Figure 1—Medicaid Enrollment and Expenditures, by Enrollment Group, as Share of Total,¹
Fiscal Year 2010**



¹ Totals and components exclude DSH expenditures, territorial enrollees and expenditures, and adjustments.

Combined, spending on aged and disabled beneficiaries constituted 65 percent of Medicaid benefit expenditures in 2010, but only accounted for 27 percent of all enrollees. Children and adults represented 73 percent of all enrollees in 2010, while only 35 percent of benefit expenditures were for enrollees in these two groups.

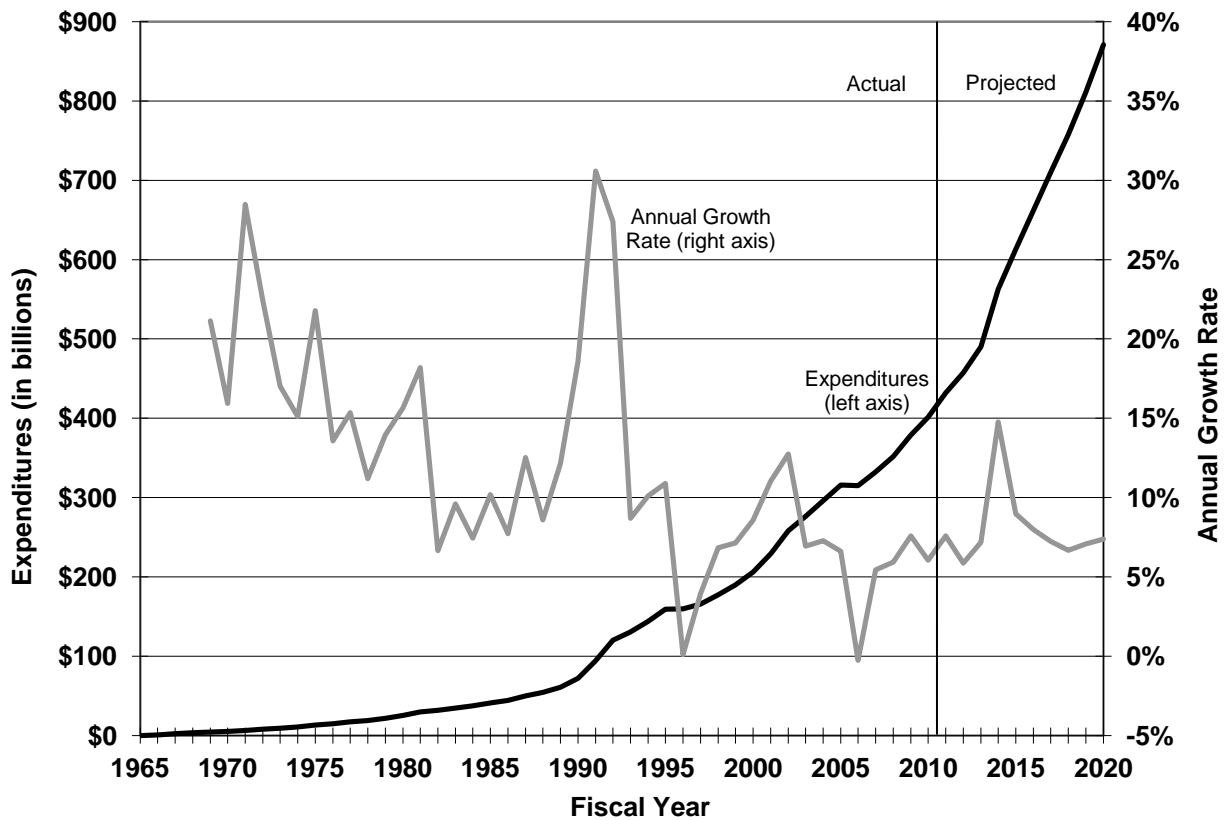
These differences between the relative shares of enrollment and expenditures result from per enrollee costs that vary dramatically among the enrollment groups. These differences in average costs, while substantial, actually understate the impact of differences in health status for these groups. In particular, Medicaid pays almost all health care costs for enrolled children and adults. However, many aged or disabled beneficiaries are also enrolled in Medicare, which is the primary payer of benefits before Medicaid; thus, these per enrollee Medicaid estimates are less than the total cost of such beneficiaries' annual health care across all payers.

B. HISTORICAL MEDICAID TRENDS

Since the start of the program, the year-to-year growth of total Medicaid expenditures (Federal and State expenditures combined) has varied substantially, as can be seen in figure 2. The growth in expenditures over time reflects growth in

the number of enrollees in the program and growth in the cost per enrollee. 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 2020



Expenditures and enrollment grew rapidly between 1966 through 1970 as the program was started and expanded significantly; expenditures were \$0.9 billion in 1966, the first year of the program, and increased to \$5.1 billion by 1970 (54.4 percent average annual growth), and enrollment increased from 4.0 million PYE to 14.0 million PYE between 1966 and 1970 (36.4 percent average annual growth). From 1971 to 2010, growth in Medicaid expenditures averaged 11.5 percent per year and enrollment growth averaged 3.4 percent per year; the average expenditures per enrollee grew at an average annual rate of 7.8 percent.

The remainder of this section describes in more detail the trends in Medicaid expenditure, enrollment, and per enrollee cost growth from 1994 through 2010.¹⁷

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

During 2000 through 2005, Medicaid growth was faster than in the previous 6 years, with spending increasing an average of 8.8 percent per year. Medicaid enrollment increased at an average rate of 6.4 percent per year during this period, in significant part due to the 2001 economic recession. Over the same time period, Medicaid per enrollee expenditures grew at an average rate of 2.3 percent per year.

One factor that contributed to slower growth in Medicaid per enrollee spending was States' efforts to control the costs of their Medicaid programs. As enrollment and medical prices grew faster than they had in the past and economic growth was slower, many of the States' efforts were focused on controlling program growth rather than on expanding their Medicaid programs. Absent these changes, per enrollee cost growth and total expenditure growth would likely have been somewhat greater over this period. Partially offsetting this slowdown was a temporary increase in Federal funding for Medicaid. Congress increased the FMAP for parts of 2003 and 2004 in the Jobs and Growth Tax Relief Reconciliation Act of 2003, thereby temporarily increasing the Federal share of Medicaid expenditures. While changes to the FMAP do not directly change the level of total Medicaid expenditures, these increases presumably assisted States in avoiding deeper cuts in their plans.

In 2006, aggregate Medicaid spending was 0.3 percent *lower* than in 2005, decreasing for the first time in the program's history. Medicaid enrollment grew 0.4 percent in 2006, while Medicaid per enrollee expenditures decreased 0.7 percent.

¹⁷ For a description of Medicaid expenditure trends from the beginning of the program in 1966 through 2000, see J. Klemm, "Medicaid Spending: A Brief History," *Health Care Financing Review*, Fall 2000; 22(1): 105-112.

The primary driver of this decrease was the shift of most prescription drug coverage for dual-eligible beneficiaries (those eligible for both Medicaid and Medicare) from Medicaid to the new Medicare Part D program, which began in January 2006. All dual-eligible beneficiaries were automatically enrolled in Part D, and Medicare now served as the primary source of their prescription drug coverage.¹⁸ As a result of this shift in coverage, Medicaid drug spending (net of rebates) decreased 44 percent from 2005 to 2006. All other Medicaid benefit spending grew 4.4 percent—still a relatively low growth rate compared to historical growth trends.

Medicaid expenditures grew 5.4 percent in 2007. Medicaid enrollment decreased by 0.7 percent, with reductions in enrollment levels for children and adults, presumably as a result of the relatively strong economic growth in the preceding several years. Growth in Medicaid per enrollee expenditures was 6.2 percent in 2007. Due to the shift of drug coverage for dual-eligible beneficiaries to Medicare Part D, benefit spending was 1.2 percent lower in the first quarter of FY 2007 than in the first quarter of FY 2006. For the rest of FY 2007, Medicaid benefits increased 7.9 percent compared to the same period in 2006.

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

In 2009, Medicaid expenditures increased by 7.6 percent, a level that was significantly affected by the economic recession. Medicaid enrollment was estimated to have grown at a rate of 6.5 percent in 2009—the fastest rate since 2003. Enrollment growth was fastest amongst children (at an estimated rate of 8.3 percent), while adults and disabled enrollees also experienced significant growth (estimated at 6.7 percent and 5.0 percent, respectively). With the strongest enrollment growth estimated to be amongst categories of beneficiaries with low average costs, per enrollee cost growth of all enrollees slowed further to only 1.0 percent in 2009.

Medicaid expenditures grew at a slower rate of 6.1 percent in 2010. This deceleration in expenditure growth was a result of slower growth in Medicaid medical assistance payments (from 7.8 percent in 2009 to 6.5 percent in 2010) and a decrease in administration payments of \$0.4 billion, or 2.1 percent. Enrollment is estimated to have increased by 6.2 percent—a slightly slower rate than in 2009. Last year, the enrollment growth rate had been projected to decelerate as economic conditions, particularly the unemployment rate, improved during 2010; however, as the unemployment rate still remained high compared to recent history, Medicaid

¹⁸ Medicaid still provides some prescription drug coverage for dual-eligible beneficiaries for categories of drugs that Medicare Part D does not cover.

enrollment growth rates are likewise expected to have remained relatively high. Enrollment growth was projected to be fastest amongst children and adults. The average expenditures per enrollee are estimated to have decreased by 0.1 percent in 2010, reflecting the decrease in administration payments and the continuing trend of relatively faster enrollment growth amongst lower-cost populations. In addition, estimated average per enrollee costs for aged enrollees declined in 2010, driven by a reduction in nursing facility expenditures from 2009 to 2010.

