MEDICAID

Improving Responsiveness of Federal Assistance to States during Economic Downturns

March 2011

GAO-11-395
MEDICAID

Improving Responsiveness of Federal Assistance to States during Economic Downturns

Why GAO Did This Study

In response to the most recent U.S. recession, from December 2007 to June 2009, Congress passed the American Recovery and Reinvestment Act of 2009 (Recovery Act). To help states maintain their Medicaid programs and provide states with general fiscal relief, the Recovery Act temporarily increased the federal share of Medicaid funding for states. The federal funding states receive for Medicaid is determined by a statutory formula—the Federal Medical Assistance Percentage (FMAP). The Recovery Act also required GAO to study options for providing a temporary increased FMAP in response to future recessions. GAO reviewed how past recessions affected states’ ability to fund Medicaid, examined the responsiveness of past increased FMAP assistance to state needs, and identified options for adjusting the increased FMAP formula for use during future recessions.

To conduct this work, GAO reviewed its previous reports on recessions and the increased FMAP and similar work from other organizations. GAO analyzed federal Medicaid data and enrollment data provided by state Medicaid directors. GAO also analyzed labor market data from the Bureau of Labor Statistics, state revenue data from the Census Bureau, and the Federal Reserve Bank of Philadelphia’s Coincident Indexes to assess states’ ability to fund Medicaid during economic downturns. GAO identifies options for Congress to consider but does not make recommendations in this report.

What GAO Found

Past recessions hampered states’ ability to fund increased Medicaid enrollment and maintain existing services. Both the 2001 and 2007 recessions resulted in increased Medicaid enrollment and decreased revenues, though states’ experiences varied. During the 2007 recession, total state tax revenues declined by 10.2 percent from the fourth quarter of 2007 to the second quarter of 2009, with individual state experiences varying. For example, North Dakota had a revenue increase of 6.9 percent while Arizona had a decline of 23.1 percent. In addition, the effect of increased Medicaid enrollment and decreased revenues persisted after the recessions ended, causing states to further adjust their Medicaid programs.

The increased FMAP funds provided by the Recovery Act were more responsive to state Medicaid needs than were funds provided after the 2001 recession. Overall, the Recovery Act funds were timed for state Medicaid funding needs. Assistance began during the recession while nearly all states were experiencing Medicaid enrollment increases as indicated by rising unemployment and revenue decreases as indicated by declining wages and salaries. The FMAP funds were targeted for Medicaid enrollment growth, but did not distinguish among states with varying degrees of reduced revenue in the allocation of assistance. The increased FMAP following the 2001 recession was provided well after the recession ended and was not targeted for state Medicaid needs.

Past recessions offer options for improving the responsiveness of temporary FMAP increases to state Medicaid program needs. More responsive assistance can aid states in addressing increased Medicaid enrollment resulting from a national recession, as well as addressing decreases in states’ revenues. GAO has revised a prototype formula for temporary FMAP increases it developed in 2006. The revised formula would address the timing and targeting of funds, and further improve the responsiveness of the increased FMAP funding. In particular, these revisions (1) use an automatic trigger to start the assistance program closer to the onset of a national recession, (2) add several quarters of transitional assistance before ending the increased FMAP assistance, and (3) target assistance by calculating the increased funding needed on the basis of the economic conditions of each state.

In commenting on a draft of this report, the Department of Health and Human Services (HHS) agreed with the analysis and goals of the report while emphasizing that changes to the FMAP formula must be authorized by statute. HHS also stated that it is critical to align changes in the FMAP formula to individual state circumstances in order to avoid unintended consequences for beneficiaries as well as provide budget planning stability for states. GAO agrees that statutory changes would be necessary to implement any adjustments to the FMAP, but does not make recommendations regarding particular actions in this report.
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Abbreviations

BEA  Bureau of Economic Analysis
BLS  Bureau of Labor Statistics
CHIP  Children’s Health Insurance Program
CMS  Centers for Medicare & Medicaid Services
FMAP  Federal Medical Assistance Percentage
FPL  federal poverty level
GDP  gross domestic product
HHS  Department of Health and Human Services
NASBO  National Association of State Budget Officers
NBER  National Bureau of Economic Research
PCI  per capita income
PPACA  Patient Protection and Affordable Care Act

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March 31, 2011

Congressional Committees

From December 2007 through June 2009, the nation experienced the most serious economic crisis since the Great Depression. This recession saw overall economic activity in the United States decrease by 4.1 percent with a loss of 8.3 million jobs.\(^1\) Although the National Bureau of Economic Research (NBER) determined that the recession ended in June 2009, the effects of the economic crisis remained for many states.\(^2\) As of December 2010, 25 states continued to experience unemployment rates above 9 percent, and more than 14.5 million people were considered unemployed—over one-third of whom had been jobless for 6 months or longer.\(^3\) As in past recessions, as unemployment increased so did enrollment in Medicaid, a joint federal-state health care program for certain low-income individuals. The 2007 recession also resulted in state tax revenue decreases, limiting states’ capacity to maintain funding for many programs, including Medicaid.

The amount of federal funds states receive for their Medicaid programs is determined by the Federal Medical Assistance Percentage (FMAP) formula.\(^4\) The FMAP is the percentage of expenditures for most Medicaid services that the federal government pays; the remainder is referred to as the state share.\(^5\) In response to the 2007 recession, and the recession in

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\(^1\)The gross domestic product (GDP) is the most comprehensive measure of the value of the goods and services produced by the U.S. economy in a given time period.

\(^2\)For this report, we use recession to refer to national recessions as defined by NBER. To determine when the nation is in a recession, NBER examines and compares various measures of broad economic activity, including GDP, economywide employment, and income.


\(^4\)In this report, we use the term regular FMAP to refer to the base FMAP, as defined under federal law, that is used to determine the percentage of federal assistance for each state’s Medicaid service expenditures. The regular FMAP is determined annually by a statutory formula designed to account for income variation across the states. See 42 U.S.C. § 1396d(b). We use the term increased FMAP to refer to temporary FMAP increases above the regular FMAP, as authorized under federal law, that provided states with additional Medicaid funding during national recessions.

\(^5\)For fiscal year 2009, Medicaid averaged 17 percent of state budgets, and total federal and state Medicaid expenditures were approximately $374 billion.
2001, Congress temporarily increased the regular FMAP to provide states with additional funding for their Medicaid programs. Following the 2001 recession, the Jobs and Growth Tax Relief Reconciliation Act of 2003 provided states $10 billion in assistance through an increased FMAP.\textsuperscript{6} In response to the 2007 recession, to provide states with fiscal relief and protect state Medicaid programs, Congress provided states with increased FMAP funding through the American Recovery and Reinvestment Act of 2009 (Recovery Act) which totaled an estimated $89 billion through December 2010.\textsuperscript{7} Subsequently, Congress extended this source of funding through June 30, 2011, subject to certain modifications, which will result in states receiving an estimated $16.1 billion in increased FMAP assistance.\textsuperscript{8}

In March 2010, the Patient Protection and Affordable Care Act (PPACA), as amended, was enacted.\textsuperscript{9} PPACA expands Medicaid eligibility to include most individuals with incomes at or below 133 percent of the federal poverty level (FPL) beginning in January 2014.\textsuperscript{10} As this provision of PPACA is implemented, states will expand coverage under the Medicaid program to an estimated 18 million additional people,\textsuperscript{11} which could further affect states’ ability to fund Medicaid during future economic downturns.

\textsuperscript{6}Pub. L. No. 108-27, § 401(a), 117 Stat. 752, 764 (2003). States were protected against decreases in their regular FMAP and could be eligible for an increased FMAP from April 1, 2003, through June 30, 2004.

\textsuperscript{7}Pub. L. No. 111-5, Div. B, Tit. V, § 5001, 123 Stat. 115, 496 (2009). For example, the Recovery Act provided states with a flat percentage point increase for their regular FMAP from October 1, 2008, through December 31, 2010.

\textsuperscript{8}Pub. L. No. 111-226, Tit. II, Subtit. A, § 201, 124 Stat. 2389, 2393 (2010). In this report, we also refer to this legislation as the Education, Jobs, and Medicaid Assistance Act.


\textsuperscript{10}Pub. L. No. 111-148, § 2001(a)(1), 124 Stat. 119, 271. The Census Bureau defines the FPL using a set of thresholds that vary by family size and composition. The bureau counts a family's income before taxes and excludes capital gains and noncash benefits (such as public housing, Medicaid, and food stamps). If a family’s total income is less than the threshold, then that family, and every individual in it, is considered poor. In 2010, the FPL was about $22,000 for a family of four.

