A Fiscal and Economic Analysis of Medicaid Expansion in Mississippi under the Patient Protection and Affordable Care Act

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Executive Summary

This report presents a fiscal and economic analysis of Medicaid expansion in Mississippi and updates our previous report from 2021. Importantly, this report makes no recommendations regarding Medicaid expansion in Mississippi. We find that Medicaid expansion in Mississippi would increase Medicaid enrollment in the state by approximately 241,000 to 249,000 individuals between 2024 and 2029. These new Medicaid enrollees consist of individuals ages 19 to 64 with household incomes below 138 percent of the federal poverty level. The federal government covers 90 percent of the expenditures for the expansion population beginning in 2024 while Mississippi is responsible for the remaining 10 percent. We estimate the annual costs to the state from Medicaid expansion before considering any savings range from approximately $232 million to $260 million from 2024 to 2029. These costs include Mississippi's portion of Medicaid expenditures for the expansion group and the administrative costs the state incurs because of expansion.

Mississippi will be able to save funds from a variety of sources if the state enters Medicaid expansion according to our estimates. First, a provision of the American Rescue Plan increases the FMAP rate on traditional Medicaid by 5-percentage points in new expansion states during the first two years of expansion. We estimate this provision will save Mississippi around $335 million and $346 million in 2024 and 2025, respectively, if the state enters Medicaid expansion. Other more long-term sources of savings include the movement of disabled individuals from traditional Medicaid coverage to the expansion group, the movement of pregnant women from traditional Medicaid coverage to the expansion group, inpatient care of prisoners, and reductions in uncompensated care costs at hospitals. We also include additional insurance premium tax revenue that results from expansion with these savings. We estimate the total annual savings beyond the two-year increase in the FMAP rate range from approximately $147 million to $166 million between 2024 and 2029. Our analysis finds that after the first two years of expansion, reductions in uncompensated care costs at hospitals generate nearly 50 percent of the total savings. Based on our estimates of the costs and savings associated with Medicaid expansion, Mississippi could enter Medicaid expansion in 2024 and incur little to no additional expenditures for more than the first seven years of expansion.

Based on trends, we estimate total costs will exceed total savings by approximately $98 million in 2032. However, this net estimate does not incorporate our projections of the changes to the state's general fund revenue that will occur following Medicaid expansion. We estimate the additional annual increases in general fund revenues the state will receive between 2024 and 2029 due to Medicaid expansion range from $15 million to $33 million, a relatively modest increase. The state could apply these additional revenues to further offset the costs of Medicaid expansion beginning in 2032. If the state chose to allocate the additional general fund revenues for this purpose the annual net cost of Medicaid expansion to Mississippi would fall well below the 10 percent share not covered by the federal government.

We estimate Medicaid expansion will increase the state's real GDP each year from 2024 to 2029 between about $764 million and $843 million, increases that equal about 0.7 percent of real GDP for Mississippi in 2023. We estimate Mississippi adds an average of 11,700 jobs a year from Medicaid expansion from 2024 to 2029. The average annual increase in jobs equals around 1.0 percent of total employment in the state in 2023. However, to realize these projected job gains the state must increase its supply of workers, including those in the Health Care and Social Assistance sector. The annual increases to real personal income in Mississippi that occur because of Medicaid expansion range from approximately $515 million to $624 million. The largest increase occurs in 2029 and represents 0.5 percent of total real personal income in Mississippi in 2022. Finally, we estimate the population of the state will increase by about 3,400 to 11,400 new residents per year between 2024 and 2029 following Medicaid expansion. This largest increase equals about 0.4 percent of the state's population in 2023.

A Fiscal and Economic Analysis of Medicaid Expansion in Mississippi under the Patient Protection and Affordable Care Act

When the Patient Protection and Affordable Care Act (ACA) became law in 2010, a central component of the legislation was the expansion of the federal and state Medicaid program in all fifty states. The ACA scheduled this expansion to begin nationwide in 2014. However, in 2012 the U.S. Supreme Court ruled in *NFIB vs. Sebelius* that the provision was unconstitutionally coercive because of the federal government's intention to withhold Medicaid funds from states that did not comply. As a result of the court's decision, individual states were left with the option to proceed with Medicaid expansion under the ACA or maintain eligibility requirements according to traditional Medicaid.

Twenty-four states initially chose to participate when the ACA instituted Medicaid expansion in 2014. The total number of states, as well as the District of Columbia, that have opted to participate in Medicaid expansion stands at forty as of December 2023[1]. Notably, to date no state that elected to enroll in Medicaid expansion has exercised its option under the ACA to withdraw from the expanded program. Mississippi is one of ten states, most of which are in the Southeast, that to date has elected to remain in the traditional Medicaid program only.

This report presents a fiscal and economic analysis of Medicaid expansion in Mississippi and updates URC's previous report from 2021. It represents an evaluation of the changes to revenues received and disbursed by state government and the expected impacts to economic output, employment, real personal income, and population if Mississippi enters the expanded Medicaid program. The effects on the economic welfare of a particular individual or group are not evaluated. The analysis considers the expansion allowed under the provisions of the ACA that does not require the state to seek any waivers from the U.S. Secretary of Health and Human Services for changes to the Medicaid conditions—such as the work requirements sought by some states. Importantly, this report makes no recommendations regarding Medicaid expansion in Mississippi, but instead presents a straightforward evaluation of the expected outcomes from a standard expansion under the ACA.