During the last several years, the States have taken more actions designed to limit the rate of growth of Medicaid expenditures, including freezing or reducing provider payment rate updates and limiting services available. It is likely that these actions have contributed to the slowing growth rates in Medicaid expenditures per enrollee as well.¹⁹

It is also important to note the impact of the American Recovery and Reinvestment Act (ARRA) of 2009 on Medicaid expenditures over the past 2 years. ARRA provided for a higher temporary FMAP for all States retroactive to the beginning of FY 2009. This change resulted in an average effective Federal share for 2009 of about 65 percent (benefits and administration costs) and increased Federal expenditures by \$34.3 billion (over what the Federal government otherwise would have spent), while it decreased State expenditures by the same amount. As a result, Federal Medicaid expenditures grew by 23.0 percent in 2009, while State Medicaid expenditures declined by 12.8 percent. In 2010, the higher temporary FMAP shifted \$39.7 billion in Medicaid expenditures from the States to the Federal government, further increasing the average effective Federal share of Medicaid expenditures to 67 percent. Federal Medicaid expenditures rose by 9.6 percent in 2010, while State Medicaid expenditures declined by 0.5 percent. (In general, the Federal and State annual Medicaid expenditure growth rates are similar; the largest annual differences between the two rates are the results of legislation, such as ARRA.)

C. MEDICAID EXPENDITURES AND ENROLLMENT PROJECTIONS, FY 2011–FY 2020

The projections presented in this report focus on Medicaid benefit expenditures and Medicaid enrollment; administration costs are also included and are based on the projections from the President’s FY 2012 Budget Mid-Session Review, updated to account for legislation that has passed since the Mid-Session Review was released. Other Title XIX expenditures (such as the Vaccines for Children program) are not

¹⁹ These State actions are well documented in the annual 50-State survey of Medicaid programs conducted by the Kaiser Family Foundation; see V. Smith, *et al.*, “Moving Ahead Amid Fiscal Challenges: A Look at Medicaid Spending, Coverage and Policy Trends; Results from a 50-State Medicaid Budget Survey for State Fiscal Years 2011 and 2012,” Kaiser Family Foundation; October 2011.

included. Historical and projected Medicaid expenditures for medical assistance payments and administration are shown in table 3.²⁰

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

Fiscal Year	Enrollment	Total expenditures	Federal expenditures	State expenditures
Historical data:				
1966	4.0	\$0.9	\$0.5	\$0.4
1970	14.0	5.1	2.8	2.3
1975	20.2	13.1	7.3	5.9
1980	19.6	25.2	14.0	11.2
1985	19.8	41.3	22.8	18.4
1990	22.9	72.2	40.9	31.3
1995	33.4	159.5	90.7	68.8
2000	34.5	206.2	117.0	89.2
2001	36.9	229.0	129.8	99.2
2002	40.5	258.2	146.6	111.6
2003	43.5	276.2	161.0	115.1
2004	45.2	296.3	175.0	121.3
2005	46.6	315.9	180.4	135.5
2006	46.7	315.1	179.3	135.8
2007	46.4	332.2	189.0	143.2
2008	47.7	351.9	200.2	151.7
2009	50.8	378.6	246.3	132.3
2010	53.9 ¹	401.5	269.8	131.7
Projections:				
2011	56.1	432.0	272.8	159.2
2012	57.0	457.4	260.9	196.5
2013	57.3	490.2	282.4	207.8
2014	72.0	562.6	341.0	221.6
2015	78.7	613.1	375.7	237.4
2016	81.4	662.1	408.2	253.9
2017	82.8	710.1	436.7	273.3
2018	83.8	757.5	465.4	292.1
2019	84.4	811.1	497.8	313.3
2020	85.1	871.0	530.9	340.0

¹ FY 2010 enrollment is projected.

Total Medicaid expenditures (Federal and State expenditures combined) for medical assistance payments and administration are projected to grow 7.6 percent in 2011

²⁰ 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). As a result, the average annual growth rates of Medicaid expenditures and enrollment that include years prior to 1977 may differ from those shown in past reports.

to \$432.0 billion and to reach \$871.0 billion by 2020, increasing at an average rate of 8.1 percent per year over the next 10 years.²¹ Federal government spending on Medicaid medical assistance payments and administration costs is projected to rise to \$272.8 billion in 2011, representing about 63 percent of total Medicaid benefit expenditures. The temporary FMAP increases under ARRA were set to expire after the first quarter of FY 2011 but were extended by P. L. 111-226 through the third quarter of FY 2011, albeit at lower rates. The phase-down and expiration of these FMAP increases are responsible for the decrease in the average Federal share in 2011 relative to 2010. Federal spending on Medicaid is projected to reach \$530.9 billion by 2020, or about 61 percent of total spending. State Medicaid expenditures are projected to grow to \$159.2 billion in 2011 and to reach \$340.0 billion by 2020. Due primarily to the expiration of the FMAP increases, Medicaid expenditures by the States are projected to increase by 20.9 percent in 2011 and by 23.4 percent in 2012.

The Affordable Care Act contains many Medicaid provisions, including a substantial increase in Medicaid eligibility beginning in 2014. These impacts are expected to have a significant influence on future Medicaid expenditure trends, and they are presented in more detail in the next section.

The Federal share of total Medicaid expenditures is projected to vary over the next 10 years due to several acts of legislation. From 2005 through 2008, the average Federal share was approximately 57 percent. For 2009, 2010, and 2011, the ARRA provided for temporary FMAP increases, in part based on changes in each State's unemployment rate. This act led to a higher Federal share of about 65 percent in 2009 and about 67 percent in 2010. As a result of an extension of the temporary FMAP increase through June 30, 2011, as provided for in P. L. 111-226, the Federal share for 2011 is projected to be approximately 63 percent. The average Federal share is expected to return to about 57 percent in 2012 and about 58 percent in 2013 before rising again in 2014—with the latter increase due mainly to the higher FMAP for newly eligible Medicaid beneficiaries as required in the Affordable Care Act. The projected average Federal share increases to about 61 percent in 2014 and 2015 and to about 62 percent for 2016 and 2017, and then declines to 61 percent in 2018 through 2020.

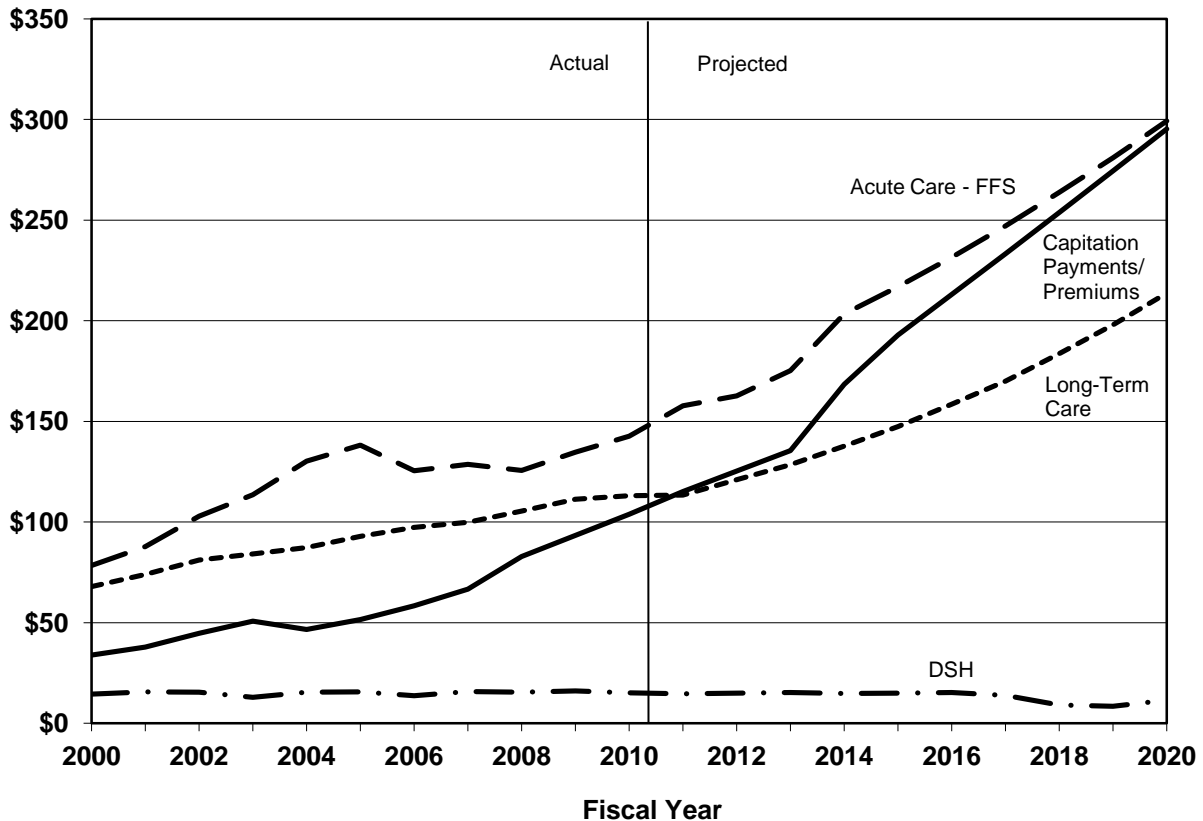
Total Medicaid expenditures (Federal and State expenditures combined) for medical assistance payments are projected to grow 7.0 percent in 2011 to \$410.4 billion and to reach \$835.7 billion by 2020, increasing at an average rate of 8.1 percent per year over the next 10 years. Federal government spending on Medicaid medical assistance payments is projected to be \$260.0 billion in 2011, the same level as in

²¹ This increase reflects average annual growth of 6.9 percent in 2011-2013, a large increase of 14.8 percent in 2014, as the eligibility expansion under the Affordable Care Act takes effect, and average growth of 7.6 percent in 2015-2020, in part due to the continuing implementation of the Affordable Care Act.

