The Impact of State Approaches to Medicaid Financing on Federal Medicaid Spending

Medicaid financing is a shared responsibility of the federal government and the states, with states receiving federal matching funds toward allowable state expenditures. These include payments to health care providers and managed care plans as well as expenditures associated with administrative tasks such as determining eligibility, enrolling and monitoring providers, overseeing managed care organizations and other contractors, and paying claims. Because federal contributions match state spending on an open-ended basis, when state spending increases, so does federal spending.

The Medicaid statute permits states to raise their share of Medicaid expenditures through multiple sources, including state general revenue, contributions from local governments (including providers operated by local governments), and specialized revenue sources such as permissible health care-related taxes. The extent to which states rely on funding sources other than state general revenue varies considerably and may be influenced by how states have historically split financing with localities for functions such as education, social services, indigent care, and corrections. This allocation of responsibilities often serves as the foundation for state financing approaches in Medicaid.

One criticism of current law is that certain approaches to raising the non-federal share—such as provider taxes and intergovernmental transfers—allow states to draw down federal funds without providing any additional services or improving the value of services provided to Medicaid enrollees (Coughlin et al. 2004). These approaches also can increase the federal share of Medicaid spending substantially (GAO 2014). To date, however, the effect of these different approaches on the allocation of state and federal Medicaid spending has not been well analyzed.

To address this knowledge gap, MACPAC undertook such an analysis, finding that state use of sources other than general revenue increases the federal share by about 5 percentage points. That is, while the reported historic share of Medicaid spending borne by the federal government is roughly 57 percent, due to state use of legally permissible sources other than general revenues, a more nuanced calculation of the federal share nationally is 61.7 percent. The effect at the state level likely varies from the national estimate due to variations in financing arrangements with providers and the allocation of taxing and financing responsibilities between the state and local governments.

It is important to note that each state makes its own choices among legally permissible funding mechanisms to generate revenue to support their Medicaid programs. Federal policy has changed at various points, sometimes because of evidence of state excesses, and sometimes in an effort to control federal spending by limiting states’ ability to make expenditures that qualify for federal contributions (GAO 1994, GAO 2004). But states have protested more robust action to limit how they raise funds to support Medicaid, noting that they may find it difficult to raise the non-federal share and balance their state budgets without this flexibility (CBO 2008).
To provide context for our findings, we begin with relevant background on federal policies for financing, including calculation of the federal matching rate and rules governing how states may raise the non-federal share. Later, we describe the data sources and methods used in our analysis.

Formula for federal financing

The vast majority of state Medicaid spending (95 percent) is for health care services provided to Medicaid enrollees, and the federal share for most of these expenditures is determined by each state’s federal medical assistance percentage (FMAP).

The FMAP formula provides higher matching rates to states with lower per capita incomes relative to the national average (and vice versa) and is intended to account for states’ differing abilities to fund Medicaid from their own revenues. Statute requires the formula to be reapplied annually to calculate new FMAPs for each state for the following fiscal year using the most recent rolling three-year average per capita income data (§ 1905(b) of the Social Security Act (the Act)). FMAPs have a statutory minimum of 50 percent and a statutory maximum of 83 percent. Mississippi currently has the highest FMAP at about 74 percent, and 13 states are currently at the minimum (MACPAC 2016a).

Certain exceptions to the FMAP formula apply, including exceptions for:
- administrative costs, which are generally matched at 50 percent;
- the territories and the District of Columbia, whose FMAPs are set in statute; and
- special situations, such as temporary state fiscal relief.

In addition, there are special matching rates for certain populations, providers, and services (such as family planning services and supplies) (MACPAC 2016b).³

Historically, the average federal share of Medicaid benefit expenditures has been about 57 percent. The average federal share has increased to over 60 percent since 2014 when states began receiving 100 percent federal match for the new adult group under the Patient Protection and Affordable Care Act (ACA, P.L. 111-148, as amended) (OACT 2016).

Non-federal share of Medicaid financing

Federal policy regarding both the permissible sources of non-federal Medicaid expenditures and federal contributions toward those expenditures dates to Medicaid’s enactment in 1965 (MACPAC 2012). Before that time, health care services for low-income individuals were provided primarily through a patchwork of programs sponsored by state and local governments, charities, and hospitals (HCFA 2000). Payments were often in the form of direct investments in hospitals and clinics serving low-income individuals. Medicaid’s financing approach was designed to build upon these existing programs by providing federal matching funds for state and local spending on approved health care services provided to certain populations. While the administration of Medicaid was centralized at the state level, this financing structure allowed preexisting local programs to maintain primary responsibility for service delivery and continue to contribute non-federal funding towards services that now qualified for federal matching funds.