Health Insurance Exchanges

In addition to Medicaid expansion, (discussed below) one of the key elements of the ACA was the establishment of health insurance exchanges in every state. While these exchanges do not directly affect a state's decision to enter Medicaid expansion, acknowledging how plans from these exchanges differ from Medicaid coverage for the potential expansion group is important to understanding the context for the Medicaid expansion decision. The ACA required health insurance exchanges to begin operating in all states on October 1, 2013. Each state had the option to establish its own health insurance exchange, align with one or more states to create multi-state exchanges, or allow the federal government to operate an exchange in the state, frequently referred to as the Marketplace. As of 2024, the federal government administers the health insurance exchange in Mississippi, as in most southern states, primarily through its web site HealthCare.gov[2]. In contrast to Medicaid and Medicare, few eligibility requirements must be met to purchase health insurance from the Marketplace. The primary criteria are one must be a resident of the U.S., a citizen or a national, and not incarcerated. No one is required to purchase a health insurance plan from an exchange or elsewhere. While the ACA originally required most U.S. citizens to either purchase health insurance or pay a fee by way of a provision known as the

[1]In March 2023 the governor of North Carolina signed a bill passed by the legislature that directs the state to begin the process of expanding Medicaid following the adoption of a budget for the upcoming fiscal year. A state budget was enacted in September 2023 and the North Carolina Department of Health and Human Services began implementing coverage on December 1, 2023.

[2]Mississippi enacted a law in May 2024 that instructs the state's Commissioner of Insurance to establish a state health insurance exchange. While the law went into effect immediately upon enactment, the exchange likely will not become active until sometime in 2025.

individual mandate, the Tax Cuts and Jobs Act of 2017 set the penalty for not complying with the mandate at $0, effectively nullifying it.

Health insurance exchanges are primarily online markets, administered and regulated by state or federal governments, where individuals, families, or businesses can purchase private insurance policies. The purchase of plans is generally limited to an open enrollment period, which in most states is November 1 to January 15. The designs of these plans are similar to those offered by many employers to their workers and their immediate families. Policies offered by insurers on the exchanges must provide specific health benefits and an individual cannot be denied coverage for pre-existing conditions. Premiums are regulated and out-of-pocket expenses are capped for individuals and families. For example, in 2024, Marketplace plans have an out-of-pocket limit of $9,450 for an individual and $18,900 for a family. Policies on the exchanges are classified into four categories known as metal tiers: bronze, silver, gold, and platinum. Policies in these tiers vary only by premium and out-of-pocket costs. Bronze and silver plans charge lower premiums, but these plans also have higher out-of-pocket costs. Compared to bronze and silver plans, gold and platinum plans have higher premiums, but lower out-of-pocket costs.

The ACA provides premium subsidies for certain individuals to facilitate purchases of health insurance plans from the exchanges, which makes the Marketplace relevant in the context of Medicaid expansion in Mississippi. These premium subsidies are available in the form of refundable tax credits. Subsidies are limited to individuals with household incomes (specifically modified adjusted gross incomes) between 100 and 400 percent of the federal poverty level. These individuals cannot be eligible for Medicaid, Medicare, the Children's Health Insurance Program (CHIP), or other public health coverage, and they cannot have access to health insurance through an employer or a family member's employer. The subsidies limit the amount an individual must pay for the second-lowest priced plan on the silver tier to a specific percentage of his or her household income[3]. However, the tax credit is applicable to any metal tier.

The American Rescue Plan Act of 2021 expanded premium subsidies to household incomes beyond 400 percent of the federal poverty level and increased premium subsidies for households between 100 percent and 400 percent of the federal poverty level for all of 2021 and 2022. In addition, the Inflation Reduction Act of 2022 extended these increased premium subsidies for another three years through the end of 2025. Furthermore, for individuals with household incomes between 100 percent and 150 percent of the federal poverty level, these higher premium subsidies limit the amount an individual must pay for the "benchmark" silver tier plan described above to 0.0 percent of household income. Cost-sharing reductions are also available on the exchanges for individuals with household incomes between 100 percent and 250 percent of the federal poverty level. The largest reductions are provided for those with household incomes between 100 percent and 150 percent of the poverty level. Specifically, the benchmark silver tier plan receives the largest cost-sharing reduction, which makes its out-of-pocket costs similar to those of a platinum tier plan. Because of the premium subsidies and cost-sharing reductions available to individuals with household incomes between 100 percent and 150 percent of the federal poverty level in states like Mississippi that have not expanded Medicaid, one could understandably view health plans from the Marketplace as a potential substitute for Medicaid expansion. However, the provision that subsidizes premiums to 0.0 percent for individuals between 100 percent and 150 percent of the federal poverty level is scheduled to expire at the end of 2025. Moreover, while the cost-sharing reductions greatly reduce the out-of-pocket limit for Marketplace plans, in 2024 an individual with a household income between 100 percent and 150 percent of the federal poverty level could still face maximum annual out-of-pocket costs of $3,150. Finally, as a recent KFF publication

[3] For individuals with incomes between 100 percent and 138 percent of the federal poverty level, this rate is 2.07 percent as of 2024.

notes, "even with no premiums, Medicaid could provide more comprehensive benefits and lower cost-sharing compared to Marketplace coverage" (Raphael and Rudowitz 2024).