2010 (due to the expiration of the temporary FMAP increases), and to grow to \$511.1 billion by 2020.

The fastest-growing service categories in Medicaid over the next 10 years are projected to be capitation payments and acute care fee-for-service, as shown in figure 3. The expansion of Medicaid eligibility in the Affordable Care Act beginning in 2014 is the primary factor underlying the growth in Medicaid spending in these types of benefits, as acute care and capitation payments tend to be the predominant sources of expenditures for children and adults. Medicaid capitation payments are projected to increase at an average annual rate of 11.0 percent per year for 2011 through 2020. This projected trend reflects the assumption that many of the newly eligible Medicaid enrollees in 2014 will be enrolled in Medicaid managed care plans, as has been true of currently enrolled children and adults. Capitation payments are projected to remain the fastest-growing category of services in Medicaid over the next 10 years and are projected to exceed long-term care expenditures in 2011 and to nearly equal acute care fee-for-service expenditures by 2020. During this period, acute care fee-for-service expenditures by Medicaid are projected to grow at an average annual rate of 7.7 percent per year, driven in part by the addition of new enrollees under the eligibility expansion in 2014.

Figure 3—Past and Projected Medicaid Expenditures for Medical Assistance Payments, by Type of Payment, FY 2000–FY 2020 (In billions)



Medicaid spending on long-term care is projected to grow by 6.6 percent on average for 2011 through 2020. The aging of the population is one contributing factor to growth in expenditures for long-term care: as the number of people age 65 or older increases—and especially the number of those over age 85—there is a corresponding projected increase in the amount of long-term care spending, since elderly beneficiaries tend to use more long-term care than younger beneficiaries. As the oldest members of the baby boom generation begin to reach age 65, both the number of aged enrollees in Medicaid and eventually the rate of long-term care expenditures growth are projected to increase. While the baby boom generation is not estimated to have a major effect on long-term care spending during 2011 through 2020, the increase in the number of people over age 85 in the next 10 years is expected to do so. Additionally, while few of the newly eligible Medicaid enrollees in 2014 and later are anticipated to have significant or immediate long-term care needs, several provisions in the legislation are expected to expand access and, in turn, spending for long-term care services.

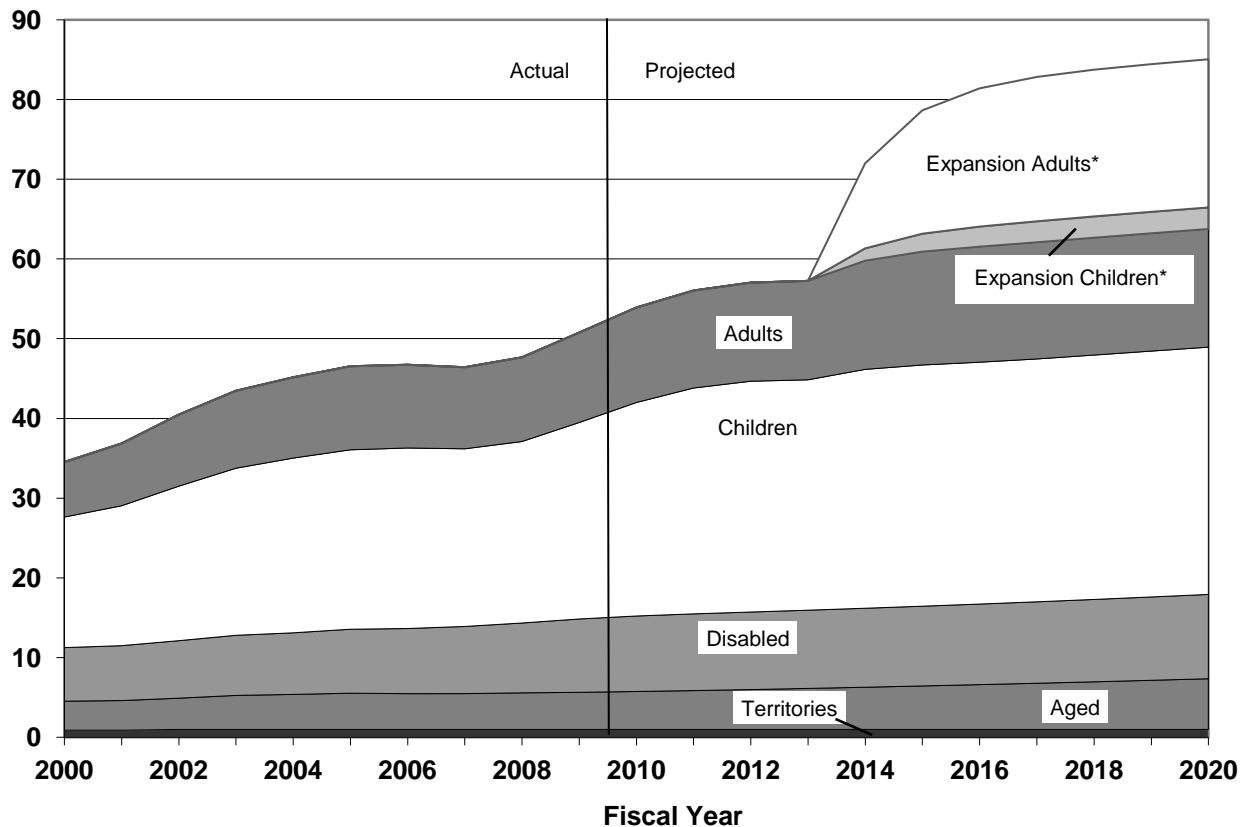
Medicaid DSH expenditures are typically expected to grow at the same rate as the Medicaid Federal DSH allotments, which are based on the Consumer Price Index (CPI); however, the Affordable Care Act prescribes reductions in Medicaid DSH

allotments beginning in 2014, with the largest adjustments starting in 2017. Thus, the average growth rate for DSH spending is projected to be -2.8 percent over the next 10 years.

Administration costs are projected to be about \$21.6 billion in 2011 and to reach approximately \$35.2 billion by 2020; such expenditures are projected to grow at an average annual rate of 7.0 percent. These projected costs include additional administration costs related to the Medicaid eligibility expansion under the Affordable Care Act.

Increasing levels of Medicaid enrollment are expected to contribute to expenditure growth over the next 10 years. Historical and projected Medicaid enrollments are shown in figure 4 by category.

**Figure 4—Past and Projected Numbers of Medicaid Enrollees, by Category,
FY 2000–FY 2020
(In millions of person-year equivalents)**



* For purposes of this chart, “Expansion Adults” are adult enrollees who are newly eligible in 2014 and later as a result of the expanded eligibility criteria in the Affordable Care Act. “Expansion Children” are defined here as the dependent children of newly eligible adult enrollees, even if these children were eligible under current criteria. Currently eligible adults who become enrolled as a result of the publicity and outreach efforts associated with the eligibility expansion in 2014 and later are included with Adults, and their dependent children are included with Children in this figure.

Total enrollment is projected to increase from 53.9 million person-year equivalents (PYE) in 2010 (including 1.0 million enrollees in the U.S. Territories) to 56.1 million in 2011 and 85.1 million PYE by 2020, reflecting the following factors:

- An increase of 4.0 percent is estimated for 2011, based on small decreases in the unemployment rate and continuing economic growth this year. This increase follows a 6.2-percent growth rate in 2010 and is consistent with the pattern experienced during and immediately following past recessions. Job losses due to recessions result in losses of employer-sponsored health insurance and lower family income, with an associated increase in the number of people eligible for Medicaid. Other workers may no longer be able to afford individual or employer insurance coverage and consequently seek Medicaid coverage. According to the National Health Expenditure (NHE) accounts and projections, private health insurance enrollment was estimated

to have declined by over 13 million persons between 2007 and 2010 and is projected to increase only modestly in 2011.²²

During 2012-2013, enrollment growth is expected to slow substantially as the economy recovers from the recent recession and unemployment declines. The estimated average annual growth rate during this period is only 1.1 percent.

In 2014, when the eligibility expansion under the Affordable Care Act takes effect, total enrollment is estimated to increase by 14.7 million or 25.7 percent. An estimated 14.9 million new beneficiaries will enroll as a result of the legislation; absent its impact, enrollment would have been projected to decline slightly in 2014, reflecting the effect of projected faster economic growth and lower unemployment rates. As noted previously, eligibility will be expanded to almost all persons under age 65 in families with income below 138 percent of the Federal Poverty Level (FPL). (The Affordable Care Act specifies an income threshold of 133 percent of FPL, but it also allows a 5-percentage-point income disregard, which sets the effective income limit to 138 percent of FPL.)