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The Medicaid statute permits states to generate their share of Medicaid expenditures through multiple sources, including state general revenue, contributions from local governments (including providers operated by local governments), and specialized revenue sources such as health care-related taxes. Although 40 percent of non-federal financing must come from the state, up to 60 percent may be derived from local sources (§1902(a)(2) of the Act). The three most common sources of non-federal financing are:

- **General revenue.** Most state financing for Medicaid is through general revenue collected through income taxes, sales taxes, and other state and local sources. These general revenues, including state general funds, intra-agency funds, and other state sources, accounted for 74 percent of the non-federal share of financing in 2012 (GAO 2014).

- **Health care-related taxes.** In fiscal year (FY) 2016, all but one state (Alaska) had at least one health care-related tax (sometimes referred to as a provider tax, fee, or assessment) in place (Smith et al. 2015). In FY 2012, these taxes, typically levied on institutional providers, accounted for about 10 percent of non-federal share (GAO 2014).

- **Other local sources of non-federal share.** Counties, municipalities, and other units of local government contribute to the non-federal share of Medicaid spending in many states through expenditures (such as services at government-owned and operated hospitals) that are eligible for federal match. These local sources—including intergovernmental transfers (IGTs) and certified public expenditures (CPEs)—totaled about 16 percent of the non-federal share in 2012 (GAO 2014).

At various points, particularly beginning in the early 1990s, this multisource approach to financing has been the subject of federal scrutiny (GAO 2014, 2004, 1994). For example, the federal government has acted to limit some strategies, such as putting constraints around the state use of health care-related taxes. In an effort to control federal spending, the federal government has in some cases limited states’ ability to make expenditures that qualify for federal contributions through statutory limits on disproportionate share hospital (DSH) payments and the creation of upper payment limits for hospitals and nursing facilities.

### Analysis of the Split between Federal and Non-Federal Funds

To estimate how financing options affect the split between federal and non-federal funds, MACPAC worked with researchers at The George Washington University to develop assumptions about the sources and uses of non-federal share. We based the assumptions on analysis of financing policies and practices in 10 states and review by experts familiar with Medicaid financing. We applied these assumptions to data on non-federal financing of Medicaid programs for 2008–2012 collected by the U.S. Government Accountability Office (GAO) and Medicaid spending data from CMS-64 financial management reports for each state.

The analysis focuses on the net payment to providers. Because many providers finance some portion of the non-federal share of the Medicaid payments they receive, our analysis posits that the total Medicaid payment received by providers is effectively reduced by the amount of non-federal share they financed. In addition, net payments may consist largely of federal dollars because the provider itself has contributed...
much of the non-federal share. As such, the proportion of federal funds in the net payment to these providers can be higher than the proportion of federal funds indicated by the state’s FMAP.

Take the example of a hospital provider tax arrangement in a state with a 60 percent FMAP (Figure 1). Hospitals pay $40 in a provider tax to the state; of this, $32 is deposited into a provider tax account and $8 is deposited into the general fund. The state makes $100 in payments to hospitals and other health care providers for services rendered, of which $60 is federal match. The state pays $80 to the hospitals for services rendered—this payment is comprised of $32 from the provider tax account and $48 in federal match. The hospitals were paid $80, but because they paid the state $40 through a provider tax that was used as the non-federal share, the hospitals only had a net gain of $40 once the provider tax is taken into account. The net payment of $40 in this example is comprised solely of federal funds.

**FIGURE 1. Illustration of the Flow of Funds from a Provider Tax on Hospitals in a State with a 60 Percent FMAP**

Note: FMAP is federal medical assistance percentage, often referred to as the federal matching rate.

In other cases, the amount of non-federal share from a provider may still be considered part of the net payment. For example, CPEs are commonly used by local education agencies to provide the non-federal share for Medicaid school-based services (Figure 2). In this example, the local education agency receives $100 in funding from the county government to support all of its budgeted activities, which can include providing Medicaid-allowable services. The local education agency certifies that the cost of providing Medicaid-allowable services were $100. The state then receives $60 in federal matching dollars based on this $100 CPE and makes a $60 payment to the local education agency. Because the local education agency received $60 dollars from the state and $40 from the county government as part of its overall operating budget, the local education agency received the funds to cover the $100 in costs that it certified.
FIGURE 2. Illustration of the Flow of Funds from a CPE from a Local Education Agency in a State with a 60 Percent FMAP

Note: CPE is certified public expenditure. FMAP is federal medical assistance percentage, often referred to as the federal matching rate.