Medicaid expansion

The provisions of the ACA extended Medicaid eligibility in participating states to adults ages 19 to 64, including adults without children, with family/household incomes below 133 percent of the federal poverty level. The law also included what is known as a 5 percent income disregard that effectively sets the income threshold at less than 138 percent of the federal poverty level. Eligible adults include citizens as well as legal immigrants who have resided in the U.S. for at least five years. As part of the expansion, the federal government paid 100 percent of the Medicaid costs of the expansion group in participating states each year from 2014 to 2016. This percentage decreased to 95 percent in 2017, to 94 percent in 2018, to 93 percent in 2019, and finally to 90 percent in 2020 and each year thereafter. Thus, states that entered expansion prior to 2020 received the most funding from the federal government. However, the American Rescue Plan Act, which became law in March 2021, provides a 5-percentage point increase in the federal medical assistance percentage (FMAP) for two years for most of the traditional or existing Medicaid group in states that have not elected to expand Medicaid, should those states decide to expand. The FMAP is the rate at which the federal government reimburses a particular state for an enrollee's Medicaid expenditures. A state may expand Medicaid at any time and receive the 5-percentage point increase in the FMAP on its traditional Medicaid group for two years[4].

Estimating populations

The first step in analyzing Medicaid expansion is to identify current Medicaid enrollment. The monthly data on enrollment in Mississippi are available for each month of 2022 from the federal government web site Data.Medicaid.gov. The average total monthly enrollment in Medicaid and CHIP in Mississippi in 2022 according to this source was 748,722. This number represents a 20.7 percent increase in average total monthly enrollment from 2019. The increase primarily reflects the continuous enrollment in Medicaid required by the federal government for the duration of the public health emergency for states to receive additional federal funds. We use the 2022 number to develop a total enrollment for 2024, the first year Medicaid expansion in Mississippi begins in our analysis. We conservatively assume following the end of continuous enrollment that began April 1, 2023, that enrollment decreases in 2024. The average total monthly Medicaid enrollment in the traditional program in 2024, the first year of expansion in the analysis, is assumed to equal 675,721. We assume the 2024 enrollment number is maintained in 2025 and each year thereafter. This figure does not include the expansion group and the calculations for determining this number are discussed below.

After determining the size of the traditional Medicaid population in the first year of expansion, the next step is determining the size of the expansion group. As mentioned previously, Medicaid eligibility under the ACA is extended to individuals ages 19 to 64 with annual incomes below 138 percent of the federal poverty level. Specific information on this population in Mississippi is not readily available and must be inferred from other sources. Several studies on Medicaid expansion use data from the American Community Survey (ACS) produced by the U.S. Census Bureau that is available through the University of Minnesota's Integrated Public Use Microdata Series (e.g., Becker 2019; Henderson et al. 2022; Ward and Bridge 2019). These data were evaluated for Mississippi for 2021, the most recent year available, to arrive at an expected Medicaid expansion population in 2024. The total sample size in the survey for ages 19 to 64 in Mississippi equaled 15,826 respondents. Once this age group was

[4] The Families First Coronavirus Response Act (FFCRA) that became law in March 2020 temporarily increased the FMAP on traditional Medicaid populations in all states by 6.2 percentage points for the duration of the public health emergency declared by the federal government in response to the COVID-19 pandemic. This declaration ended May 11, 2023, and therefore the temporary increase in the FMAP outlined by the FFCRA has no impact on our analysis of Medicaid expansion, which begins in 2024.

identified, we then limited it to individuals with incomes below 138 percent of the federal poverty level. In contrast to the previous version of this study, we follow Becker (2019) and use the health insurance unit identifier added to the data by the State Health Access Data Assistance Center (SHADAC) to limit the sample to incomes below 138 percent of the federal poverty level. Becker notes these units "are more likely to be the basis for public or private insurance coverage eligibility than the general Census definition." Specifically, we use the variable "ratio of health insurance unit income to households' poverty guidelines." The total number of individuals in the 2021 sample year with annual incomes below 138 percent of the federal poverty level equaled 5,775. This number represents a share of the total sample of 36.5 percent. The next step is to determine the actual population in Mississippi in 2021 that ranged from ages 19 to 64 years. These data are available from the U.S. Census Bureau (2023) for each age in the desired range. In 2021 this total population equaled 1,727,765 residents. We assume that the share of the 19- to 64-year-old population in the state with incomes below 138 percent of the federal poverty level corresponds to the same shares in the total sample in the ACS data. By using the share mentioned above along with population projections for the 19- to 64-year-old group, we can estimate a total potential Medicaid expansion population in Mississippi for 2024, the first year in our analysis.

We obtain a projected population of the 19- to 64-year-old age group in Mississippi for 2024 of 1,681,828 from a software program known as Tax-PI. Produced by Regional Economic Models, Inc., (2021) Tax-PI is a dynamic fiscal and economic impact model that we use to assess the economic impacts of Medicaid expansion in Mississippi, discussed later. According to the U.S. Census Bureau (2023) the 19- to 64-year-old population in Mississippi decreased 0.5 percent in 2021 and decreased 0.8 percent in 2022. In the population estimates from the Tax-PI model, the population of this group decreases 0.9 percent in 2023 and 1.0 percent in 2024, consistent with this recent history. The projected population for 2024 is multiplied by the 36.5 percent share of survey respondents determined to have annual incomes below 138 percent of the federal poverty level in 2021. This calculation results in a potential Medicaid population for 2024 of 613,709.