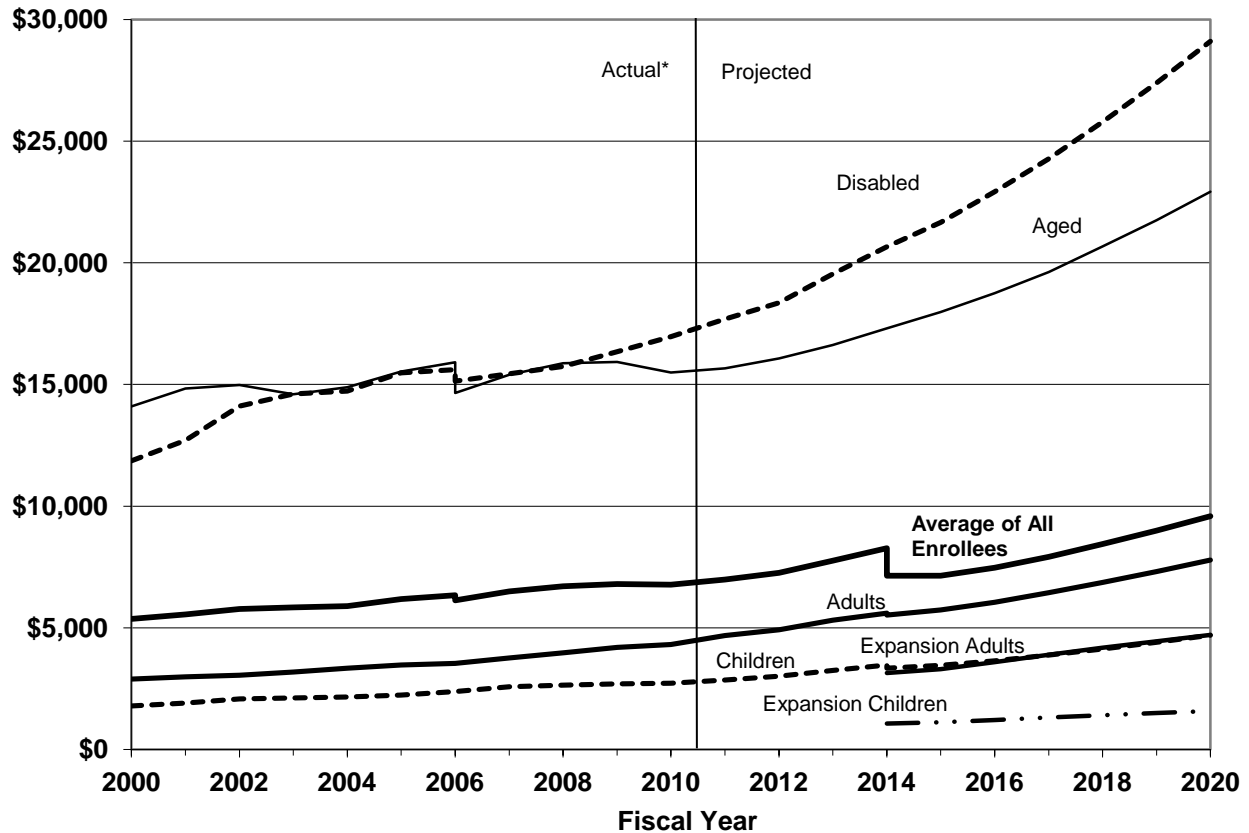
The increase in Medicaid enrollees attributable to the eligibility expansion is assumed to occur during 2014-2016, with most of the increase taking place in the first year. The additional growth in enrollment in 2015-2016 is estimated to average 6.3 percent per year.

Finally, after the coverage expansion is fully realized, the total number of Medicaid enrollees is projected to increase during 2017-2020 at about 1.1 percent per year, reflecting population growth, stable economic assumptions, and an increase in the number of aged enrollees as the baby boom generation continues to reach age 65. (Excluding the newly eligible enrollment groups, the growth of aged adults is expected to be faster than the other categories of enrollment; the average annual increase for aged adults is estimated to be 2.9 percent over the next 10 years.)

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 5 displays historical and projected average Medicaid benefit expenditures per enrollee for all enrollees collectively and by eligibility group.

²² Martin, *et al.*, “Recession Contributes to Slowest Annual Rate of Increase in Health Spending in Five Decades”; and Keehan, *et al.*, “National Health Spending Projections Through 2020: Economic Recovery and Reform Drive Faster Spending Growth.”

Figure 5—Past and Projected Medicaid Expenditures on Medical Assistance Payments Per Enrollee, by Enrollment Category, FY 2000–FY 2020



* Per enrollee amounts for 2010 are based on actual expenditures and estimated enrollment.

The average Medicaid benefit expenditures per enrollee were estimated to have declined by 0.3 percent from 2009 to 2010, reflecting an estimated decrease in the average expenditures per aged enrollee (led by slower long-term care expenditure growth) and an estimated relative increase in the number of children enrolled in Medicaid. These children are anticipated to have relatively lower health care costs, similar to children previously enrolled, contributing to lower average expenditures per enrollee when considering all enrollment categories together. The relative differences shown previously in table 2 for the individual enrollment categories are expected to continue, with average costs for aged and disabled enrollees projected to remain substantially higher than for children and adults.

Aged Medicaid enrollees have traditionally had the highest average benefit cost, primarily as a result of nursing facility expenses and, prior to 2006, prescription drug costs. During 2000 to 2009, however, nursing home expenditures per aged enrollee increased relatively slowly, and most costs for prescription drugs were shifted from Medicaid to the new Medicare Part D program starting January 1, 2006. As a result, the average benefit cost per aged Medicaid enrollee grew very slowly during this period (1.4 percent) and declined to approximately the same level as for disabled enrollees in 2006 through 2009. The average annual increase in all

other benefit costs per aged enrollee (that is, excluding nursing home and prescription drug costs) was substantially faster during 2000 to 2009.

In 2010, aged enrollees' average benefits cost was estimated to have declined 2.7 percent, driven (as noted) mainly by a decrease in nursing home expenditures. Average benefits for aged enrollees are projected to continue to increase at a below-average pace (4.0 percent) for the next 10 years, in large part because of expected continuing slow growth in the use of nursing home care. The projected growth rate is significantly faster than that experienced during 2000 to 2010, since the introduction of Medicare Part D had a strong impact on average growth over this historical period but will not further affect future growth rates. In addition, provisions in the Deficit Reduction Act of 2005 tightened the eligibility criteria for nursing facility benefits, while the Affordable Care Act broadens availability of long-term care services and supports.

Per enrollee costs for the disabled have been increasing at a faster pace than for aged beneficiaries (3.6 percent on average during 2000 through 2009). Slow growth in nursing home costs has had a much smaller impact on average costs for this category of enrollees, since the proportion of disabled enrollees with nursing home placement is substantially lower than for aged enrollees. At the same time, cost increases for disabled enrollees have reflected the expanding use of home and community-based services.²³ Per enrollee Medicaid costs for the disabled were also reduced significantly by the shift of prescription drug coverage from Medicaid to Medicare for dual beneficiaries; however, this impact was smaller for the average cost per disabled enrollee than for the aged, because a greater proportion of aged Medicaid enrollees are enrolled in Medicare than is the case for disabled Medicaid enrollees.

The average benefit costs for disabled enrollees are estimated to have increased by 3.8 percent in 2010. Per enrollee benefits are projected to increase in 2011 through 2020 at a rate similar to that experienced over the last decade (after adjusting for the removal of most prescription drugs). Growth in benefits for the disabled is projected to average 5.5 percent, reflecting a lower proportion of costs spent on nursing home care than for aged enrollees and a continuing rapid expansion in the use of home and community-based services.²⁴

²³ Use of home and community-based services can substantially reduce expenditures for enrollees who would otherwise have had to enter a nursing home. Conversely, the expanding use of these services, by those who would not otherwise have had nursing home care, adds to overall program costs.

²⁴ Although the availability of home and community-based services can help prevent or postpone nursing home placement—and thus substantially reduce Medicaid costs for beneficiaries—this impact appears to be outweighed by the increasing availability and use of home and community-based services by disabled enrollees who may not have used institutional long-term care in the absence of these services.

Per enrollee Medicaid benefits for adults increased by about 4.2 percent annually during 2000 through 2009, as a result of growth in the costs of prescription drugs, clinics, laboratory tests, and capitation payments, offset by relatively flat trends in spending for inpatient and outpatient hospital care and for physician services. These patterns by type of service are strongly affected by the increasing proportion of the adult Medicaid population enrolled in managed care plans.²⁵

After increasing an estimated 2.8 percent in 2010, growth in average benefits for non-expansion adults is projected to increase during 2011 through 2020 at a faster pace—averaging 6.1 percent per year—due to faster growth in fee-for-service acute-care expenditures and a slowdown in moving beneficiaries to managed care plans. As the proportion of beneficiaries in managed care plans has grown, future increases are expected to be smaller, and fee-for-service and managed care plan expenditures per enrollee are ultimately projected to grow at similar rates. Additionally, average benefit growth is projected to accelerate in 2011, associated with a sharp increase in supplemental inpatient and outpatient hospital payments; this trend is expected to influence the average benefit growth amongst adults most strongly, because for these beneficiaries, inpatient and outpatient hospital services account for a relatively larger share of their Medicaid benefits than for other enrollment groups.²⁶

As shown in figure 5, the estimated average costs for adults who become enrolled as a result of the expanded eligibility criteria in the Affordable Care Act are significantly lower than those for existing beneficiaries. In part this difference arises from the fact that adults in poor health often suffer a loss in income, increasing their likelihood of qualifying for Medicaid under the pre-Affordable Care Act criteria. Differences in the costs may also reflect the impact of an anticipated higher participation rate amongst persons with relatively low or no health care costs, whose inclusion would tend to lower average per enrollee costs.

For children, per enrollee Medicaid benefits increased at a 4.7-percent annual rate during 2000 through 2009. Expenditure growth was driven by capitation payments and premiums, which account for nearly half of children's Medicaid expenditures. Per enrollee expenditures are estimated to have grown only 0.9 percent in 2010, as the result of relatively slow growth in managed care premium payments and acute-

²⁵ Medicare expenditures for nursing home care, on behalf of children and adults, are very low, and such enrollees were unaffected by the implementation of Medicare Part D in 2006. Thus, these factors, which limited expenditure per enrollee growth for aged and disabled beneficiaries, had an insignificant impact on the trends for children and adults.

²⁶ These supplemental payments are payments made by the States to health care providers or facilities that are above the standard program reimbursement rates, subject to the upper payment limits (UPLs). These upper payment limits are generally equal to the amount that Medicare would have paid for the same services.

care services. Future growth in per enrollee spending is projected to be somewhat faster than in the last decade, averaging about 5.6 percent per year, with the fastest growth again coming from capitation payments and premiums.