\textsuperscript{11}Medicaid enrollment estimates are from the CMS Office of the Actuary. Centers for Medicare & Medicaid Services, \textit{Estimated Financial Effects of the Patient Protection and Affordable Care Act, as Amended} (Baltimore, Md., Apr. 22, 2010).
In a 2006 report, we provided options for Congress to consider when assisting states in their efforts to meet increased Medicaid expenditures resulting from recessions. We noted that among states, economic downturns have varied widely in their onset, depth, and duration, and they did not coincide exactly with national recessions. Likewise, increases in Medicaid enrollment and expenditures were specific to individual states because of differences in states’ economic conditions, Medicaid program designs, and health care costs. To address these differences, we noted that calculating the increased FMAP using changes in states’ unemployment rates was a key variable because it reflected the potential for increased Medicaid enrollment resulting from a state’s economic downturn.

The Recovery Act mandated that we conduct an analysis of past national economic downturns, including the effects of the increased FMAP during these periods, and that we provide recommendations, as appropriate, for further modifications of the increased FMAP formula to make it more responsive to state Medicaid program needs during such periods in the future. GAO is issuing two reports to address this mandate. This report, (1) describes the effect past recessions, in 2001 and 2007, had on the ability of states to fund their Medicaid programs; (2) examines the responsiveness of past increased FMAPs to state Medicaid program needs resulting from the 2001 and 2007 recessions; and (3) identifies options for adjusting the FMAP to make it more responsive to state Medicaid program needs during future recessions.


13In this report, we use the phrase economic downturn to refer to declining economic conditions of individual states that accompany the declaration of national recessions.

14Pub. L. No. 111-5, Div. B, Tit. 5, § 5008, 123 Stat. 511. This report focuses on state Medicaid programs during economic downturns. The Recovery Act also mandated that we analyze the effect of past national economic downturns on states with respect to maintenance and growth of Medicaid, state Children’s Health Insurance Program (CHIP) and other publicly funded state health care programs. Compared to the magnitude of the Medicaid program, CHIP and other state health program expenditures represent a small portion of states’ budgets. We have included relevant information on CHIP and other publicly funded health programs in app. I.

To describe the effects of past recessions on state Medicaid programs, we
reviewed prior GAO reports that examined the effect of past recessions on
Medicaid enrollment and expenditures, as well as the responsiveness of
increased FMAPs to state Medicaid funding needs. We reviewed similar
research by The Kaiser Commission on Medicaid and the Uninsured, the
Urban Institute, and other organizations on the relationship between
recessions, increased unemployment, and increased Medicaid enrollment.
We analyzed Medicaid enrollment data from the Centers for Medicare &
Medicaid Services (CMS)—the agency that oversees states’ Medicaid
programs—and used Medicaid enrollment data that we collected from a
survey of state Medicaid directors or their designated contacts in August
2009 and March 2010.16 We did not independently verify these data;
however, we reviewed all federal Medicaid data and survey responses for
internal consistency, validity, and reliability. On the basis of these
activities, we determined these data were sufficiently reliable for the
purpose of our report. We also analyzed state-level economic indicators,
including data on unemployment from the Bureau of Labor Statistics
(BLS), and quarterly state tax revenue data from the Bureau of the Census.
To compare the economic conditions across states, we analyzed and
compared the Federal Reserve Bank of Philadelphia’s Coincident Indexes,
which summarize the economic conditions of each of the 50 states.17 We
obtained additional state-specific data from the National Association of
State Budget Officers (NASBO), the National Conference of State
Legislatures, and the National Governors Association. Staff from the
American Enterprise Institute for Public Policy Research, the Center for
Studying Health System Change, and Federal Funds Information for States
provided additional information on the effect of past recessions on state
economies and Medicaid programs.

To examine the responsiveness of past increased FMAPs to state Medicaid
program needs, we reviewed the relationship between the increased
FMAP and specific state circumstances by analyzing the Federal Reserve
Bank of Philadelphia’s Coincident Indexes, BLS data on changes in

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16These data were collected for prior work that we conducted. See GAO, Recovery Act:
Increased Medicaid Funds Aided Enrollment Growth, and Most States Reported Taking

17The Federal Reserve Bank of Philadelphia’s Coincident Indexes combine four state-level
indicators to summarize current economic conditions into a single statistic. The four state-
level variables are nonfarm payroll employment, average hours worked in manufacturing,
the unemployment rate, and wage and salary disbursements deflated by the U.S. city
average of the consumer price index.
unemployment, and data on wages and salaries from the Bureau of Economic Analysis (BEA). We assessed the reliability of the data we used for this review and determined that they were sufficiently reliable for our purposes. We defined responsiveness in terms of two criteria: timing and targeting. Timing refers to whether funds were provided when states most needed them. Targeting refers to whether the distribution of funds reflected different state needs for funding the cost of new Medicaid enrollees attributable to the recession and maintaining their existing Medicaid programs as states’ revenues declined as a result of the recession.

To identify options for adjusting the FMAP formula during recessions, we analyzed data from BLS, BEA, and the Census Bureau to assess the revenue capacities of states to meet Medicaid program needs during recessions. In addition, we reviewed our previous work on increasing the FMAP in response to recessions, and investigated alternatives that would make it more responsive to specific state needs. This report presents a framework and discussion of key design decisions for a modified increased FMAP formula. A subsequent GAO report will present additional detail on a modified formula and simulations of its effects on the allocation of assistance to states.

We conducted this performance audit from April 2010 to March 2011 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

The causes of national recessions, their depths, and durations vary considerably. For example, the 2001 recession lasted only 8 months, while the 2007 recession was 18 months long. The nation also experienced different declines in economic activity, as measured by gross domestic product (GDP), due to these recessions. For example, during the 2007 recession GDP decreased 4.1 percent whereas GDP decreased by 0.3 percent during the 2001 recession.
Recent economic research suggests that while economic downturns within states generally occur around the same time as national recessions, their timing and duration can vary. States have different industry mixes and resources, and they may enter a downturn before the national recession begins or well after the recession has set in. The timing of a state’s economic downturn is determined by its individual economic condition and revenue structure, which can also affect a state’s capacity to fund its Medicaid program. (See fig. 1 for differences in the timing, depth, and duration of state downturns compared to the national recessions of 2001 and 2007.)

Figure 1: State Economic Downturns and National Recessions, Quarterly Percent Change in Coincident Indexes, 1999-2010

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Source: GAO analysis of Federal Reserve Bank of Philadelphia data.
Medicaid enrollment, and the state funding needed to support the program, increase during and after national recessions, when the number of people with incomes low enough to qualify for Medicaid coverage rises as economies weaken.\(^{19}\) Researchers have estimated that for every 1 percent increase in national unemployment, Medicaid enrollment increases by 1 million.\(^{20}\) Moreover, as the economy weakens, states have reduced revenues with which to fund their share of the Medicaid programs in place prior to the recession.

Under the regular FMAP, the federal government pays a larger portion of Medicaid expenditures in states with low per capita income (PCI) relative to the national average, and a smaller portion for states with higher PCIs.\(^{21}\) Use of PCI was, by design, intended to adjust for differences in state funding ability. PCI also serves as an indicator for the number of people eligible for Medicaid in a given state. The Department of Health and Human Services (HHS) calculates and publishes the regular FMAP for each state for each federal fiscal year based on a statutory formula that incorporates PCI. The regular FMAP for federal fiscal year 2010 for states

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\(^{19}\)States have some flexibility in the design of their Medicaid programs within broad federal parameters. For example, under federal law, states generally must enroll certain mandatory categories of individuals, which include pregnant women and children up to 6 years of age with family income at or below 133 percent of the FPL, and children ages 6 to 19 with a family income at 100 percent or less of the FPL. States may choose to cover additional categories of individuals, such as pregnant women and infants between 133 and 185 percent of the FPL. Under federal law, states generally are required to cover a specified set of benefits for their mandatory and optional Medicaid populations, such as inpatient and outpatient hospital services. In addition, states may choose to cover optional benefits, such as dental and physical therapy services, for these populations. See 42 U.S.C. § 1396a(a)(10)(A), 1396d(a).