As stipulated the preceding value represents only the *potential* Medicaid expansion population in 2024 and must be dissected further to get to a reasonable expectation of the expansion group. Other characteristics of respondents in the survey are used to further narrow the expansion group: number with any type of health insurance coverage, number with health insurance coverage through an employer, and number with health insurance coverage purchased through the federal Marketplace. Each of these groups is included because their participation rates in Medicaid will vary.

The share of respondents ages 19 to 64 with annual incomes below 138 percent of the federal poverty level who had any health insurance coverage in the 2021 survey data was 66.9 percent. Therefore, the share of respondents with no health insurance coverage in 2021 was 33.1 percent. The share of respondents in the survey in 2021 with health insurance coverage through an employer equaled 25.4 percent. In the survey data a total of 10.7 percent of respondents purchased health insurance through the federal Marketplace. The share of respondents with Medicaid coverage in the survey in 2021 was 31.2 percent. The potential population is multiplied by the share of respondents in 2021 that reported no health insurance coverage, employer-based health insurance coverage, and health insurance coverage purchased from the federal Marketplace[5].

The next step in estimating the Medicaid expansion population beginning in 2024 is determining how many individuals in the groups outlined above will enroll. We follow some—but not all—of the take-up percentages used by Becker (2019), which he based on data from the Urban Institute. These

[5] The labor force status of potential new Medicaid participants ages 19-64 with household incomes below 138 percent of the federal poverty level in 2021 was also available in the ACS data. We report this status by health insurance coverage. Among those respondents with no health insurance coverage, the largest group, 41 percent were in the labor force. Approximately 62 percent of respondents with health insurance coverage through an employer were in the labor force. Finally, for those respondents who had coverage through the federal Marketplace, 50 percent were in the labor force. Across all potential new Medicaid participants, approximately 50 percent were in the labor force in 2021.

estimates project 79 percent of those uninsured in expansion states that gain eligibility will enroll in Medicaid. The lowest take-up rate assumed is 15 percent for those with employer-sponsored coverage who gain Medicaid eligibility. Becker uses a take-up rate of 85 percent for those who purchase health insurance coverage from the federal exchange. However, according to the HealthCare.gov web site, any individual who is determined to be eligible for Medicaid or CHIP—both of which meet the requirements for "qualifying health coverage" under the ACA—is no longer eligible for premium tax credits for a Marketplace plan. While an individual who is found to be eligible for Medicaid or CHIP can still purchase a Marketplace plan, he or she must pay the full cost of the plan without receiving any premium tax credits. Therefore, because these individuals would have to pay full price for a Marketplace plan, we conservatively assume 100 percent of those who are ages 19 to 64 with annual incomes below 138 percent of the federal poverty level and have Marketplace coverage will enroll in Medicaid following expansion[6]. In the previous version of this study, we assumed that those individuals in the newly eligible population already enrolled in Medicaid remained enrolled following expansion. However, as Henderson et al (2022) note, these individuals do "not represent new Medicaid participants," and as such, Mississippi will not receive a higher FMAP rate for this group upon entering expansion. Therefore, we do not include existing Medicaid enrollees in the expansion group we identify, which is limited to new Medicaid participants.

The take-up rates outlined above are multiplied by the appropriate subgroup: 79 percent for the uninsured, 15 percent for those with employer-based coverage, and 100 percent for those who purchased coverage from the federal Marketplace. The three values found after multiplying by the take-up rates are then summed to determine the estimated Medicaid expansion population for 2024 of 249,272. The preceding steps in this paragraph are repeated with projected population data for each year from 2025 through 2029 to determine the respective estimated annual Medicaid expansion populations used in our analysis.

Table 1. Estimated 2024 Medicaid expansion population by type of health insurance coverage.

	None	Employer	Marketplace	Total
Estimated *potential* expansion population	613,709	613,709	613,709	613,709
Share of respondents by coverage	33.1%	25.4%	10.7%	69.1%
Estimated *potential* expansion population by coverage	202,976	155,685	65,569	424,230
Take-up rate assumed	79.0%	15.0%	100.0%	40.6%
Estimated 2024 expansion population by coverage	160,351	23,353	65,569	**249,272**

The calculations for the estimated 2024 Medicaid expansion population in Mississippi are outlined in Table 1. The second row lists the total potential Medicaid expansion population in Mississippi in 2024 determined previously of 613,709 residents. The third row of Table 1 lists the share of respondents according to type of coverage, including no coverage, employer-based coverage, and coverage purchased through the federal Marketplace. The product of the total potential Medicaid expansion population and the share of respondents by type of coverage are listed in the fourth row of Table 1. The take-up rates by type of coverage discussed in the previous paragraph are listed in the fifth

[6] This take-up rate differs from that used in the previous version of this study, which was 85 percent. More information on Marketplace plans and Medicaid and CHIP is available at: https://www.healthcare.gov/medicaid-chip/cancelling-marketplace-plan/.

row. The sixth row lists the estimated expansion population by type of coverage, which is the product of the estimated potential expansion population by type of coverage and the assumed take-up rate. The last entry in Table 1 is the total estimated expansion population for 2024 and equals the sum of the estimated expansion populations by type of coverage, which is 249,272 residents.