Over the next 10 years, the projected average annual growth rates of per enrollee benefit expenditures range from 6.1 percent for adults to 4.0 percent for aged enrollees. As suggested by the discussion above, variations in per enrollee cost growth rates among enrollment categories are mainly due to the different mix of services assumed for each group. In particular, the growth rate for aged enrollees is strongly affected by the expected continuing slow increase in the use of nursing home care, which dominates this category, while costs for other enrollees reflect a greater proportion of acute-care services and capitation payments, which are expected to increase at more normal rates.

Across all enrollment categories, by 2020 the average beneficiary is projected to receive about \$9,600 in health care benefits through Medicaid. For all categories combined, per enrollee spending on medical assistance payments during 2011 through 2020 is projected to increase at an average annual rate of 3.5 percent per year—which, somewhat counter-intuitively, is slower than the rate for any of the separate eligibility categories. The apparent anomaly is explained by expected changes in the proportions of total enrollees in each category.²⁷ In particular, most of the estimated 25.9 million new enrollees becoming eligible in 2014 and later under the Affordable Care Act will be adults and children, who have a much lower average cost than do aged or disabled enrollees. Moreover, as noted above, the expansion populations are expected to have a lower average cost than existing beneficiaries in each category. Without the effects of the new beneficiaries, Medicaid expenditures per enrollee would be projected to grow 5.9 percent per year on average over the next 10 years. (As indicated in figure 5, the average per enrollee cost across all beneficiaries is projected to decline 8.1 percent in 2014 with the addition of the new, comparatively less expensive enrollees, and then to increase only 0.1 percent in 2015 as additional people become enrolled under the broader eligibility criteria.)

The downward impact on average cost growth described above will be partially offset by a change in the relative number of aged enrollees in the program. With accelerating growth in the number of Medicaid enrollees age 65 or older, coinciding

²⁷ This effect—that differences in enrollment growth rates between enrollment groups have influenced overall per enrollee spending trends—has had major impacts on historical per enrollee growth trends. These impacts have been most notable during economic recessions: as more children and adults enroll in Medicaid during a typical recession—since they tend to be the Medicaid beneficiary groups most sensitive to changes in the economy—the overall per enrollee expenditure growth rate tends to be relatively lower, reflecting the influx of less costly enrollees. Similarly, in periods when enrollment growth of children and adults has been slower than that of aged and disabled beneficiaries, the overall per enrollee expenditure growth rate has tended to be relatively higher.

with the aging of the baby boom generation, there will be a greater share of aged enrollees in the program in the near future. Between 2011 and 2020, the number of such beneficiaries is expected to increase by 30 percent, or 1.5 million. Although this demographic shift is significant, it is still small compared to the expansion of coverage under the Affordable Care Act.

D. AFFORDABLE CARE ACT AND OTHER LEGISLATIVE IMPACTS

The Affordable Care Act will have a substantial effect on Medicaid trends over the next 10 years and beyond. In terms of the magnitude of changes to the program's projected expenditures and enrollment, it is likely that the provisions of this law will result in the largest legislative change to Medicaid since the program's inception. This section will describe the estimated impacts on total Medicaid expenditures, Federal and State Medicaid expenditures, and Medicaid enrollment.²⁸

In 2010, the Affordable Care Act is estimated to have lowered Medicaid expenditures by about \$90 million. The two largest impacts in 2010 were the additions of several new drug rebates, which led to savings, and the option for States to expand eligibility to adults at higher income levels before 2014, which led to small costs that partially offset the savings from the drug rebates.

From 2011 through 2020, the Affordable Care Act is expected to add a total of \$619 billion to aggregate Medicaid expenditures—an increase of about 11 percent over projections of Medicaid spending without the impact of the legislation. Federal expenditures make up the great majority of this projected increase; Federal Medicaid expenditures are projected to be \$572 billion (or about 17 percent) higher over this time period, while State expenditures are projected to expand only by \$47 billion (or about 2 percent). The Federal government is projected to pay for about 92 percent of this increase.

The most significant provision, measured by its impact on expenditures and enrollment, is the expansion of Medicaid eligibility to almost all persons under age 65 living in families with incomes below 138 percent of the FPL beginning in 2014. This expansion is projected to add 14.9 million PYE to enrollment in FY 2014 during the 9 months that the new eligibility rules will be in effect for that year and is expected to add 25.9 million PYE by 2020.²⁹ Of the new enrollees, about

²⁸ The Office of the Actuary originally developed estimates of the impacts of the Affordable Care Act on Medicaid expenditures and enrollment that were included in the April 22, 2010 memorandum by Richard S. Foster. Subsequently, these estimates have been updated to incorporate the most recent health expenditure and coverage data, as well as to reflect the most current understanding of policy related to the implementation of the Act.

²⁹ Under the Affordable Care Act, income would be measured using Modified Adjusted Gross Income (MAGI). P.L. 112-56 amended the eligibility criteria added by the Affordable Care Act to include all Social Security income in MAGI for the purposes of determining Medicaid eligibility. The projections shown in this report are consistent with this income definition.

80 percent are projected to be adults, and the remaining 20 percent children.³⁰ Furthermore, 82 percent are projected to be newly eligible (that is, eligible only under the new rules beginning in 2014), while 18 percent are projected to be eligible under the current Medicaid rules. (This latter group is expected to enroll in Medicaid as a result of the new assistance that will be available through the simplified enrollment process, the health insurance exchanges, and the publicity associated with the expansion of eligibility.)

Of the total increase in Medicaid expenditures on benefits under the Affordable Care Act, the expansion, including the enrollment of newly eligible individuals and increased participation of currently eligible individuals, is projected to contribute \$564 billion from 2014 through 2020.³¹ Of this increase, the majority is projected to be paid by the Federal government—\$500 billion, or about 89 percent—and the States are projected to spend an additional \$64 billion. The Federal government participation is relatively larger than for current Medicaid expenditures because the Affordable Care Act specifies a much higher Federal matching rate for newly eligible beneficiaries, ranging from 100 percent in 2014, 2015, and 2016 to 90 percent by 2020 and beyond.

The effective participation rate of persons who would have been uninsured for a full year, but are newly eligible for Medicaid as a result of the Affordable Care Act, is assumed to be 95 percent. This assumed rate is significantly higher than actual Medicaid participation rates to date and is based on the anticipated impacts of sections of the Affordable Care Act intended to make the process of enrolling easier. In particular, simplified eligibility determinations will enable many individuals to be enrolled automatically based on their prior year income tax returns. Moreover, the legislation establishes State or federally facilitated health insurance exchanges that, among other responsibilities, will facilitate the determination of individuals' and families' eligibility for Federal financial assistance for health insurance, either through Medicaid or through the Federal premium and cost-sharing subsidies for private health insurance plans. The exchanges are assumed to perform this role effectively and, for those found to qualify for Medicaid, to assist the application and enrollment process. In this role, the exchanges would also serve as a valuable new resource for health providers who seek assistance in enrolling eligible persons in Medicaid. In addition, 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

³⁰ 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.

³¹ Increased administration costs associated with updating eligibility systems and overall program administration are not included in these figures and are presented in more detail below.

such assistance through Medicaid. Finally, the high FMAP percentages specified by the Affordable Care Act are expected to help reduce any hesitation that might exist on the part of States regarding the expansion of coverage.

Other factors underlying the assumed Medicaid participation rates for newly eligible individuals include (i) the exclusion of people ineligible for Medicaid due to citizenship status (who are not counted as newly eligible persons); (ii) different participation assumptions for eligible individuals with high versus low health care costs; (iii) lower assumed participation for persons who would have had part-year coverage from sources other than Medicaid; and (iv) separate, lower participation assumptions for people who would have had other forms of insurance, such as individually purchased insurance and employer-sponsored coverage. Combined with these other factors, the estimated total number of new Medicaid enrollees resulting from the Affordable Care Act represents about 87 percent of all eligible individuals and families with incomes below 138 percent of FPL (or 77 percent of all individuals and families, including non-eligible immigrants, with incomes below 138 percent of FPL).

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

The per enrollee costs of new beneficiaries who were formerly uninsured and are without other forms of insurance are estimated to be about 70 percent of those for current beneficiaries enrolled for the entire year by eligibility group; that is, newly enrolled children are expected to have per enrollee benefit costs on average equal to about 70 percent of the average costs of currently enrolled children, as are newly enrolled adults relative to currently enrolled adults. This estimate includes the impact of increased utilization of health care services after individuals gain health insurance and the impact of the lower prices that Medicaid generally pays for health care services and products. Some new Medicaid enrollees are also expected to retain other forms of insurance, such as employer-sponsored insurance, and enroll in Medicaid to “wrap around” the benefits of the other plans. Program costs for these enrollees are substantially lower than for beneficiaries who have only Medicaid, since the other insurance is the primary payer. These beneficiaries

further lower estimates of the per enrollee Medicaid expenditures of all new enrollees.³²

In addition to the Medicaid eligibility expansion, there are numerous other provisions of the Affordable Care Act that affect Medicaid. These provisions (excluding the effects of the eligibility expansion) are projected to add about \$24 billion in expenditures over the next 10 years. While these estimates show a relatively small increase in total Medicaid expenditures, several of the provisions are expected to result in significant costs or savings when considered separately.

There is also expected to be a difference between the net effects of the Affordable Care Act on Medicaid expenditures paid for by the States and those paid for by the Federal government due to ACA provisions other than the eligibility expansion. The States' Medicaid expenditures are projected to be lower by approximately \$30 billion, while Federal Medicaid expenditures are projected to increase by about \$54 billion. This projected difference between the Federal and State impacts is attributable primarily to several provisions that rely almost entirely on Federal funding or make further changes to the Federal matching rate.

The Affordable Care Act is expected to lead to increases in Medicaid administration costs, mainly related to higher Medicaid caseloads as a result of the eligibility expansion. These costs include the expenses of updating eligibility systems to accommodate the enrollment of new Medicaid beneficiaries and determining whether persons qualify under the existing Medicaid eligibility criteria or the new criteria, as well as the increased costs of program administration associated with the number of new enrollees starting in 2014. Administration costs are projected to increase by about \$31 billion in total during 2011 through 2020 as a result of the legislation, of which about \$18 billion is expected to be paid by the Federal government and approximately \$13 billion by the States.