\(^{21}\)According to the Census Bureau, per capita income is the mean income received in a given year computed for every man, woman, and child in a geographic area. It is derived by dividing the total income of all people 15 years old and over in a geographic area by the total population in that area.
ranged from 50.00 percent to 75.67 percent, and was calculated using the following formula:  

\[
FMAP_{\text{state}} = 1 - \left( \frac{(\text{PCI}_{\text{state}})^2}{(\text{PCI}_{\text{U.S.}})^2} \right) \times 0.45
\]

Our prior work concluded that PCI is not a comprehensive indicator of states’ total available resources and thus does not accurately represent states’ funding ability. PCI is a poor proxy for the size and cost of serving states’ poverty populations, which vary considerably. For example, the elderly and disabled constitute about 25 percent of the Medicaid population, but constitute approximately 67 percent of all Medicaid expenditures. As a result, two states with low PCIs may have very different proportions of elderly persons potentially eligible for Medicaid, and thus very different amounts of Medicaid spending. In addition, the regular FMAP for each state is generally published in the Federal Register a year in advance of the federal fiscal year in which it will apply. For example, regular FMAPs for fiscal year 2011 (which began October 1, 2010) were published November 27, 2009, based on a 3-year average of PCI data from 2006 through 2008. This lag time between the publication and implementation of the regular FMAP provides states with an opportunity to adjust to changing levels of federal assistance. However, it also means that the PCI amounts used to calculate FMAPs for a given fiscal year do not reflect states’ economic conditions for that year.

To help states meet additional Medicaid program needs, and to provide fiscal relief, Congress established temporary FMAP increases for states in

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22 The regular FMAP formula establishes the range for the federal share for most Medicaid service expenditures from 50 to 83 percent for states. The 0.45 factor in the formula is designed to ensure that a state with PCI equal to the U.S. average receives an FMAP of 55 percent (i.e., a state share of 45 percent). The formula’s squaring of income provides a higher FMAP than a state would otherwise receive when the state’s income is below the U.S. average. The District of Columbia is not subject to this formula and instead by law has its FMAP set at 70 percent.


24 Under federal law, the Secretary of HHS is required to publish the regular FMAP for each state between October 1 and November 30 of each year on the basis of average per capita income of each state for the 3 most recent calendar years for which satisfactory data are available from the Department of Commerce. 42 U.S.C. § 1301(a)(8)(B).
2003, 2009, and 2010. Increased FMAPs help states maintain their Medicaid programs during downturns. They may also free up funds states would otherwise have used for Medicaid and make them available to address other state budget needs. The FMAP is a readily available mechanism for providing temporary assistance to states because assistance can be distributed quickly, with states obtaining funds on a quarterly basis through Medicaid’s existing payment system. In 2003, the increased FMAP provided states with $10 billion in assistance. When combined, the increased FMAP formulas in the Recovery Act and the 2010 extension provided states with an estimated $105.1 billion in assistance. These formulas also incorporated three components for calculating the increase: a component that protected states against decreases in FMAP, an across-the-board component, and a component based on a state’s increase in unemployment. (See table 1 for more information on these increased FMAPs for the 2001 and 2007 recessions.)

As referenced earlier, Congress provided for increases in the regular FMAPs for states through the Jobs and Growth Tax Relief Reconciliation Act of 2003 and the Recovery Act. The increased FMAP authorized under the Recovery Act was subsequently extended, subject to certain modifications, by the Education, Jobs, and Medicaid Assistance Act.

This component is also referred to as a “hold-harmless” provision because it maintains a state’s regular FMAP at the higher of its current or previous year’s rate.
### Table 1: Temporary Increases in FMAP

<table>
<thead>
<tr>
<th>Dates of recession</th>
<th>Legislation (date enacted)</th>
<th>Amount of Medicaid assistance</th>
<th>Duration</th>
<th>Calculation used to provide increased assistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 2001–November 2001</td>
<td>Section 401 of the Jobs and Growth Tax Relief Reconciliation Act of 2003 (May 28, 2003)</td>
<td>$10 billion</td>
<td>Last two quarters of fiscal year (FY) 2003 though the first three quarters of FY 2004</td>
<td>1. Maintains a state’s regular FMAP rate to at least the rate for the prior fiscal year; and 2. an across-the-board increase of 2.95 percentage points in a state’s FMAP, subject to certain requirements.</td>
</tr>
<tr>
<td>December 2007–June 2009</td>
<td>Section 5001 of the American Recovery and Reinvestment Act of 2009 (Feb. 17, 2009)</td>
<td>$89 billion</td>
<td>First quarter of FY 2009 through the first quarter of FY 2011</td>
<td>1. Maintains a state’s regular FMAP to at least its highest rate since FY 2008; 2. an across-the-board increase of 6.2 percentage points in a state’s FMAP, subject to certain requirements; and 3. an additional increase in a state’s FMAP, subject to certain requirements, based on a qualifying increase in a state’s rate of unemployment.</td>
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<tr>
<td>December 2007–June 2009</td>
<td>Section 201 of the Education, Jobs and Medicaid Assistance Act (Aug. 10, 2010)</td>
<td>$16.1 billion</td>
<td>Second quarter of FY 2011 through third quarter of FY 2011</td>
<td>1. Maintains a state’s regular FMAP to at least its highest rate since FY 2008; 2. an across-the-board FMAP increase of 3.2 percentage points for the second quarter of FY 2011, and of 1.2 percentage points for the third quarter of FY 2011, subject to certain requirements; and 3. an additional increase in a state’s FMAP, subject to certain requirements, based on a qualifying increase in a state’s rate of unemployment.</td>
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Source: GAO summary of federal legislation.

Notes: Fiscal year refers to the federal fiscal year, which runs from October 1 through September 30.

*Recession dates cited were designated by the National Bureau of Economic Research (NBER).*

*Amount of funding provided by law.*

*This component is also referred to as a “hold-harmless” provision because it maintains a state’s regular FMAP at the higher of its current or previous year’s rate.*


*The unemployment adjustment is generally determined using both changes in a state’s unemployment rate and the increases in its regular FMAP rate. The adjustment is calculated for each state, in part, by determining a percentage increase based on a comparison of the state’s average monthly unemployment rate during the applicable consecutive 3-month periods to the state’s lowest average monthly unemployment rate for any consecutive 3-month period since January 1, 2006. This unemployment percentage may also be maintained at its highest level for a given quarter from January 1, 2009, through July 1, 2010 (under the Recovery Act), and through January 1, 2011 (under the Education, Jobs, and Medicaid Assistance Act).*

*Congressional Budget Office, *Budgetary Effects of Senate Amendment 4575* (Washington, D.C.: August 4, 2010).*
The enactment of PPACA affects federal and state funding of the Medicaid program. For example, PPACA establishes an eligibility threshold for state Medicaid programs by requiring states, beginning on January 1, 2014, to cover a new eligibility group of nonelderly, nonpregnant individuals at or below 133 percent of the FPL. Consequently, the number of individuals who qualify for Medicaid is estimated to increase by 18 million, according to the CMS actuary. The federal government will pay 100 percent of the cost of covering newly eligible individuals in fiscal years 2014, 2015, and 2016, with the federal match gradually reduced to 90 percent by 2020. States will continue to receive the regular FMAP for most individuals who meet the Medicaid eligibility requirements that each state had in place prior to the enactment of PPACA.

### Past Recessions in 2001 and 2007

Hampered States’ Ability to Fund Medicaid

Past recessions hampered states’ ability to fund increased Medicaid enrollment and maintain existing services. Within this broad national trend, however, there was significant variation among states in terms of their increases in Medicaid enrollment and revenue losses. Further, these enrollment increases and revenue declines continued after the national recessions ended, and states made additional adjustments to their Medicaid programs.

### Past Recessions Resulted in Increased Medicaid Enrollment, though States’ Experiences Varied

Medicaid enrollment increased during past recessions, in part due to increased unemployment, which led more individuals to become eligible for the program. During the 2001 recession—March 2001 through November 2001—the national unemployment rate increased from 4.3 to 5.5 percent, and total Medicaid enrollment increased by 5.6 percent, which added approximately 2 million enrollees to the Medicaid program. During the 2007 recession, from December 2007 through June 2009, the unemployment rate grew from 5.0 to 9.5 percent, while Medicaid enrollment rose by 9.7 percent—adding nearly 4.3 million enrollees to the program.