Methods

We developed a spreadsheet model of Medicaid spending by state grouped into the four payment categories (fee-for-service, managed care, disproportionate share hospital (DSH), and non-DSH supplemental payments) that were used in the GAO study. For each of these spending groups, we used the GAO findings to calculate how much of the non-federal share was financed by different sources:

- general funds,
- intra-agency transfers,
- provider taxes,
- IGTs,
- CPEs, and
- other sources.

For purposes of the analysis, we estimated the percent of each source of financing that contributed to the net payments made to providers, which represents our best-informed guess about how much of the reported non-federal share was financed by different sources either:

- comes from providers (e.g., taxes or donations) or on behalf of locally owned or operated providers (e.g., IGTs, CPEs) and is not used to make payments to the same providers; or
- originates from a state (e.g., general funds, intra-agency transfers) or local authority (e.g., IGTs, CPEs) and is not offset by the state or local authority retaining some or all of the resulting federal matching funds.

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We assume that 100 percent of state general funds contribute to net provider payments. For other sources of non-federal share, we estimate that between 20 and 95 percent of each source contributes to net provider payment. Specific estimates for each source and the rationale are described in more detail below.

We then classified the remainder of the non-federal share as funds that were provided by or on behalf of providers and used to make payments to the same providers in aggregate, and thus do not end up as a net payment to Medicaid providers. We estimated the amount of federal matching funds that are attributable to these remaining funds based on each state’s statutory FMAP.

For example, using the scenario in Figure 1, the hospitals paid the state $40 through a provider tax. In our analysis, we would consider the $8 (20 percent) in non-federal share from the hospital provider tax that was used to pay other health care providers to contribute to the net payment of those providers since they did not pay the tax. The rest of the provider tax, $32 (80 percent), was used to generate the non-federal share of payments to the hospitals that paid the tax, and thus, we would not consider this non-federal share to contribute to the net payment to those hospitals.

Next, we removed the non-federal amount provided by and returned to the same providers from total Medicaid spending, and then computed a new federal share for each state by dividing the total amount of federal funding by the amount of total Medicaid spending after subtracting any provider-returned funds from the non-federal share. We also conducted sensitivity analyses by changing the default assumptions to estimate high and low scenarios.

Summary of default assumptions

We developed default assumptions for each source of non-federal share. Because we do not have a data source that identified how funds from each source are used at the state level, we applied the assumptions for each of the funding sources equally to each state and each of the four payment categories used by the GAO. Thus, the impact for any particular state may be under- or overestimated.

State general funds. Based on a review of available information, our assumption is that 100 percent of state general funds contribute to net provider payment.

Intra-agency funds. Our default assumption is that 95 percent of intra-agency funding provides a net payment to providers. A 100 percent assumption would also be reasonable and consistent with the notion that intra-agency transfers are analogous to general funds, and we take this into account as part of our sensitivity analyses.

Provider taxes. States generally use provider taxes to either increase payments to providers or offset potential cuts to provider payment that otherwise would be made to fill budget gaps. In the 10 states we researched, state laws on provider taxes usually require that the resulting revenues are used solely to finance Medicaid payments to the particular type of provider that paid the tax. Therefore, we assume that most of the non-federal share financed by provider taxes is used to make payments to the same class of providers who paid the tax (e.g., hospitals, nursing facilities).
Even so, there are situations where provider tax revenue is not used to finance payments to the providers who were taxed. For example, in Colorado, a portion of the hospital provider fee was used to implement Health First Colorado eligibility for adults up to 133 percent FPL and Child Health Plan Plus eligibility for children and pregnant women up to 250 percent FPL (HCPF 2016). The hospital provider fee in Colorado would be used to make payments to providers other than hospitals through these eligibility expansions. Thus, we assumed that 20 percent of non-federal share generated by provider taxes was used to finance payments to other types of providers who did not pay the tax.

**Provider donations.** Given federal restrictions on provider donations that prohibit hold harmless arrangements that directly or indirectly return some or all of the donation to the provider, it is unlikely that providers making donations receive the full amount of their donations back, although it seems reasonable to assume that providers receive at least some portion back to justify the donations. Because only two states report substantive use of provider donations and we were not able to find any public documentation regarding their purpose and use, we applied the same 20 percent that we used for provider taxes. Due to the limited use of such donations, this assumption has almost no impact on national estimates.