The additional costs related to the Affordable Care Act increase the estimated average Medicaid expenditure growth rate for 2011 through 2020, with the greatest changes starting in 2014 with the eligibility expansion:

During 2011 through 2013, Medicaid expenditure growth is projected to average 6.9 percent per year; excluding the impact of the Affordable Care Act, growth would be projected to be slightly lower at a rate of 6.4 percent per year. The differential results from the net impact of higher expenditures associated with long-term care demonstrations, increased access to long-term care, temporarily increased payments

³² It may be apparent from figure 5 that the projected per enrollee expenditures of the newly eligible enrollees are less than 70 percent of the per enrollee expenditures of the currently eligible enrollees. This apparent difference is the result of the lower per enrollee costs to Medicaid of persons who have other forms of insurance and the relatively small additional costs of those persons who previously had Medicaid for only part of the year.

to primary care physicians, and increased administration costs, partially offset by larger prescription drug rebates.

Medicaid expenditures are projected to increase 14.8 percent in FY 2014 as a result of the eligibility expansion that begins on January 1, 2014. Growth in expenditures without the Affordable Care Act would be projected at 6.0 percent. As would be expected, this is the largest 1-year difference between projected growth rates with and without the impact of the legislation during 2011 through 2020.

In the last 6 years of the period, Medicaid expenditures are projected to grow 7.6 percent per year on average, somewhat faster than without the impact of the Affordable Care Act (6.7 percent); this difference is mostly due to the additional new Medicaid enrollees in 2015 and 2016, as people continue to react to the new eligibility criteria.

During 2011 through 2020, Medicaid expenditure growth is projected to be 8.1 percent per year on average, 1.5 percentage points higher than it would be if the Affordable Care Act impacts were excluded (6.6 percent average growth), reflecting all of the factors listed above.

The income definition to determine newly eligible Medicaid enrollees was modified by P. L. 112-56 in 2011. The Affordable Care Act originally specified that Modified Adjusted Gross Income (MAGI) would be the income definition used for Medicaid eligibility in 2014 and later. MAGI excludes most income from Social Security benefits. P. L. 112-56 revised the Affordable Care Act so that all Social Security benefits would be included when calculating income for Medicaid eligibility determinations, as well as eligibility for subsidies for the Health Insurance Exchanges.³³

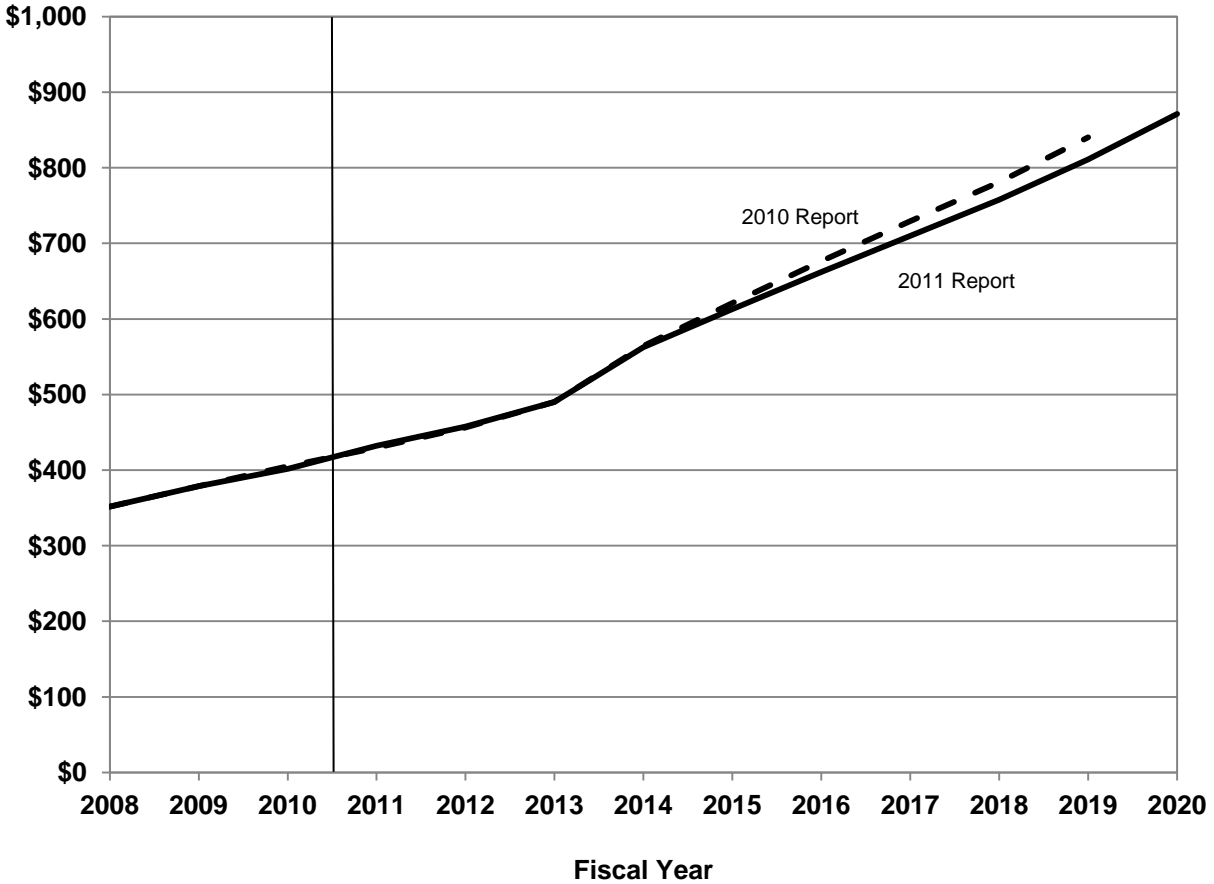
Other legislation in the past year is expected to have only minor impacts on Medicaid expenditures. The Medicare and Medicaid Extenders Act of 2010 (P. L. 111-309) provided for extensions of the Qualifying Individual (QI) program and Transitional Medical Assistance (TMA) through December 31, 2011; these extensions increased projected Medicaid expenditures by \$725 million in 2011, \$565 million in 2012, and \$10 million in 2013. The Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 (P. L. 111-312) allowed for some tax refunds and credits to be disregarded as income or resources when determining eligibility for Federal programs, including Medicaid, through December 31, 2012; this change is projected to increase Medicaid expenditures by \$520 million between 2011 and 2013.

³³ The estimates of Medicaid enrollment and expenditures in the 2010 report were based on calculations of income that included all Social Security benefits, in anticipation that certain administrative flexibilities in the Affordable Care Act would be used to this end. Subsequent policy development determined that a strict application of the MAGI definition would be required.

E. COMPARISON TO 2010 REPORT PROJECTIONS

The projections of Medicaid expenditures in this report are generally somewhat lower than in the 2010 Actuarial Report on the Financial Outlook for Medicaid. Figure 6 compares the projections of total Medicaid expenditures (including Federal and State) to those in last year's report.

Figure 6—Projected Medicaid Expenditures: Comparison of 2010 versus 2011 Actuarial Reports on the Financial Outlook for Medicaid, FY 2008–FY 2020 (In billions)



Projected spending in 2019 of \$811.1 billion is 3.5 percent lower than the corresponding amount in last year's report (\$840.4 billion). This small difference reflects several changes between the two sets of projections. Medicaid expenditures in 2010 were slightly lower than projected last year (\$401.5 billion compared to \$404.9 billion, or 0.8 percent lower). Overall Medicaid expenditures are projected to grow from 2010 through 2019 at an average rate that is 0.2 percentage point slower than under the projections in last year's report (8.1 percent and 8.3 percent, respectively). In general, lower costs related to slower growth in Medicaid expenditures per enrollee are mostly offset by increased costs related to higher projected levels of enrollment.

Medicaid expenditures per enrollee are projected to grow at a slower average annual rate (3.2 percent over 2010 to 2019) than projected in the 2010 report (4.1 percent). The projected average Medicaid expenditures per enrollee are about \$9,000 by 2019, or about 12 percent less than in last year's report. This difference in the projected per enrollee expenditures is accounted for by two factors. First, slower projected growth in the utilization of Medicaid services, most notably long-term care services, and other actions to control the rate of Medicaid expenditure growth (including limiting provider payment rate updates and changes to State Medicaid plans) contribute to slower overall per enrollee cost growth. In addition, the projected number of children enrolled in Medicaid is greater in the projections in this year's report, due to assumptions of higher unemployment rates and slower economic growth than those for last year. Also, a greater number of people are now projected to enroll in Medicaid, after the Affordable Care Act eligibility expansion goes into effect in 2014, due to revisions in the OHRM to model the statutory and regulatory definition of a "health insurance unit" more precisely. These latter two factors—greater projected enrollment for children and for newly eligible adults under the eligibility expansion—reduce the projected Medicaid expenditures per enrollee relative to last year's report, because the average costs of these beneficiaries are expected to be less than the average expenditures for all Medicaid beneficiaries, including relatively costly aged and disabled enrollees.

As noted above, Medicaid enrollment is expected to be greater by 2019 than projected in the 2010 report. Enrollment is projected to reach 84.4 million PYE by 2019, whereas in last year's report enrollment was projected to be 78.0 million by 2019 (or about 8 percent higher). Faster enrollment growth for children and a larger number of people eligible for and enrolling in Medicaid under the new eligibility criteria in 2014 account for the difference. Medicaid enrollment from 2010 to 2019 is projected to grow at an average rate of 5.1 percent, up from last year's projection of 4.5 percent.