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29The average FMAP was about 57 percent for fiscal years 2005-2008.
Although Medicaid enrollment increased nationally during the 2001 and 2007 recessions, the percentage change varied considerably at the state level. All new Medicaid enrollment was not attributable to past recessions, as some states expanded eligibility or received waivers that increased the size of their programs.\(^\text{30}\) In 2001, changes in enrollment ranged from an increase of 12.4 percent in Mississippi’s Medicaid program to a decline of 5.6 percent in New Jersey. The 2007 recession also showed variation. From December 2007 through December 2009, Nevada experienced 32 percent enrollment growth in its Medicaid program, while Tennessee’s Medicaid program enrollment remained steady. Although the magnitude of the enrollment increases across states was largely due to the economic downturn, program expansions and enrollment outreach activities implemented in some states also contributed to enrollment growth.\(^\text{31}\) Figure 2 shows the changes in Medicaid enrollment among the states and the District of Columbia during the 2007 recession.

\(^\text{30}\)For example, Arizona received waivers to expand eligibility for its Medicaid program in both 2001 and 2007.

\(^\text{31}\)GAO-11-58, 13.
Figure 2: Percentage Change in Medicaid Enrollment, December 2007 through December 2009

Notes: Percentages are based on GAO analysis of Medicaid enrollment data from December 2007 through December 2009 as reported by state Medicaid directors. “States” includes the District of Columbia.

Sources: GAO analysis of state reported Medicaid enrollment (data); Map Resources (map).
Past Recessions Resulted in Decreased State Revenue to Maintain Medicaid Services, though States’ Experiences Varied

As economic activity slowed during the 2001 and 2007 recessions, states’ revenues decreased,32 which hampered states’ ability to fund their existing Medicaid services and support new enrollment. For example, due to the 2007 recession, total state tax revenues declined by 10.2 percent from the fourth quarter of 2007 to the fourth quarter of 2009. However, the depth and duration of states’ economic downturns varied. As shown in figure 3, 44 states and the District of Columbia experienced decreases in tax revenue during the 2007 recession; for example, Iowa experienced a 1 percent revenue decrease, while revenue declined 23.1 percent in Arizona. Over this same period, North Dakota’s tax revenue increased by 6.9 percent.

Figure 3: Percentage Change in State Tax Revenue, Fourth Quarter 2007 to Fourth Quarter 2009

Sources: GAO analysis of U.S. Census revenue (data); Map Resources (map).

Notes: Map shows the total percent change in quarterly tax revenue for each state from the fourth quarter 2007 to the fourth quarter 2009. “States” includes the District of Columbia.
As a result of the revenue decreases and Medicaid enrollment increases brought on by the 2001 and 2007 recessions, states took steps to contain Medicaid costs. For example, in response to the 2001 recession, 34 states took actions to reduce costs that included freezing or reducing provider payments; capping program enrollment; eliminating coverage for optional services; and increasing premiums and copayments for prescription drugs. Revenue decreases due to the 2007 recession prompted 31 states to cut health care programs by reducing or freezing provider rates or increasing provider taxes. Other states took steps to control prescription drug costs, amend enrollment criteria for optional eligibility groups, and limit or eliminate coverage for optional services, such as mental health or dental care.

Increased Medicaid Enrollment and Decreased Revenue Continued after Recessions Ended

After the 2001 and 2007 recessions ended, Medicaid enrollment remained high or increased in most states, even as revenues continued to decrease or remain below their prerecession levels. As the economic downturns persisted, states remained hampered by both effects in their ability to fund Medicaid and other state programs. According to NASBO, Medicaid is the largest component of state budgets. Therefore, to balance their budgets, states implemented a variety of actions to contain costs, such as modifying eligibility criteria, limiting benefits, and instituting new or higher copayments.

Following the 2001 recession, which ended in November of that year, the national unemployment rate remained above prerecession levels, peaking at 6.3 percent in June 2003—19 months after the recession was declared over. In the second quarter of 2002, state tax revenue dropped by 3.2 percent, continuing a decline that started during the 2001 recession. Further, Medicaid enrollment increased by 9.5 percent in 2002, and by another 5.1 percent in 2003. As a consequence in 2002, states instituted additional Medicaid enrollment requirements, such as waiting lists, increased premiums, and changes in optional eligibility categories. In some cases, a state’s enrollment increase was due to policy changes. For example, the most significant factor driving Utah’s enrollment growth was the state’s decision to extend a limited benefit package to parents and adults without children in fiscal year 2003.\(^3^)\n
In June 2009—the designated end of the 2007 recession—the national unemployment rate was 9.5 percent and rising, reaching 10.1 percent in October 2009. As a result, Medicaid enrollment continued to grow from 48.7 million in June 2009 to 49.7 million in October 2009, and to 50.7 million in February 2010. In most states, tax revenue remained below prerecession levels after the 2007 recession, resulting in continued budgeting challenges in 41 states. To balance their budgets, states implemented various Medicaid program cuts and other adjustments. For example, 28 states reduced or froze provider payment rates; 22 states reported implementing or considering restrictions on optional benefits, such as eliminating dental and vision services; 38 states implemented cost containment initiatives in the area of prescription drugs; and 18 states implemented utilization controls on long-term care services. According to NASBO, 23 states expect budget deficits for fiscal year 2012, and 17 states anticipate budget gaps for fiscal year 2013, presenting further challenges to funding Medicaid.

Increased FMAP funds provided by the Recovery Act were better timed and targeted for state Medicaid needs than were funds provided following the 2001 national recession. Overall, the Recovery Act funds were timed for state Medicaid needs because assistance began during the 2007 national recession while nearly all states were experiencing Medicaid enrollment increases and revenue decreases. The funds were targeted for state Medicaid enrollment growth based on changes in state unemployment rates, but assistance was not allocated on the basis of a state’s ability to generate revenue. As a result, the increased FMAP funding did not reflect varying degrees of decreased revenue that states had for maintaining Medicaid services. In contrast, the increased FMAP funds for the 2001 recession were provided well after the recession ended and not targeted on the basis of need.

The Recovery Act assistance provided to states was timed to meet state Medicaid needs resulting from Medicaid enrollment increases and revenue decreases, beginning midway through the 2007 national recession. As shown in figure 4, the initial period of assistance under the Recovery Act began approximately three quarters after the December 2007 start of the recession, and continued for six quarters beyond the June 2009 end of the
recession. Although the timing of state economic downturns varied, almost all states were in an economic downturn during the period covered by the increased FMAP, beginning in October 2008, and funds continued to be available as state economies began to recover.

Figure 4: States in Economic Downturn during the 2007 Recession, by Quarter

![Bar chart showing number of states in economic downturn by quarter from Q1-07 to Q4-10.]

Source: GAO analysis of Federal Reserve Bank of Philadelphia data.

Note: The National Bureau of Economic Research (NBER) recession period was from December 2007 through June 2009. The increased Federal Medical Assistance Percentage (FMAP) under the Recovery Act was initially provided from October 2008 through December 2010, with an extension through June 2011. Individual states were determined to be in an economic downturn if their Coincident Index value had declined from the prior quarter. State Coincident Indexes are published monthly by the Federal Reserve Bank of Philadelphia.

The Education, Jobs, and Medicaid Assistance Act, enacted in August 2010, extended Recovery Act assistance, subject to certain modifications, for two additional quarters through June 2011.

Individual states were determined to be in an economic downturn if their Coincident Index value had declined from the prior quarter. State Coincident Indexes are published monthly by the Federal Reserve Bank of Philadelphia.
Although Recovery Act funds were provided during the period of economic downturn in most states, states experienced their peak Medicaid needs at different times during the 2007 recession. As shown in figure 5, the period of peak unemployment occurred after the 2007 recession in most states; however, no state experienced a peak in unemployment prior to the receipt of Recovery Act funds. Almost all states experienced declining wages and salaries during or following the 2007 national recession, and the period of increased FMAP assistance included the lowest point of total wages and salaries in most states.

In our analysis, state Medicaid needs due to changes in enrollment are represented by changes in unemployment; Medicaid enrollment rises as unemployment increases. State Medicaid needs due to changes in revenues are represented by changes in total state wages and salaries; state revenue capacity declines as total state wages and salaries decline.
Figure 5: States’ Peak Quarter of Unemployment and Lowest Quarter of Wages and Salaries during the 2007 National Recession

Notes: The National Bureau of Economic Research (NBER) recession period was from December 2007 through June 2009. The increased Federal Medical Assistance Percentage (FMAP) under the Recovery Act was initially provided from October 2008 through December 2010, with an extension through June 2011.