**Intergovernmental transfers.** In the 10 states we researched, we found little publicly available information on IGTs regarding the participating governments, institutions or other provider entities participating in the transfers, or the amounts of money involved. In many states, the IGT is from a local government on behalf of providers that are owned or operated by the local government, and the IGT is used to support DSH or non-DSH supplemental payments. Based on this information, we assume that 25 percent of the non-federal financing represents a net payment to the providers. However, in the case of IGTs, it may be appropriate to vary the default assumption for different categories of services. The most likely scenario in which the non-federal share would largely be paid back to the providers owned or operated by a local government that made the IGT would be through DSH and non-DSH supplemental payments where the payments are not directly tied to services and can be targeted to a specific group of providers. By contrast, for fee-for-service (FFS) payments and payments to managed care organizations (MCOs), the non-federal share coming from IGTs is more likely to fund payments to providers that are not owned or operated by local governments because the payments are directly tied to a service that was rendered and less likely to be targeted to specific providers. For part of our sensitivity analyses, we varied the percentages applied for DSH and non-DSH supplemental payments from the percentages used for FFS and MCO payments. We applied the same percentage used for provider taxes and donations to IGT funding for all supplemental payments, but assume that a higher percentage of IGTs (e.g., 100 percent) of IGTs for FFS and MCO payments contribute to the net payment of providers.

**Certified public expenditures.** Similar to IGTs, we found it difficult to find any publicly available information on CPEs regarding the participating governments, institutions, or other provider entities participating in CPE arrangements, or the amounts of money involved. In many states, CPEs are most commonly used by local education agencies to provide the non-federal share for Medicaid school-based services. Because the local government has initially funded these local education agencies, the CPEs allow the local education agency to claim federal funds to pay for the allowable Medicaid services provided. We assumed that 75 percent of the non-federal share of CPEs contributes to the net payment of providers. However, CPEs may also be used to fund DSH and non-DSH supplemental payments that are not directly

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tied to a service that was rendered and targeted to providers owned or operated by the local governments that provided the CPE. Similar to IGTs, we varied the percentages applied for DSH and UPL payments from the percentages used for FFS and MCO payments in our sensitivity analyses.

**Other state and local sources.** GAO’s analysis of state and local sources of Medicaid financing showed significant amounts of funds from tobacco taxes and settlements such as the 1998 Master Tobacco Settlement Agreement, drug rebates, and trust funds. Because we did not have specific information on how these sources of funds were used in our review of 10 states, we assumed that these funds were analogous to state general funds and assumed that 100 percent of these funds contributed to the net payment of providers.

**Results**

Using the default assumptions, we estimate that nationally, providers and local governments contributed and received back in payments about $32 billion of the $180 billion in non-federal funding in 2012, about 18 percent of the total non-federal share. This $32 billion of non-federal share financed by providers and local governments led to $42 billion in federal matching funds. Reducing total spending by the amount of non-federal share that was provided by providers and used to make payments to the same providers, we compute a new federal share of 61.7 percent nationwide, compared to roughly 57 percent for the national average federal share of Medicaid spending prior to those adjustments, or a 4.7 percentage point increase (Table 1). The increase in federal share varies by state (Figure 3). The majority of states (31 states) have between a 0 to 4 percent increase in the federal share over their FMAP rate.

**TABLE 1: Federal Share of Net Provider Payments**

<table>
<thead>
<tr>
<th>Spending and federal share calculation</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Total spending</td>
<td>$418.3 B</td>
</tr>
<tr>
<td>b) Federal spending</td>
<td>$238.3 B</td>
</tr>
<tr>
<td>c) Non-federal spending</td>
<td>$180.0 B</td>
</tr>
<tr>
<td>d) Non-federal share financed and paid back to providers</td>
<td>$31.6 B</td>
</tr>
<tr>
<td>e) Federal share (b/a)</td>
<td>57.0%</td>
</tr>
<tr>
<td>f) Federal share on net provider payments [b/(a-d)]</td>
<td>61.7 %</td>
</tr>
<tr>
<td>g) Percentage point increase in federal share (f-e)</td>
<td>4.7 %</td>
</tr>
</tbody>
</table>

**Source:** MACPAC and George Washington University, 2016, analysis of GAO 2014 and CMS-64 net financial management report data.
**FIGURE 3: Number of States by Percentage Point Increase in Federal Share of Net Provider Payments over State FMAP Rate**

- **0-2%**: 15 states
- **2-4%**: 16 states
- **4-6%**: 12 states
- **6-8%**: 7 states
- **8+%**: 1 state

**Percentage point increase in federal share**

**Number of states**

**Source:** MACPAC and George Washington University, 2016, analysis of GAO 2014 and CMS-64 net financial management report data.

**Sensitivity Analysis**

Our results are sensitive to variations in the assumptions, especially for larger non-federal sources of funding (e.g., provider taxes, IGTs). To provide bounds around our default assumptions, we analyzed additional scenarios to establish a lower and upper bound (Table 2).