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.³⁴ Based on the 2009 NHE accounts (the latest available historical year), Medicaid spending for that year represented 15.6 percent of total NHE. Private health insurance was the largest source of spending on health care in 2009, accounting for 32.2 percent of total NHE, while Medicare paid for 20.2 percent.³⁵

The historical NHE also presents health care spending by the original source of financing (or sponsor). In calendar year (CY) 2009, Medicaid represented 37 percent of Federal government expenditures on health services and supplies and 32 percent of such spending by State and local governments. For the Federal government, Medicaid is the largest source of general revenue-based spending on health services. Notably, Medicaid is a larger source of such Federal expenditures than Medicare. A sizeable portion of Medicare spending is funded by income from dedicated revenue sources—which include Medicare Part A payroll taxes and Part B and Part D beneficiary premiums—with the balance from Federal general revenues. In contrast, Medicaid does not have any dedicated Federal revenue source; all Federal spending on Medicaid comes from general revenue. For State governments, as with the Federal government, 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 in 2009.³⁶

Medicaid is also larger than Medicare in terms of the number of people covered. In FY 2010, Medicaid was estimated to have covered 53.9 million PYE, and 67.7 million people were enrolled in the program at some point during the year. In comparison, Medicare covered an average of 47.5 million people during CY 2010. 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 (39.6 million beneficiaries in 2010), but only those aged

³⁴ 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.

³⁵ Martin, *et al.*, “Recession Contributes to Slowest Annual Rate of Increase in Health Spending in Five Decades.”

³⁶ *Ibid.* There are some State dedicated revenues for Medicaid. For more detail on this analysis of health care spending by sponsor, see the methodology paper at <http://www.cms.gov/NationalHealthExpendData/downloads/dsm-08.pdf>.

individuals with very low incomes—and who apply for the coverage—become Medicaid enrollees (estimated at 4.8 million PYE). Disabled enrollment was more similar between the two programs; Medicaid covered an estimated PYE average of 9.5 million blind or disabled persons in 2010, while Medicare covered 7.9 million disabled beneficiaries. Although the definition of disability is essentially the same for the two programs, the other eligibility criteria are entirely different, and the similarity of the enrollment numbers is somewhat coincidental.³⁷ 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 9.1 million enrollees in each program in 2010.³⁸

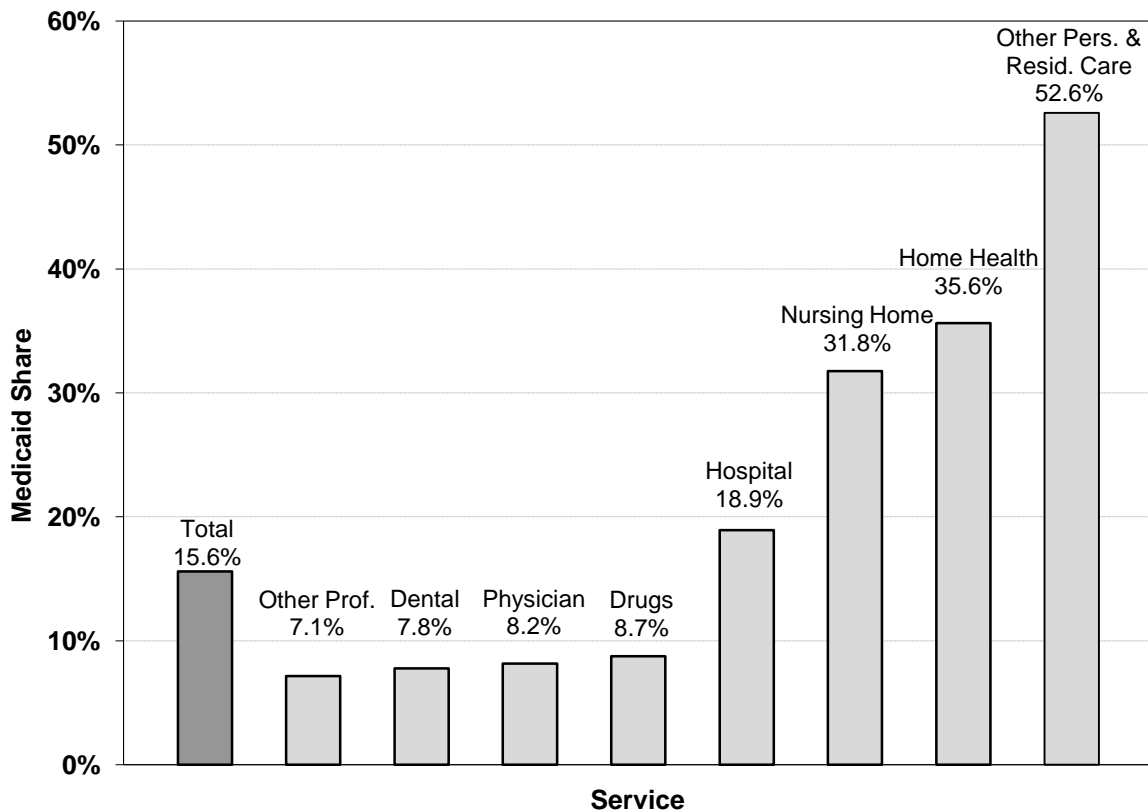
Among the different types of health care services, Medicaid plays the largest role in the funding of long-term care. According to the 2009 NHE, Medicaid is estimated to have paid for 35.6 percent of all freestanding home health care and 31.8 percent of all freestanding nursing home care in the U.S. In addition, Medicaid covered 52.6 percent of other personal and residential care in 2009, including Medicaid payments for intermediate care facilities and for home and community-based waivers.³⁹ Medicaid has a major responsibility for providing long-term care because the program covers some aged and many disabled persons, who tend to be the most frequent and most costly users of such care, and because private health insurance and Medicare often furnish only limited coverage for these benefits, particularly for nursing homes. Many people who pay for nursing home care privately become impoverished due to the expense; as a result, these people eventually become eligible for Medicaid. Figure 7 shows the percentage of total spending for the major health care services that Medicaid covers.

³⁷ As with other enrollment categories, Medicaid eligibility for disabled individuals is based on income and asset criteria. Medicare eligibility generally depends on an individual's sufficient participation in the paid work force prior to disability. Despite these different requirements, a significant number of disabled people qualify for coverage under both Medicaid and Medicare.

³⁸ *2010 Medicaid Managed Care Enrollment Report*. Dual-eligible beneficiaries are included in the aged or disabled enrollment groups based on their eligibility for Medicaid.

³⁹ Martin, *et al.*, "Recession Contributes to Slowest Annual Rate of Increase in Health Spending in Five Decades." In the 2009 NHE benchmark, residential care expenditures—for Medicaid, specifically expenditures paid to intermediate care facilities—were moved from nursing home services to other personal and residential care services. More details can be found in the summary of changes made during the 2009 NHE benchmark, which is available on the CMS website at <https://www.cms.gov/NationalHealthExpendData/downloads/benchmark2009.pdf>.

Figure 7—Medicaid Expenditures as Percentage of Total U.S. Health Expenditures, by Service Category, CY 2009¹



¹ Martin, *et al.*, "Recession Contributes to Slowest Annual Rate of Increase in Health Spending in Five Decades."

Historically, Medicaid expenditures per enrollee have generally grown at a slower rate than overall national health expenditures per capita. From 1969 through 2009, Medicaid expenditures per enrollee increased at an average annual rate of 7.8 percent, which is slightly less than the average growth rate of NHE per capita of 8.4 percent. This difference has become greater in more recent years; from 1999 through 2009, Medicaid expenditures per enrollee grew at an average rate of 2.6 percent, compared to 5.8 percent for NHE per capita. The difference between these two rates of growth can be significantly larger in any single year, and in many years Medicaid expenditures per enrollee grew faster than NHE per capita.

For several reasons, comparisons of per capita cost growth rates may provide only a partial explanation of how Medicaid relates to the rest of the U.S. health care system. First, NHE per capita includes both Medicaid expenditures in NHE and Medicaid enrollees in the U.S. population. As illustrated in figure 7, Medicaid pays different relative shares of health care costs by type of service; to the extent that given categories of service have grown faster or slower relative to total health spending, the differential can affect the comparison between Medicaid expenditures per enrollee and NHE per capita. In addition, the demographic composition of Medicaid enrollees is different than the overall population; for example, Medicaid

covers a significantly larger share of persons under age 18. Changes in the population covered by Medicaid—especially in the relative share of adults and children enrolled relative to disabled and aged enrollees—can have a substantial effect on the difference between Medicaid expenditures per enrollee and NHE per capita. Furthermore, changes in how people receive health care insurance—and especially in the relative number of people who are uninsured and purchasing all of their health care out-of-pocket—may affect both trends. Finally, the difference between the two growth rates may also reflect changes in legislation or policy affecting Medicaid or affecting other parts of the health care system (for example, Medicare or the private insurance market). For these reasons, comparisons of per capita cost growth trends between Medicaid and NHE (or other payers with more homogenous enrollments, such as Medicare) are not straightforward and should be interpreted carefully.

It is also important to note that Medicaid represents a significant share of the Federal and State budgets. In FY 2010, out of a total of \$3,456 billion spent by the Federal government for all purposes, \$293 billion (or 8.5 percent) can be attributed to Medicaid. Under the President’s FY 2012 Budget, Federal outlays on Medicaid are projected to account for 10.4 percent of all Federal outlays by 2020.⁴⁰

According to the National Association of State Budget Officers (NASBO), in State fiscal year 2010, Medicaid represented an estimated 21.8 percent of all State government spending.⁴¹ 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 consist of “provider taxes, fees, donations, assessments, and local funds”). According to NASBO, Medicaid was the largest program in 2010 (measured by State expenditures), and for the first time since 2006, it overtook elementary and secondary education. When only State general revenues are considered, however, Medicaid spending constituted an estimated 15.4 percent of expenditures in 2010, placing it well behind education. It should be pointed out that the share of State general revenues devoted to Medicaid has declined since 2008, largely as a result of the temporary FMAP increases under ARRA.