Figure includes 50 states and the District of Columbia with rising unemployment after the start of the recession. It includes 45 states with declining wages and salaries after the start of the recession; 5 states and the District of Columbia did not experience a decline in total wages and salaries. Analysis includes data through the 3rd quarter of 2010. Data beyond this period were not available at the time of our analysis.
The increased FMAP funds provided by the Recovery Act were targeted for increases in states’ unemployment, but did not target the varying degrees of state revenue decreases that occurred during the 2007 recession. Furthermore, some provisions of the Recovery Act—such as the across-the-board FMAP increase—were not targeted, and states with higher regular FMAPs received a greater increase in funding.\textsuperscript{37}

The increased FMAP funds included a factor for changes in unemployment as a proxy for targeting changes in Medicaid enrollment. As a result, changes in state Medicaid shares based on the unemployment component of the increased FMAP formula were strongly correlated with changes in state unemployment rates.\textsuperscript{38} States with a greater increase in unemployment received a greater reduction in their share of Medicaid. Figure 6 reflects the three tiers of state assistance provided by the Recovery Act based on different levels of unemployment growth.

\textsuperscript{37}For the purposes of this analysis we divided states and the District of Columbia into three groups of 17 states each: high, middle, and low FMAP states. Except for the District of Columbia, high FMAP states are those with low per capita incomes relative to the national average and 2009 regular FMAPs ranging from 64.4 to 75.8. Low FMAP states are those with higher per capita incomes relative to the national average and 2009 regular FMAPs from 50.0 to 52.6. The statutory floor for the regular FMAP is generally 50.00 percent. The District of Columbia is not subject to the regular FMAP formula and instead, by law, has its FMAP set at 70 percent.

\textsuperscript{38}The correlation factor ($r$) was 0.74.
Figure 6: Change in Unemployment Rate and Percent Change in State Medicaid Share by State, Recovery Act, Quarter 4 (July–September 2009—Unemployment Component Only)

Percent decline in state Medicaid share vs. Percentage point increase in unemployment rate.

Source: GAO analysis of Federal Funds Information for States data.

Notes: The unemployment and Federal Medical Assistance Percentage (FMAP) data are from Federal Funds Information for States.

This analysis includes only the unemployment-based component of the Recovery Act’s increased FMAP formula. The figure shows the percent decline in the state share of Medicaid for varying levels of unemployment increase. Changes in state Medicaid shares based solely on changes in unemployment were strongly correlated with changes in state unemployment rates, r=0.74.

The Recovery Act formula had three levels of unemployment-based assistance. States with an increase in unemployment of at least 1.5 but less than 2.5 percentage points received a 5.5 percent reduction in their adjusted state share of Medicaid—that is, the state share of Medicaid after taking into account the hold harmless-provision and half the across-the-board increase. States with an increase in unemployment of at least 2.5 but less than 3.5 percentage points received an 8.5 percent reduction in their adjusted state share; and states with an increase in unemployment of 3.5 percentage points or greater received an 11.5 percent reduction in their adjusted state share.

During the fourth quarter of the Recovery Act (July–September 2009), these unemployment-based increases resulted in an average FMAP increase of 3.72 percentage points, and ranged from a low of 0.00 in North Dakota to as high as 5.39 in several states.
However, reductions in state Medicaid shares produced by the overall increased FMAP formula—including the hold-harmless provision, which prohibited decreases in the regular FMAP, and across-the-board increases—were only slightly correlated with increased state Medicaid enrollment as represented by rising unemployment rates. As shown in figure 7, states with a greater increase in unemployment generally received a larger reduction in their state Medicaid share, but the relationship was not as strong as it was for the unemployment component only.

Figure 7: Change in Unemployment Rate and Percent Change in State Medicaid Share by State, Recovery Act, Quarter 4 (July–September 2009)

Note: The unemployment and Federal Medical Assistance Percentage (FMAP) data are from Federal Funds Information for States.

This analysis includes all three components of the Recovery Act increased FMAP: (i) the hold-harmless provision, (ii) the across-the-board 6.2 percentage point increase, and (iii) the additional unemployment-based increase. Changes in state Medicaid shares during the fourth quarter of the Recovery Act (July–September 2009) were slightly correlated with changes in state unemployment rates, \( r=0.30 \).

\[ 39 \] The correlation factor \( (r) \) was 0.30.
Although Recovery Act funds were targeted for increases in state Medicaid enrollment, they were not targeted to reflect varying degrees of revenue decreases among states. Therefore, the Recovery Act did not distinguish among states with varying degrees of reduced revenue capacity in the allocation of assistance. For example, during the fourth quarter of assistance under the Recovery Act, there was no relationship between reductions in the state share of Medicaid expenditures and decreases in state revenue as indicated by declines in state wages and salaries.\footnote{The correlation factor (r) was -0.09.}

The largest share of total assistance under the Recovery Act—the across-the-board 6.2 percentage point FMAP increase—was not targeted for variable state Medicaid needs.\footnote{The 6.2 percentage point FMAP increase given to all states was almost twice as large as the average increase states received based on changes in unemployment. During the fourth quarter of the Recovery Act (July–September 2009), the average unemployment-based FMAP increase was 3.72 percentage points, and ranged from a low of 0.00 in North Dakota to as high as 5.39 in several states.} As a result, state Medicaid shares were reduced more in high FMAP states than low FMAP states. For example, a 6.2 percentage point FMAP increase results in a 12.4 percent reduction in the state share of Medicaid in a state with a low FMAP of 50.00 percent. However, the same 6.2 percentage point increase produces a 24.8 percent reduction in the state share of Medicaid in a state with a high FMAP of 75.00. While there was a strong correlation between reductions in state Medicaid shares and rising unemployment among low FMAP states, there was no correlation among high FMAP states.\footnote{The correlation factor among low FMAP states was r=0.72; among high FMAP states, the correlation factor was r=-0.09.} As a result, some states with similar changes in unemployment had widely varying reductions in their state share of Medicaid. For example, during the fourth quarter of assistance under the Recovery Act, West Virginia had a 4.2 percentage point increase in unemployment and a 35.5 percent decline in state share of Medicaid, while Virginia had an identical 4.2 percentage point increase in unemployment, but a 23.2 percent decline in state share.\footnote{Some states with widely different changes in unemployment had similar reductions in state share. For example, Nevada had a 7.1 percentage point rise in unemployment and a 27.9 percent decline in state share, while Arkansas had a much lower 2.1 percentage point rise in unemployment, but a similar decline in state share of 28.1 percent.}

The effect of the across-the-board increase was particularly evident with respect to state revenue decreases as represented by declines in wages and salaries. As a group, during the fourth quarter of assistance under the Recovery
Act, the low FMAP states had a greater reduction in total wages and salaries than high FMAP states, yet they received a smaller reduction in their share of Medicaid.  

### Assistance Was Provided after the 2001 Recession Ended and Not Targeted Based on Need

The assistance following the 2001 recession was provided approximately six quarters after the recession ended and not targeted based on state Medicaid needs. The five-quarter period of increased FMAP assistance provided following the 2001 recession began well after the three-quarter recession and after the period of economic downturn when most states were in recovery. (See fig. 8.) Increased FMAP assistance began in April 2003, eight quarters after the March 2001 start of the national recession, and six quarters after the November 2001 end of the recession.

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44During the fourth quarter of the Recovery Act (July–September 2009), wages and salaries among low FMAP states declined by 5.14 percent compared to 3.89 percent among high FMAP states. However, the state Medicaid shares were reduced by 23.0 percent on average among the low FMAP states compared to an average reduction of 30.4 percent among the high FMAP states.
Figure 8: States in Economic Downturn during the 2001 Recession, by Quarter

Number of states

Quarter-Year

<table>
<thead>
<tr>
<th>Quarter-Year</th>
<th>Number of States</th>
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<tr>
<td>Q1-04</td>
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</tr>
</tbody>
</table>

Source: GAO analysis of Federal Reserve Bank of Philadelphia data.

Note: The National Bureau of Economic Research (NBER) recession period was from March through November 2001. The increased Federal Medical Assistance Percentage (FMAP) was provided from April 2003 through June 2004. Individual states were determined to be in an economic downturn if their Coincident Index value had declined from the prior quarter. State Coincident Indexes are published monthly by the Federal Reserve Bank of Philadelphia.