Estimating costs

After estimating both the traditional and expansion Medicaid populations, the next step in the analysis is to determine expected costs based on these population estimates. In the previous version of this study, we calculated a value for per capita Medicaid expenditures using the total net expenditures in Mississippi for Medicaid in 2019 (federal and state). The value of these total expenditures was divided by the total Medicaid and CHIP enrollment in Mississippi in 2019 to obtain a per capita expenditure value. However, when the value of total net expenditures in Mississippi for 2021 is divided by the total Medicaid and CHIP enrollment in 2021, the per capita expenditure value for 2021 is less than the value for 2019. Although a lower per capita expenditure value in 2021 compared to 2019 may reflect economies of scale in costs from the higher enrollment, using a lower value as a starting point to estimate costs in 2024 is likely unrealistic, particularly considering inflation trends. Therefore, as an alternative measure of per capita expenditures we use the value of benefit spending per full-year equivalent (FYE) enrollee for Mississippi as reported by the Medicaid and CHIP Payment and Access Commission (MACPAC 2021). The most recent value available for Mississippi is for federal fiscal year 2020—which began in October 2019—and this value is $9,209. Becker (2019) notes that, "Individuals who gain Medicaid coverage will utilize more health care services than when they were uninsured, but will consume fewer services than current adult Medicaid beneficiaries, who are disproportionately disabled." Therefore, we assume that the per capita costs of Medicaid expansion enrollees will equal two thirds of the costs of current Medicaid enrollees. This relationship is approximately the same as that reported by Becker between the health care expenditures of privately insured individuals and publicly insured individuals, both with family incomes below 138 percent of the federal poverty level. Thus, using two thirds of the per capita value for expenditures for traditional Medicaid obtained from MACPAC, estimated per capita Medicaid expenditures for the expansion group in Mississippi for 2019 are $6,139. We inflate this value by the increase in the Consumer Price Index (CPI) for medical services in 2020, which was 4.9 percent, to obtain a value for 2020. We repeat this procedure to obtain a value for 2021 using the change in the CPI for medical services, which in 2021 was 1.9 percent. For 2022 the increase in the CPI for medical services was 4.3 percent, and we increase the 2021 value by this rate. Finally, we increase the cost again by 4.3 percent in 2023 and 2024, which yields a per capita Medicaid expenditure value for the expansion group in the first year of our analysis of $7,446. In subsequent years, we increase this amount by 3.0 percent annually to account for inflation.

Administrative costs represent the other component of the annual expenditures associated with Medicaid expansion in Mississippi. The Mississippi Division of Medicaid reported administrative expenditures in 2019 that were 3.1 percent of the total net expenditures for Medicaid cited in the previous paragraph. Becker assumes administrative costs equal 1.55 percent of total program costs, which he maintains likely overstates the administrative costs of expansion, which are expected to be less than those of the current Medicaid program. Based on this information, we conservatively assume annual administrative costs for Medicaid expansion in Mississippi equal 2.5 percent of net expenditures for expansion.

Using the data discussed up to this point, we calculate annual estimates of the total expenditures for Medicaid expansion in Mississippi. These are costs to the state before any savings in Medicaid or other areas of state government are considered, which are discussed later. Table 2 outlines the derivation of projected annual expenditures for Medicaid expansion in Mississippi from 2024 through 2029. The majority of Table 2 repeats the calculations of Table 1 in determining the estimated expansion

enrollment for the years 2024 through 2029. The population projections from the Tax-PI software of the 19- to 64-year-old age group for each year are multiplied by the share of respondents in this age group in the 2021 ACS data who have annual incomes below 138 percent of the federal poverty level. This potential Medicaid expansion population for each year is multiplied by each of the shares of respondents in the 2021 ACS data who had no health insurance coverage, had health insurance coverage through an employer, and purchased health insurance coverage through the federal Marketplace. The number in each of these groups is multiplied by the respective take-up percentages discussed previously. These products are then summed to get the total estimated expansion enrollment for each year. The total expansion enrollment in each year is multiplied by the estimated per capita expenditures for each year to get the total annual expenditures for Medicaid expansion in Mississippi. Each of these annual numbers is multiplied by 10 percent, the share of expansion expenditures for which the state is responsible under the ACA. The total annual expansion costs are multiplied by 2.5 percent as discussed previously to determine the annual administrative costs of Medicaid expansion in Mississippi. Finally, these last two amounts are summed to get the total estimated annual costs of Medicaid expansion in the state from 2024 to 2029. As seen in the last row of Table 2, these annual costs to the state range from $232 million in 2024 to almost $260 million by 2029. Our cost estimate for 2025 of approximately $237 million compares to the $244 million estimate for Mississippi for 2025 by Ku and Brantley (2021) and the $190 million estimate for 2025 by Henderson et al. (2022). In their analysis of Medicaid expansion following the enactment of the American Rescue Plan, Striar, Boozrang, and Mann (2021a) estimate a "year 3" cost to Mississippi of $205 million, which corresponds to the costs in 2024.

Estimating savings

The preceding section discussed estimates of the costs of Medicaid expansion in Mississippi without considering any potential savings to the state that result from participating in the program. This section outlines the primary sources of savings Mississippi could expect from Medicaid expansion.

Higher FMAP rate for two years

As discussed on page 3, the American Rescue Plan Act includes a provision that will increase the FMAP rate on the traditional Medicaid population by 5 percentage points for two years in states that have yet to expand Medicaid under the ACA if those states implement expansion. Since our analysis of Medicaid expansion in Mississippi begins in 2024, we assume the 5-percentage point increase in the FMAP applies to the costs of the traditional Medicaid population in the state for 2024 and 2025. Table 3 lists the derivation of the estimates of the expenditures for the traditional Medicaid population in Mississippi from 2024 and 2025 under expansion.