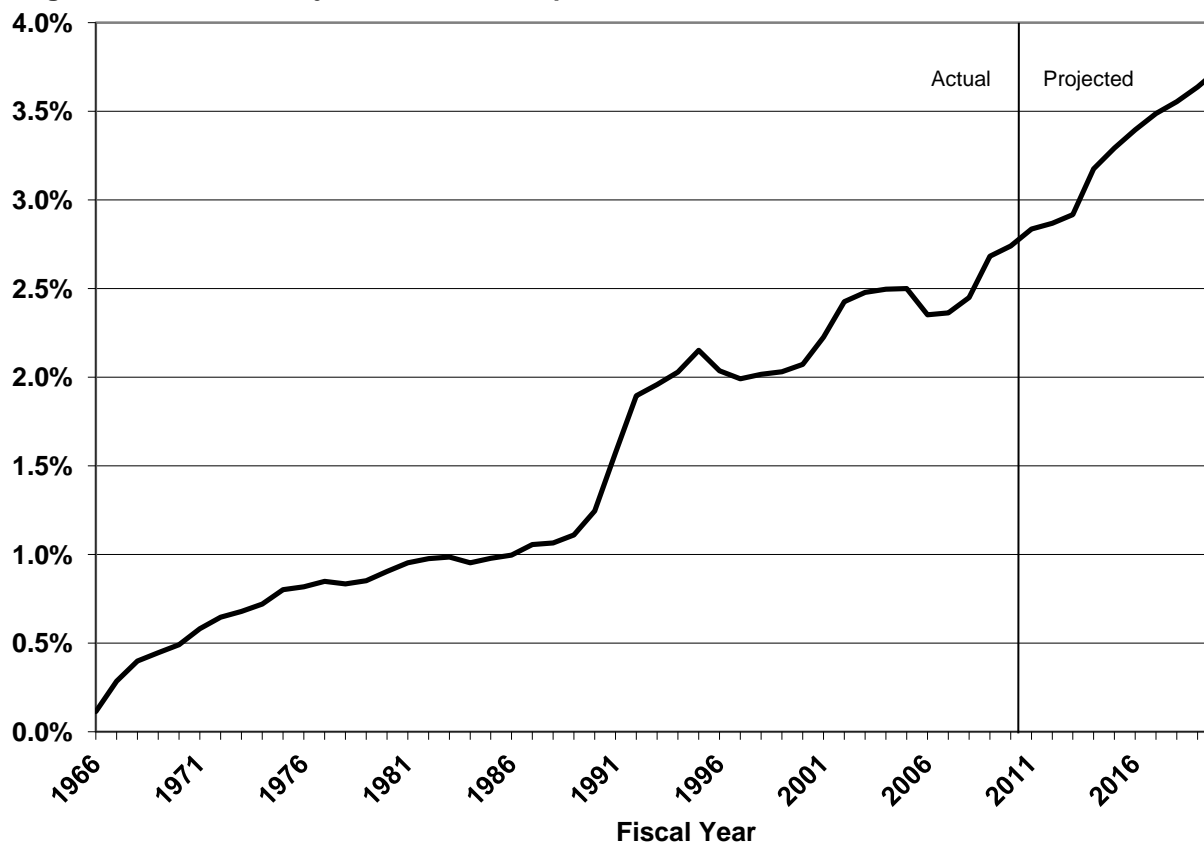
As shown in figure 8, Medicaid represented about 2.7 percent of GDP in 2010, steadily increasing over the last 4 years from 2.4 percent in 2007. Medicaid declined in share of GDP during 2006 as Medicaid expenditures decreased by 0.3 percent, a result of the shift of prescription drug coverage for dual-eligible beneficiaries to Medicare. This decrease was only the second substantial reduction in Medicaid’s share of GDP. Due to the recent economic recession—which increased enrollment in

⁴⁰ More information on the Federal budget is available in *Analytical Perspectives, Budget of the United States Government, Fiscal Year 2012*.

⁴¹ *FY 2009 State Expenditure Report*, National Association of State Budget Officers, Fall 2010.

Medicaid while also suppressing GDP growth—the program’s share of GDP grew significantly in 2008, 2009, and 2010.

Figure 8—Past and Projected Medicaid Expenditures as Share of GDP, FY 1966–FY 2020



Medicaid is projected to increase somewhat faster than GDP through 2013, as Medicaid enrollment and expenditure growth slow relative to recent history while economic growth accelerates. Starting in 2014 through 2016, of course, as the new Affordable Care Act provisions expand eligibility to many people, Medicaid costs will increase significantly relative to GDP. As seen in figure 8, the program’s expenditures are projected to grow to 3.7 percent of GDP over the next 10 years. Medicaid expenditures are projected to increase about 3.3 percentage points faster than GDP on average per year through 2020, with much of this growth due to the eligibility expansion. The Affordable Care Act accounts for nearly half of the difference between projected Medicaid expenditure and GDP growth rates over the 10 years; about 1.5 percentage points of the 3.3-percentage-point differential are attributable to the estimated impacts of the Affordable Care Act, most notably the eligibility expansion.

This projection of Medicaid expenditures as a share of GDP is nearly identical to the projection included in last year’s report. The share of GDP devoted to Medicaid in 2019 is projected to be 3.6 percent, the same share as in last year’s projection. While

projected Medicaid expenditures are somewhat lower than the 2010 projections, the economic assumptions in the 2011 Medicare Trustees Report generally project slower growth in GDP than in the 2010 report.

VI. CONCLUSION

Medicaid expenditures are projected to reach \$432.0 billion in 2011 and \$871.0 billion by 2020. Medicaid is expected to grow about 8.1 percent per year on average—which would be much faster than the projection of average annual GDP growth of 4.8 percent. Should these Medicaid trends continue as projected under current law—even after accounting for the increase associated with covering newly eligible beneficiaries in 2014—a steadily increasing share of both Federal and State budgets would be devoted to Medicaid absent other changes to the program, other budget expenditures, or budget revenues.

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

As the program's costs are projected to increase over the next 10 years, in a manner similar to the expenditure projections for private health insurance and Medicare, any efforts to slow the cost of health care spending will likely have some direct or indirect impact on Medicaid. Whether such efforts are focused on the payment or management of health care specific to certain programs, or on the delivery or practice of health care generally, it will be important to consider the potential effects 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 or Medicaid (commonly referred to as dual-eligibles), or that focus on Medicare beneficiaries including dual-eligibles, may have some effects on the costs and quality of care paid for by Medicaid.

Particular attention may need to be given to the ways in which Medicaid is different from other types of health care coverage—for example, in administration, the benefits offered, the populations covered, and the ways in which it pays for health care. Further attention may need to be given to provider participation, Medicaid payment rates, and beneficiary access to services.

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

While the economic recession has ended and unemployment rates have fallen, the effects of the recession on Medicaid continue throughout 2011. The increased Medicaid costs associated with growing caseloads and the pressures on government

revenues are likely to add to the financial stress of States' Medicaid programs. Although the Federal government is able to borrow to help finance its current expenditures and maintain its share of Medicaid costs, most States are not able to spend if doing so would create a budget deficit. In addition, while the temporary increases in Federal funding reduced State Medicaid expenditures significantly in 2009 and 2010, the expiration of these increases is expected to contribute to an increase in State Medicaid expenditures of nearly 50 percent between 2010 and 2012. How the States respond to these increasing Medicaid costs will be an important factor in the course of Medicaid growth over the next several years.

Lastly, it should be noted that many of the provisions of the Affordable Care Act that affect Medicaid—directly and indirectly—are still in the process of being implemented. These provisions are expected to affect spending across numerous services and beneficiary categories and to expand Medicaid enrollment substantially, but until they take effect and can be evaluated, their impacts can only be estimated; the actual effects could differ significantly from the estimates underlying this report.

VII. APPENDIX

A. MEDICAID DATA SOURCES

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

Medicaid Statistical Information System (MSIS)

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

CMS-64 and CMS-37 Reports

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

The mandatory services contained in the CMS-64 and CMS-37 reports include inpatient and outpatient hospital care, physician services, nursing facility care for individuals aged 21 or older, family planning services, rural health clinic services, home health care, laboratory and x-ray tests, other practitioner services, federally qualified health centers, and early and periodic screening, diagnostic, and treatment services for children under 21 (EPSDT). Among the many reported optional services that States may provide are clinic services, prescription drugs, intermediate care facilities for the 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 disproportionate share hospital (DSH) payments, offsets to drug spending through rebates, Medicare Parts A and B premiums paid for those dually eligible for both Medicare and Medicaid, premiums paid for Medicaid-only capitated arrangements, and expenditures for home and community-based waiver programs.

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

B. DEMOGRAPHIC, ECONOMIC, AND HEALTH CARE ASSUMPTIONS

The primary demographic, economic, and health cost inflation assumptions underlying the Medicaid projections shown in this report are the same as those used by the OASDI and Medicare Boards of Trustees in their annual reports to Congress. Growth in the number of Medicaid enrollees in each eligibility category—aged, blind or disabled, children, and adults—is initially projected based on past growth trends. These growth rates are assumed to gradually transition to rates comparable to the general population by the end of the 10-year projection period. The Trustees’ population projections depend on assumed future birth rates, mortality rates, and net immigration rates.⁴²

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

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

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

⁴² Further information on the Trustees’ population projections and economic assumptions is available in the 2010 OASDI and Medicare Trustees Reports.

C. ADDITIONAL PROJECTION METHODOLOGY DETAIL

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

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

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	Average wage increase
Institutional long-term care	Maximum of CPI increase and average wage increase
Community long-term care	Medicare home health input price index, before the application of productivity adjustment
Prescription drugs	CPI increase

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