Under the lower bound assumptions, the new federal share was 58.8 percent, a 1.8 percentage point increase over the national average of 57 percent prior to any adjustments (Table 3). For the lower bound, we assumed 100 percent of federal, state general funds, intra-agency funds, and other local sources contributed to net provider payments (Table 2). For provider taxes and donations, we assumed 50 percent. For IGTs and CPEs, we varied the percentages by type of payment. For the fee for service and managed care categories, we assumed 100 percent of these funds contributed to net provider payments, but only 50 percent of IGTs and 75 percent of CPEs for DSH and non-DSH supplemental payments.

For our upper bound, the new federal share was 65.0 percent, an 8 percentage point increase over the national average of 57 percent prior to any adjustments (Table 3). For the upper bound assumptions, we changed the default assumptions for provider taxes, provider donations, IGTs, and CPEs to assume that none of these sources contributed to net provider payments in the analysis and lowered other local sources to 50 percent (Table 2).
TABLE 2. Sensitivity Analysis on Assumptions of Amount of Funds Contributing to Net Payments by Source of Funds

<table>
<thead>
<tr>
<th>Source of funds</th>
<th>Lower bound assumptions</th>
<th>Default assumptions</th>
<th>Upper bound assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FFS and MCO</td>
<td>DSH and non-DSH</td>
<td>All payment categories</td>
</tr>
<tr>
<td>Federal</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>State general funds</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Intra-agency transfers</td>
<td>100%</td>
<td>100%</td>
<td>95%</td>
</tr>
<tr>
<td>Provider taxes</td>
<td>50%</td>
<td>50%</td>
<td>20%</td>
</tr>
<tr>
<td>Provider donations</td>
<td>50%</td>
<td>50%</td>
<td>20%</td>
</tr>
<tr>
<td>IGTs</td>
<td>100%</td>
<td>50%</td>
<td>25%</td>
</tr>
<tr>
<td>CPEs</td>
<td>100%</td>
<td>75%</td>
<td>75%</td>
</tr>
<tr>
<td>Other local and state sources</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

Notes: FFS is fee for service. MCO is managed care organization. DSH is disproportionate share hospital. IGT is intergovernmental transfer. CPE is certified public expenditure.

Source: MACPAC and George Washington University, 2016, analysis of GAO 2014 and CMS-64 net financial management report data.

TABLE 3. Sensitivity Analysis on Federal Share of Medicaid Spending on Net Provider Payments

<table>
<thead>
<tr>
<th></th>
<th>Lower bound assumptions</th>
<th>Default assumptions</th>
<th>Upper bound assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal share on net provider payments</td>
<td>58.8%</td>
<td>61.7%</td>
<td>65.0%</td>
</tr>
<tr>
<td>Percentage point increase over historical average federal share in 2012</td>
<td>1.8%</td>
<td>4.7%</td>
<td>8.0%</td>
</tr>
</tbody>
</table>

Source: MACPAC and George Washington University, 2016, analysis of GAO 2014 and CMS-64 net financial management report data.
Endnotes

1 Our analysis was based on data from the period prior to the Medicaid expansion to the new adult group. The average federal share in FY 2016 including the new adult group is 63 percent.

2 While we do summarize the range of the increase in federal share across states, these estimates apply the same set of assumptions for each state. We did not have data on the specific financing arrangements with providers and the allocation of taxing and financing responsibilities between the state and local governments for every state to develop state-level estimates.

3 Certain administrative functions have a higher federal match, including activities that require medically trained personnel, the operation of information systems, fraud control activities, and administration of services that themselves have higher medical assistance match rates (MACPAC 2016c).

4 Health care-related taxes are defined by federal statute as taxes of which at least 85 percent of the burden falls on health care providers, and are permitted by federal rule for 18 separate provider classes (§ 1903(w)(3)(A) of the Act and 42 CFR 433.56). Provider donations are also permitted as a source of the non-federal share, but the stringent conditions placed on donations have effectively prohibited their use.

5 Federal statute permits the use of funds transferred from or certified by units of government within a state as the non-federal share of Medicaid expenditures regardless of whether the unit of government is also a health care provider (§ 1903(w)(6)(A) of the Act). Unit of local government is defined as a city, county, special purpose district, or other governmental unit in the state (§ 1903(w)(7)(G) of the Act).

6 We reviewed publicly available information from Alabama, California, Colorado, Florida, Illinois, Michigan, Mississippi, Missouri, Oklahoma, and Wisconsin.

References


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