The first column of Table 3 lists calculations of the cost of the traditional Medicaid program as estimated for 2024. The traditional Medicaid enrollment for 2024 is the number we determined as discussed on page 4. The per capita expenditures amount of $9,928 is the value of $7,446 used in Table 2 on page 8 increased by one third to reflect the full cost of traditional Medicaid per individual in Mississippi in 2024. The FMAP rate of 77.3 percent is the actual rate published by MACPAC (2023) for federal fiscal year 2024. These values are used to compute a total cost of traditional Medicaid to Mississippi for 2024 of just over $1.5 billion. The next row in Table 3 is the FMAP rate for 2024 listed above increased by 5 percentage points. This rate is used to compute the total cost of Medicaid to Mississippi in 2024. The savings to the state from the higher FMAP in 2024 are found by subtracting the cost with the higher FMAP from the cost with the lower FMAP. We find these savings in 2024 equal over $335 million. The same calculation is performed for 2025 as seen in the second column of Table 3. The enrollment number for 2025 is the same as in 2024, while per capita expenditures are increased by 3.0 percent. We use the FMAP rate for 2025 estimated by KFF for Mississippi of 76.9 percent (2024).

Table 2. Derivation of projected annual costs of Medicaid expansion in Mississippi, 2024 to 2029.

	2024	2025	2026	2027	2028	2029
[A] Estimated population 19-64 years old	1,681,828	1,665,947	1,653,248	1,644,738	1,634,492	1,624,222
[B] Share in 2021 ACS data with incomes below 138% FPL	36.5%	36.5%	36.5%	36.5%	36.5%	36.5%
[C] Estimated population ages 19-64 with incomes below 138% FPL (A × B)	613,709	607,914	603,280	600,175	596,436	592,688
[D] Share with no health insurance coverage in 2021 ACS data	33.1%	33.1%	33.1%	33.1%	33.1%	33.1%
[E] Est. number with no health insurance coverage (C × D)	202,976	201,059	199,526	198,499	197,263	196,023
[F] Est. number with take-up rate of 79% (E × 0.79)	160,351	158,837	157,626	156,814	155,838	154,858
[G] Share with employer health insurance coverage in 2021 ACS data	25.4%	25.4%	25.4%	25.4%	25.4%	25.4%
[H] Est. number with employer health insurance coverage (C × G)	155,685	154,215	153,040	152,252	151,304	150,353
[I] Est. number assuming take-up rate of 15% (H×0.15)	23,353	23,132	22,956	22,838	22,696	22,553
[J] Share with Marketplace health insurance coverage in 2021 ACS data	10.7%	10.7%	10.7%	10.7%	10.7%	10.7%
[K] Est. number with Marketplace coverage (C × J)	65,569	64,949	64,454	64,123	63,723	63,323
[L] Est. number assuming take-up rate of 100% (K×1.0)	65,569	64,949	64,454	64,123	63,723	63,323
[M] Total estimated expansion enrollment (F + I + L)	249,272	246,918	245,036	243,775	242,256	240,734
[N] Estimated per capita expansion expenditures	$7,446	$7,669	$7,899	$8,136	$8,381	$8,632
[O] Total estimated expansion expenditures (M × N)	$1,856,083,197	$1,893,713,460	$1,935,656,614	$1,983,463,720	$2,030,240,835	$2,078,008,754
[P] Mississippi portion of expansion expenditures (O × 0.10)	$185,608,320	$189,371,346	$193,565,661	$198,346,372	$203,024,083	$207,800,875
[Q] Estimated administrative costs of expansion in Mississippi (O × 0.025)	$46,402,080	$47,342,836	$48,391,415	$49,586,593	$50,756,021	$51,950,219
[R] Total estimated annual cost of Medicaid expansion in Mississippi (P + Q)	$232,010,400	$236,714,182	$241,957,077	$247,932,965	$253,780,104	$259,751,094

We then use these values to calculate the cost of traditional Medicaid in Mississippi in 2025 of almost $1.6 billion, which essentially represents the status quo without expansion. We calculate the cost of traditional Medicaid in 2025 with the higher FMAP, which results in a value of more than $1.2 billion. The difference between these two amounts is nearly $346 million, which represents the savings in traditional Medicaid to the state in the second year of expansion from the higher FMAP. The sum of the estimated savings in traditional Medicaid to Mississippi in the first two years of expansion from the 5-percentage point increase in the FMAP equals nearly $681 million. Based on the estimated annual costs of expansion to the state as determined in Table 2, the increase in the FMAP in the first two years of expansion therefore will fully offset the first two years of costs to the state and more than 95.0 percent of the costs of the third year without considering any other savings within or outside of the Medicaid program. Our estimate is very similar to that of Henderson et al. (2022), who calculate the state will save approximately $676 million in the first two years of Medicaid expansion because of the higher FMAP rate. Our assessment is somewhat less than that of Striar, Boozang, and Mann (2021b), who in their 2021 study of Medicaid expansion in Mississippi estimate the two-year increase in the FMAP will generate around $747 million in savings to the state. However, in this analysis the authors assumed expansion began in 2022 when the number enrolled in traditional Medicaid in Mississippi was elevated due to the COVID-19 pandemic.