Although the increased FMAP following the 2001 recession coincided with states’ needs due to increased Medicaid enrollment, it was not timed to assist states in responding to decreased revenues as indicated by lower total wages and salaries. As shown in figure 9, the period of increased FMAP assistance included the period of peak unemployment in most states, but it trailed states’ lowest point of total wages and salaries by at least six quarters.
Figure 9: States’ Peak Quarter of Unemployment and Low Quarter of Wages and Salaries during the 2001 National Recession

Number of states

Quarter-Year

- Blue: Peak Unemployment Rate Quarter
- Maroon: Low Total Wages and Salaries Quarter
- Gray: NBER recession
- Dashes: Assistance period for increased FMAP


Notes: The National Bureau of Economic Research (NBER) recession period was from March through November 2001. The increased Federal Medical Assistance Percentage (FMAP) was provided from April 2003 through June 2004.

Figure includes 49 states and the District of Columbia with rising unemployment after the start of the recession; 1 state did not experience a rise in unemployment after the start of the recession. It includes 31 states with declining wages and salaries after the start of the recession; 19 states and the District of Columbia did not experience a decline in total wages and salaries.
The increased FMAP provided following the 2001 recession was not targeted for variable state needs because it relied on an across-the-board FMAP increase for states and a hold-harmless provision.⁴⁵

States’ experiences with past recessions offer insights for improving the responsiveness of FMAP adjustments. In particular, mechanisms that (1) improve the timing for starting assistance, (2) taper off the end of assistance, and (3) better target for state needs can provide a more responsive increased FMAP. More responsive assistance can aid states in addressing increased Medicaid enrollment resulting from a national recession, as well as addressing reductions in states’ revenues. Our 2006 report provided a prototype formula for an increased FMAP that addressed increased Medicaid enrollment, but did not address states’ revenue losses.⁴⁶ We have revised our 2006 prototype formula in several ways to further improve its responsiveness. Table 2 summarizes and compares the design options from our 2006 report with our proposed revisions and the purpose of the changes.

⁴⁵States were held harmless during the third and fourth quarters of fiscal year 2003 for any reduction in their FMAP between fiscal year 2002 and fiscal year 2003, and during the first three quarters of fiscal year 2004 for any reduction in their FMAP between fiscal year 2003 and fiscal year 2004. The 2.95 percentage point increase was applied after the hold-harmless protections had been applied.

⁴⁶See GAO-07-97.
### Table 2: Revised Prototype Formula and Purpose of Revision, by Key Design Decision

<table>
<thead>
<tr>
<th>Key design decision</th>
<th>Prototype (2006)</th>
<th>Revised prototype</th>
<th>Purpose of revision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Starting point</td>
<td>The starting point, or automatic trigger, would be a threshold number of states showing an increase in quarterly state unemployment rate above a certain level.</td>
<td>Revised prototype would change the type of data and the threshold of states used in the automatic trigger.</td>
<td>Shifting from changes in unemployment to the employment-to-population ratio could provide assistance to states earlier.</td>
</tr>
<tr>
<td></td>
<td>Once the threshold was reached and assistance had begun for those states, any state with any increase in unemployment would be eligible to receive assistance.</td>
<td>The automatic trigger would be a threshold number of states that show a decrease in quarterly employment-to-population ratio. The revision could provide two quarters of retroactive assistance after triggering.</td>
<td>Retroactive assistance limits concerns about the timeliness of the trigger by assuring states that assistance will be provided, even though delayed.</td>
</tr>
<tr>
<td>Ending point</td>
<td>Assistance would end when the number of states showing an increase in unemployment rate declined below a predetermined threshold.</td>
<td>The end of assistance could be set by a number of states showing recovery, but could be adjusted based on economic conditions.</td>
<td>An endpoint would be established, but would also provide the federal government with the opportunity to extend the assistance based on certain factors such as the current economic conditions.</td>
</tr>
<tr>
<td></td>
<td>Once the ending point has been reached, a targeted phaseout of assistance would begin.</td>
<td></td>
<td>Phasing out assistance avoids abrupt changes, thus enabling state governments to plan their transitions back to greater reliance on their own revenues.</td>
</tr>
<tr>
<td>Targeting assistance</td>
<td>Funds would be distributed quarterly through a targeted supplement to states’ federal matching rates.</td>
<td>Would add a second component that targets additional assistance to states based on their losses in wages and salaries (as a proxy for the losses in revenues needed to maintain the funding of their Medicaid services).</td>
<td>The second component helps states with revenue losses that occur as a result of the downturn.</td>
</tr>
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<td>Funds would be targeted to Medicaid needs due to growing enrollments. Distribution amounts would vary based on a state’s increase in unemployment and its average cost of providing services to children and nonelderly adults.</td>
<td>Assistance targeted to states with the greatest Medicaid needs is most likely to help with macroeconomic objectives. States with the highest Medicaid needs (i.e., increases in unemployment and losses in wages and salaries) are most likely to use the assistance in ways that add to the nation’s aggregate demand, while states with the lowest needs are least likely to use the assistance in ways that would add to aggregate demand.</td>
<td></td>
</tr>
</tbody>
</table>

Source: GAO.

*The employment-to-population ratio is the ratio of the number of employed persons to the population age 16 or older. The source of these monthly data by state is the Bureau of Labor Statistics.*
Although the Recovery Act assistance timing was an improvement over the assistance for the 2001 recession, an automatic trigger (a provision that would start the assistance program without the need for legislation) that would provide an increased FMAP to states close to the onset of an NBER-designated recession has additional advantages. Providing assistance earlier than that provided under the Recovery Act could have assured states of a federal response if the national economy weakened. This would particularly benefit states that begin an economic downturn before a national recession. Additionally, from a macroeconomic perspective, it is likely to be more effective to provide temporary assistance—such as that offered by an increased FMAP—when the economy is just beginning its downturn rather than later when the effects of recession are more widespread and the economy has greater downward momentum. When states face an uncertain economic outlook, their awareness that the trigger is there may forestall tax increases or cuts in services because states know that increased assistance will begin if economic conditions continue to worsen. (In other words, because states can anticipate assistance, the assistance does not need to be received or “in the pipeline” in order to produce the desired effect on state fiscal behavior.)

Our 2006 report suggested a prototype formula for triggering and targeting an increased FMAP that was based on increases in unemployment. Although unemployment increases in many states typically lag behind the onset of a national recession, our prototype formula considered that states had budget resources and financial management techniques to temporarily

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47The automatic trigger would begin the program based on economic data signaling recession rather than relying on discretionary legislative action. We previously discussed some of the options for starting and stopping assistance. See GAO-07-97, 43. Also see GAO-11-401.

48To discuss timing, we refer to recessions using the NBER-designated periods from the peak month to the trough month (the month in which the recession ends.). Though the NBER designation of the trough marks the beginning of the recovery phase, the economy can remain in a slump and Medicaid needs typically continue after the trough because unemployment and poverty are slow to recover.

49Our 2006 report found that while all states received assistance under our prototype model, some states received less assistance than others because their increased unemployment occurred either earlier or later than the national downturn. See GAO-07-97.

50Fiscal stimulus programs are intended to increase aggregate demand, which in macroeconomics is defined as the spending of consumers, business firms, and government. While not all of the temporary increases in FMAP will result in additions to aggregate demand, well-targeted assistance is more likely to arrest declines in aggregate demand, and thereby increase it compared to what it would otherwise be.
sustain them for a year or two with downturn-driven increases in Medicaid expenditures. However, the additional objective of responding to state revenue losses makes a more timely response preferable. Other measures, such as the decrease in states’ employment-to-population ratio, could improve the timing and hasten the provision of assistance to states during a national recession. A trigger based on a change to this ratio could further mitigate the lag time by including two quarters of retroactive funds, similar to that provided in the Recovery Act. If targeted assistance was triggered earlier, the overall amount of increased FMAP assistance would initially be smaller, as most states show greater funding needs a number of quarters after the onset of a national recession, when the results of economic downturns—increases in unemployment and decreases in revenue—are more widespread.