Table 3. Derivation of projected savings in traditional Medicaid from two-year increase in FMAP rate.

Estimate	2024	2025
Traditional Medicaid enrollment	675,721	675,721
Per capita expenditures	$9,928	$10,226
FMAP rate	77.3%*	76.9%†
Total traditional Medicaid cost to Mississippi	$1,522,845,419	$1,596,170,091
FMAP + 5%	82.3%	81.9%
Traditional Medicaid cost to Mississippi with FMAP + 5%	$1,187,416,913	$1,250,678,729
Savings from FMAP + 5%	$335,428,506	$345,491,362
Total savings to Mississippi from FMAP + 5%		$680,919,868

*actual value. †KFF estimate.

Movement of disabled to expansion group

A potential source of savings to the state from Medicaid expansion is the movement of disabled individuals from the traditional Medicaid group to the expansion group. That is, those individuals who currently receive Medicaid coverage based on a disability but who would receive coverage under expansion because their household income is below 138 percent of the federal poverty level. The savings occur because, as noted above, the FMAP for those covered in the expansion group is 90 percent while the FMAP for those in the traditional Medicaid group will be less than 80 percent as of 2024.

Using the same ACS data described previously, we limited the sample to individuals ages 19 to 64 with household incomes below 138 percent of the federal poverty level in 2021 who also had Medicaid coverage. We then restricted this group to those who responded they have difficulty living independently, using this variable as a proxy for a disability designation. We also limited the sample to those individuals who were not covered by Medicare in 2021. Individuals who receive Social Security

Disability Insurance must wait at least twenty-four months before they can obtain Medicare coverage and can receive Medicaid coverage during this period if they qualify. After restricting the sample to these parameters, we found that 1.7 percent of those surveyed who had Medicaid coverage also met the criteria of a household income below 138 percent of the poverty level, no Medicare coverage, and disability according to the variable for difficulty living independently. This approximation likely represents a conservative estimate of the number of individuals in this group. We multiplied the 1.7 percent share by the estimated traditional Medicaid enrollment of 675,721 as reported in Table 3 to determine the

Table 4. Derivation of projected savings in traditional Medicaid from moving disabled to expansion.

Estimate	2024	2025	2026	2027	2028	2029
Traditional Medicaid enrollment	675,721	675,721	675,721	675,721	675,721	675,721
Share of disabled with incomes below 138% FPL	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%
Number of disabled with incomes below 138% FPL	11,487	11,487	11,487	11,487	11,487	11,487
Per capita expenditures	$9,928	$10,226	$10,533	$10,849	$11,174	$11,509
Total expenditures	$114,045,756	$117,467,129	$120,991,143	$124,620,877	$128,359,503	$132,210,288
FMAP	77.3%*	76.9%†	76.5%	76.1%	76.1%	76.1%
Mississippi share	$25,922,600	$27,170,147	$28,469,216	$29,821,776	$30,716,429	$31,637,922
FMAP of expansion	90%	90%	90%	90%	90%	90%
Mississippi share of expansion expenditures	$11,404,576	$11,746,713	$12,099,114	$12,462,088	$12,835,950	$13,221,029
Savings	$14,518,025	$15,423,434	$16,370,102	$17,359,688	$17,880,479	$18,416,893

*actual value. †KFF estimate.

savings to Medicaid in 2024 from moving these individuals to expansion coverage. This calculation results in a total of 11,487 individuals ages 19 to 64 with incomes below 138 percent of the federal poverty level, no Medicare coverage, and who are disabled. This number is multiplied by the per capita medical costs of traditional Medicaid in 2024 of $9,928, also reported in Table 3, to determine the total estimated costs for this group of approximately $114 million. The share of these costs to the state is equal to 1 minus the FMAP for 2024 of 77.3 percent multiplied by the total costs, which equals $25.9 million. The share of these costs to the state under Medicaid expansion equals 1 minus the FMAP of 90.0 percent multiplied by the total costs, which equals $11.4 million. Thus, the estimated total savings to the state in 2024 if this group is moved to expansion coverage is $14.5 million. These calculations are repeated for subsequent years through 2029 and are presented in Table 4. The annual savings gradually

increase each year through 2027 as the FMAP rate on the traditional group decreases to 76.1 percent[7]. This FMAP rate is maintained in 2028 and 2029. Savings increase in 2028 and 2029 as per capita expenditures increase. Annual savings average about $16.7 million from 2024 through 2029. Striar, Boozang, and Mann (2021b) estimate Mississippi will save an average of $32 million per year from 2023 to 2027 from the movement of the disabled to the expansion population. In contrast, Henderson et al. (2022) estimate these savings to average only $1.6 million annually from 2023 to 2028. The latter authors note this estimate is lower than for other states, which they attribute to the relatively high FMAP rate for Mississippi.

Movement of pregnant women to expansion group

Much like the movement of disabled individuals from the traditional Medicaid group to the expansion group, pregnant women represent another potential source of savings. Currently, pregnant women in Mississippi with household incomes below 194 percent of the federal poverty level are eligible for Medicaid coverage up to twelve months after giving birth. Like disabled individuals, women with a pregnancy-based eligibility under traditional Medicaid with household incomes below 138 percent of the federal poverty level are eligible for coverage under expansion. The state would realize savings because as previously discussed, the FMAP for those covered in the expansion group is 90 percent while the FMAP for those in the traditional Medicaid group as of 2024 is less than 80 percent. We use the estimate by Manatt Health that 45 percent of pregnant women with traditional Medicaid coverage will move to the expansion group, as noted by Becker (2019).