Determining When to End Assistance Is Complicated by States’ Continuing Medicaid Funding Needs

Determining when to end increased FMAP assistance to states is complicated by states’ continuing Medicaid funding needs. In our 2006 report, the increased FMAP prototype stopped assistance abruptly once a threshold of states no longer showed increases in unemployment. This approach did not allow states time to transition their Medicaid programs back to their regular federal matching rates. As we noted earlier, increased Medicaid enrollment and decreased revenue continued after both the 2001 and 2007 recessions ended. Adding several quarters of transitional assistance and gradually reducing the percentage of increased FMAP provided could help mitigate the effects of a slower recovery. Phaseout assistance such as this could be targeted to states that have weaker economies and face larger losses. However, any transitional rule for terminating assistance will be subject to complex considerations, including assessing the competing demands for federal resources and

51 The employment-to-population ratio is the ratio of the number of employed persons to the population age 16 or older. The source of these monthly data by state is the Bureau of Labor Statistics.

52 The threshold was when fewer than 23 states showed increases in their quarterly unemployment from a year ago of 10 percent.

53 Under the Recovery Act, increased FMAP assistance was scheduled to terminate at the end of 2010. In August 2010, Congress did provide an extension that would phase out the increases in FMAPs over an additional two quarters in 2011.

54 Because assistance would be targeted, states with the deepest economic downturns would face the greatest losses of assistance when the program ends. The phaseout rule would allow more quarters of assistance for these states so that their quarterly loss of assistance would not exceed the losses of states less affected by economic downturn.
states’ ability to cope with their economic conditions without further federal aid. As a result, any transitional rule is likely to require several options for proceeding that are based on several factors, including economic circumstances and congressional decision making.

**Accounting for Medicaid Enrollment Increases as Well as State Revenue Losses Could Further Improve Targeting**

States’ efforts to fund Medicaid during an economic downturn have two main challenges: (1) financing increased enrollment, and (2) replacing revenues lost as a result of the recession. In our 2006 report, the prototype formula accounted for the increases in enrollment, but did not provide for states’ revenue losses. A more responsive increased FMAP would calculate the increased funding needed on the basis of the economic conditions of each state. To consider both increased enrollment and decreased revenue, quarterly increases in each state’s unemployment and decreases in real wages and salaries could be calculated and used together as the basis for targeting funds. Such an approach would target assistance to the states with the greatest economic declines. States could then receive funding based on two formula components:

- each state’s increase in unemployment, as a proxy for an increase in Medicaid enrollment; and
- each state’s decrease in wages and salaries, as a proxy for the loss of revenue.\(^5^\)

Improving targeting is essential to meet the goals of providing assistance to states in an efficient and effective manner. Without specific measures of states’ needs, federal funds could be distributed inequitably and run counter to the goals of providing assistance during a recession. A formula with finely graduated adjustments to assistance can be an efficient

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\(^5^\)Because both the change in Medicaid enrollment and change in revenues can be affected by administrative and policy changes made by state governments, these effects should be excluded and instead assistance should be targeted to each state to address the effects of the economic downturn on Medicaid enrollment and revenues. Data on states’ growth in Medicaid enrollment would not be appropriate because they reflect different states’ Medicaid policy choices. Using data on states’ revenue collections would not be appropriate because they reflect different states’ revenue policy choices.
mechanism for providing support to states. States that do not yet show increases in unemployment and decreases in wages and salaries would not receive assistance until changes in these measures indicated an economic downturn. For states with rapidly improving economies that show large decreases in unemployment and increases in wages and salaries, the quarterly assistance could be phased out to ease the transition for their Medicaid programs.

In commenting on a draft of this report, the Department of Health and Human Services stated that it agreed with the analysis and goals of the report while emphasizing that any changes to the FMAP formula must be authorized by statute and implemented by the Assistant Secretary for Planning and Evaluation in HHS. The department further stated its belief that it is critical to as closely as possible align changes in the FMAP formula to individual state circumstances in order to avoid unintended consequences for beneficiaries as well as provide budget planning stability for states. We agree that statutory changes would be necessary to implement any adjustments to the FMAP, but we do not make recommendations regarding particular actions in this report. The full text of HHS's comments can be found in appendix II. HHS also provided technical comments, which we incorporated as appropriate throughout this report.

We are sending copies of this report to the Secretary of HHS, the Administrator of the Centers for Medicare & Medicaid Services, and other interested parties. In addition, the report will be available at no charge on the GAO Web site at http://www.gao.gov.
If you or your staffs have questions about this report, please contact Thomas J. McCool at (202) 512-2642 or mccoolt@gao.gov or Carolyn L. Yocom at (202) 512-7114 or yocomc@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report major contributors to this report are listed in appendix III.

Thomas J. McCool  
Director, Center for Economics

Carolyn L. Yocom  
Acting Director, Health Care
List of Committees

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Chairman
The Honorable Thad Cochran
Vice Chairman
Committee on Appropriations
United States Senate

The Honorable Max Baucus
Chairman
The Honorable Orrin G. Hatch
Ranking Member
Committee on Finance
United States Senate

The Honorable Joseph I. Lieberman
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The Honorable Susan M. Collins
Ranking Member
Committee on Homeland Security and Governmental Affairs
United States Senate

The Honorable Harold Rogers
Chairman
The Honorable Norman D. Dicks
Ranking Member
Committee on Appropriations
House of Representatives

The Honorable Fred Upton
Chairman
The Honorable Henry A. Waxman
Ranking Member
Committee on Energy and Commerce
House of Representatives

The Honorable Darrell Issa
Chairman
The Honorable Elijah E. Cummings
Ranking Member
Committee on Oversight and Government Reform
House of Representatives
Appendix I: Children’s Health Insurance and Other Publicly Funded Health Programs

In addition to examining the effect of past economic downturns, including of temporary increases in the Federal Medical Assistance Percentage (FMAP), the American Recovery and Reinvestment Act (Recovery Act) mandated GAO to examine the effect of past economic downturns on the state Children’s Health Insurance Program (CHIP), and other publicly funded programs that provide health benefits coverage to state residents.

In 1997, Congress created CHIP, a federal-state health care program providing coverage for uninsured children in families with incomes that are too high to qualify for Medicaid. States can design and operate their CHIP programs as an expansion of their Medicaid program, as a separate program, or as a combination of the two approaches. CHIP is based on federally funded allotments for each state that are subject to reauthorization by Congress. CHIP provides a strong incentive for states to participate because the federal government pays an “enhanced” federal matching rate that is derived from a state’s FMAP. The Children’s Health Insurance Program Reauthorization Act of 2009 (CHIPRA) extended federal funding for CHIP through federal fiscal year 2013. Patient Protection and Affordable Care Act (PPACA) further extended federal CHIP funding through fiscal year 2015 and provided for an increase in the enhanced FMAP for CHIP beginning in fiscal year 2016. Since its inception in 1997, CHIP enrollment has steadily increased from 660,000 in 1998, to 7.7 million in 2010. (See fig. 10 for CHIP enrollment trends.)

Program Descriptions

In 1997, Congress created CHIP, a federal-state health care program providing coverage for uninsured children in families with incomes that are too high to qualify for Medicaid. States can design and operate their CHIP programs as an expansion of their Medicaid program, as a separate program, or as a combination of the two approaches. CHIP is based on federally funded allotments for each state that are subject to reauthorization by Congress. CHIP provides a strong incentive for states to participate because the federal government pays an “enhanced” federal matching rate that is derived from a state’s FMAP. The Children’s Health Insurance Program Reauthorization Act of 2009 (CHIPRA) extended federal funding for CHIP through federal fiscal year 2013. Patient Protection and Affordable Care Act (PPACA) further extended federal CHIP funding through fiscal year 2015 and provided for an increase in the enhanced FMAP for CHIP beginning in fiscal year 2016. Since its inception in 1997, CHIP enrollment has steadily increased from 660,000 in 1998, to 7.7 million in 2010. (See fig. 10 for CHIP enrollment trends.)

1CHIP was originally known as the State Children’s Health Insurance Program or SCHIP. Subsequent legislation renamed the program CHIP. In this report, we use the acronym CHIP to refer to the program.


4The enhanced FMAP for CHIP in 2010 ranged from 65.00 to 82.97.

Figure 10: Total Enrollment in the Children’s Health Insurance Program (CHIP)

States differ in the types and number of other publicly funded health programs they provide beyond Medicaid and CHIP. Categories of state spending include pharmaceutical assistance programs; population health expenditures, such as environmental health; public health surveillance;\(^6\) the promotion of healthy behavior; disaster preparedness and response; community-based services, such as rehabilitation services, and alcohol and drug abuse treatment; mental health community services; and developmental and vocational services. In addition, states provide health care to state employees and residents of correctional facilities. These discretionary programs are often funded by state general fund dollars, which are affected by fluctuations in state revenue.

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\(^6\)Public health surveillance is the ongoing, systematic collection, analysis, interpretation, and dissemination of data regarding a health-related event for use in a public health action to reduce morbidity and mortality, and to improve health.
CHIP and other publicly funded programs constitute a small percentage of overall state health expenditures. According to 2003 data from the National Association of State Budget Officers (NASBO),\(^7\) on average, Medicaid constituted 71 percent of state health spending, CHIP 1.7 percent, and other publicly funded health expenditures constituted 16.2 percent.\(^8\) The approximately 11 percent of expenditures remaining included health care for state employees, residents of correctional facilities, and support for state university-based teaching hospitals. (See table 3 for the percentage of health program expenditures in sample states.)

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\(^7\)NASBO has not updated the data in its report, however staff there stated that the data are likely representative of current percentages.

Appendix I: Children’s Health Insurance and Other Publicly Funded Health Programs

Table 3: Selected States’ Percentage of State Expenditures on Health Care by Program, 2002-2003

<table>
<thead>
<tr>
<th>Category based on state spending on health care</th>
<th>Highest states&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Percentage of expenditures</th>
<th>Lowest states&lt;sup&gt;b&lt;/sup&gt;</th>
<th>Percentage of expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>State budget spent on health care</td>
<td>Medicaid</td>
<td>CHIP</td>
<td>All other health programs</td>
</tr>
<tr>
<td>New York</td>
<td>45.5</td>
<td>34.6</td>
<td>0.8</td>
<td>10.1</td>
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<tr>
<td>Missouri</td>
<td>41.2</td>
<td>31.4</td>
<td>0.5</td>
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<td>Texas</td>
<td>41.1</td>
<td>25.2</td>
<td>1.3</td>
<td>14.6</td>
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<tr>
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<td>39.6</td>
<td>29.3</td>
<td>0.4</td>
<td>9.9</td>
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<td>39.1</td>
<td>32.9</td>
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<td>18.5</td>
<td>13.1</td>
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<td>17.4</td>
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<tr>
<td>West Virginia</td>
<td>15.0</td>
<td>11.6</td>
<td>0.2</td>
<td>3.2</td>
</tr>
</tbody>
</table>

Source: GAO analysis of National Association of State Budget Officers data.


<sup>a</sup>States with highest percentage of state budgets spent on health care.

<sup>b</sup>States with the lowest percentage of state budgets spent on health care.

Effects of the 2001 and 2007 Recessions on CHIP

In response to the 2001 recession, states made different decisions regarding their CHIP programs. For example, six states expanded their CHIP programs, while seven states froze or capped their enrollment in CHIP. Other states proposed cost-containment strategies for their CHIP programs, such as reducing payments for health care providers, eliminating benefits, and increasing the use of copayments and monthly premiums.

Due to the 2007 recession, 13 states expanded eligibility for their programs, and 14 states made changes in enrollment and renewal procedures, such as accepting online applications or eliminating face-to-face interviews for renewal.<sup>9</sup> However, a number of states reported

<sup>9</sup>A state was not eligible for an increased FMAP if its eligibility standards, methodologies, and procedures were more restrictive than those in effect on July 1, 2008.
Effects of the 2001 and 2007 Recessions on Other Publicly Funded Health Programs

Decreases in tax revenues during the 2001 and 2007 recessions led most states to cut or reduce coverage for many of their health programs. For example, 14 states that operated a prescription drug program responded to the 2001 economic downturn by proposing to reduce dispensing fees, change reimbursement formulas, and implement a maximum allowable cost for generic drugs to contain costs. Other states addressed budget concerns by limiting enrollment in state-funded health programs, increasing premiums for program participants, and increasing copayments. In addition, states eliminated or reduced coverage of low-income adults in three state-funded health programs; cut services for people with chronic diseases who were rejected by private insurance companies; and discontinued services for disabled individuals.

The 2007 recession also created significant budget gaps for states, which affected their health care programs. The National Conference of State Legislatures reported that for fiscal year 2011, health programs were over budget in 18 states. In November 2010, the Center on Budget and Policy Priorities reported that 31 states enacted cuts to public health services, and 29 states cut services to elderly and disabled individuals. Examples of state health program cuts included dental and vision care programs, maternal and child health programs, health insurance for legal immigrants, and prescription drug coverage to help seniors pay for drugs not covered

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11National Association of State Budget Officers and the National Governors Association, “Medicaid and Other State Healthcare Issues: The Current Situation, A Supplement to the Fiscal Survey of States” (Washington, D.C., May 2002). This report notes that because total health care spending accounted for approximately 27 percent of all state spending, state budget cuts “inevitably” included state health programs.

12National Conference of State Legislatures, State Budget Update: November 2010 (December 2010).

13N. Johnson, P. Oliff, and E. Williams, An Update on State Budget Cuts: At Least 46 States have Imposed Cuts that Hurt Vulnerable Residents and Cause Job Loss, 7.
by Medicare’s prescription drug benefit. In addition, other states eliminated funding for their state-funded health insurance programs for certain low-income parents and disabled adults.
Appendix II: Comments from the Department of Health and Human Services

Dear Ms. Yocom and Mr. McCool:


The Department appreciates the opportunity to review this correspondence before its publication.

Sincerely,

Jim R. Esquea
Assistant Secretary for Legislation
Appendix II: Comments from the Department of Health and Human Services

GENERAL COMMENTS OF THE DEPARTMENT OF HEALTH AND HUMAN SERVICES (HHS) ON THE GOVERNMENT ACCOUNTABILITY OFFICE'S (GAO) DRAFT REPORT ENTITLED, "MEDICAID: IMPROVING RESPONSIVENESS OF FEDERAL ASSISTANCE TO STATES DURING ECONOMIC DOWNTURNS" (GAO-11-395)

The Department appreciates the opportunity to comment on this draft report. The purpose of the review was to analyze past national economic downturns and the impact of the increased Federal Medical Assistance Percentage (FMAP) on those downturns. The report compares the effectiveness of the temporary FMAP increase in 2003-2004 in response to the 2001 recession to more recent actions under the American Recovery and Reinvestment Act of 2009 (Recovery Act) to respond to the 2007 recession. The goal was to address the timing and targeting of funds to further improve the responsiveness of any future increased FMAP periods. One critical point made in the draft report is the need to better align recessionary periods with an increase in FMAP so that States can better plan their budgetary processes and avoid unnecessary benefit or rate reductions.

In particular, while your report acknowledges that both periods of increased FMAP were beneficial, the increased FMAP authorized under the Recovery Act was more responsive to individual State Medicaid needs. This increased responsiveness is attributable to several factors, including that funds were provided during the recession while most States were experiencing Medicaid enrollment increases coupled with revenue decreases. In addition, unlike the 2003-2004 increased FMAP, the Recovery Act increased FMAP formula included measuring the change in States’ unemployment rates and adjusting the increased FMAP accordingly, which better reflected increases in Medicaid enrollment as a result of an individual State’s economic downturn.

Finally, this draft report suggests that future approaches should consider individual State economic indicators to better monitor increases in unemployment as proxies for increases in Medicaid enrollment and to evaluate State decreases in wages and salaries to proxy for loss of revenues to their general funds. In addition, the report recommends including the provision for automatic triggers so that any increased FMAP funding can be made available as quickly as possible to States at the onset of a recession.

Centers for Medicare & Medicaid Services' (CMS) Comments

While CMS realizes that any changes to the FMAP formula must be authorized by statute and are then further implemented by the Assistant Secretary for Planning and Evaluation in the Department of Health and Human Services, we agree with the analysis and goals of this report. We believe it is critical to as closely as possible align changes to the FMAP formula to individual State circumstances in order to avoid unintended consequences for beneficiaries as well as provide budget planning stability for States.
## Appendix III: GAO Contacts and Staff Acknowledgments

### GAO Contacts

<table>
<thead>
<tr>
<th>Name</th>
<th>Phone Number</th>
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</tbody>
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### Staff Acknowledgments

In addition to the contacts named above, major contributors included Robert Copeland, Assistant Director; Eric R. Anderson; Robert Dinkelmeyer; Greg Dybalski; Anne Hopewell; Allison Liebhaber, Drew S. Long; Victor J. Miller; Elizabeth T. Morrison; and Hemi Tewarson.
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