According to the Mississippi Division of Medicaid, pregnant women represented approximately 2.0 percent of the traditional Medicaid population in the state in state fiscal year 2019 (Snyder 2020). We multiply our previously discussed estimated Medicaid enrollment for 2024 of 675,721 by 2.0 percent to reach an estimate of 13,514 pregnancy-eligible women for that year. We then multiply this number by 45 percent as noted in the previous paragraph to reach an estimate of 6,081 individuals who would move to Medicaid expansion in 2024. This number is multiplied by the per capita medical expenditures of traditional Medicaid in 2024 of $9,928, as reported in Table 3, to determine total estimated costs for this group of just over $60 million. The share of these costs to the state is equal to 1 minus the FMAP for 2024 of 77.3 percent multiplied by the total costs, which equals about $13.7 million. The share of these costs to the state under Medicaid expansion equals 1 minus the FMAP of 90.0 percent multiplied by the total costs, which equals $6.0 million. Therefore, the estimated total savings to the state in 2024 if this group were moved to expansion coverage are approximately $7.7 million. These calculations are repeated for subsequent years and Table 5 lists the estimated annual savings to the state each year from 2024 to 2029. As in Table 4, the annual savings gradually increase each year as annual per capita expenditures increase and the FMAP rate on the traditional group decreases. The annual savings from 2024 to 2029 average about $8.8 million. These estimates are in line with those of Manatt Health for Alabama cited by Becker (2019) of $11 million to $13 million per year. Similarly, an analysis by Bachrach et al. (2016) reported Arkansas saved $15.2 million in 2015 from moving pregnant women to expansion coverage.

[7] In the previous version of this study, we gradually increased the FMAP rate over the years analyzed based on the previous history of changes to the rate. However, the rate decreased in FY2023 and again in FY2024, even after accounting for the temporary increase due to the public health emergency. As noted, KFF estimates another decrease in the FMAP for Mississippi in FY2025. Therefore, we reduce the FMAP in FY2026 by the same amount and again in FY2027. We conservatively maintain the FY2027 rate for FY2028 and FY2029. For more information on FMAP changes see https://www.macpac.gov/wp-content/uploads/2023/12/EXHIBIT-6.-Federal-Medical-Assistance-Percentages-and-Enhanced-FMAPs-by-State-FYs-2021%E2%80%932024.pdf.

Savings from enhanced federal matching funds

In the previous version of this study, we noted that in Mississippi and other states the Breast and Cervical Cancer Treatment Program is funded by the federal government and matched with state funds. The program provides Medicaid coverage for individuals over the course of their treatment who are under 65 years old, uninsured, and not eligible for Medicaid. When a state expands Medicaid, those individuals with household incomes below 138 percent of the federal poverty level who would have been covered by the Breast and Cervical Cancer Treatment Program receive coverage through expanded Medicaid, which results in savings to the state. We included these savings in the previous version of our study. However, we note that in state fiscal years 2023 and 2024 the Mississippi legislature appropriated $0 and $50,000, respectively, toward the Breast and Cervical Cancer Treatment Program. Based on the level of appropriations in the previous two fiscal years, any savings to the program from Medicaid expansion would be immaterial and therefore we do not include them in our study.

Table 5. Derivation of projected savings in traditional Medicaid from moving pregnant women to expansion.

Estimate	2024	2025	2026	2027	2028	2029
Traditional Medicaid enrollment	675,721	675,721	675,721	675,721	675,721	675,721
Share of pregnant women	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Total pregnancy-eligible women	13,514	13,514	13,514	13,514	13,514	13,514
Take-up rate	45.0%	45.0%	45.0%	45.0%	45.0%	45.0%
Number moved to expansion coverage	6,081	6,081	6,081	6,081	6,081	6,081
Per capita expenditures	$9,928	$10,226	$10,533	$10,849	$11,174	$11,509
Total expenditures	$60,377,165	$62,188,480	$64,054,134	$65,975,758	$67,955,031	$69,993,682
FMAP	77.3%*	76.9%†	76.5%	76.1%	76.1%	76.1%
Mississippi share	$13,723,730	$14,384,195	$15,071,938	$15,787,999	$16,261,639	$16,749,488
FMAP of expansion	90.0%	90.0%	90.0%	90.0%	90.0%	90.0%
Mississippi share of expansion expenditures	$6,037,717	$6,218,848	$6,405,413	$6,597,576	$6,795,503	$6,999,368
Savings	$7,686,013	$8,165,347	$8,666,524	$9,190,423	$9,466,136	$9,750,120

*actual value. †KFF estimate.

We assumed in the previous version of this study that Mississippi was among the states that could receive an enhanced federal match rate for family planning services following Medicaid expansion. The reason is because those individuals with household incomes below 138 percent of the federal poverty level who would have qualified for the services can receive coverage through expanded Medicaid at a higher federal match rate. However, the report by Henderson et al. (2022) notes that the FMAP for this program is 90.0 percent. Therefore, Mississippi in fact should not expect to realize savings from family planning services due to Medicaid expansion. States that expanded before 2020 may have realized some savings from family planning in the first few years of expansion because prior to 2020 the FMAP for the expansion population exceeded 90.0 percent.

State spending on mental health and substance abuse treatment represents another potential source of savings if Mississippi participates in Medicaid expansion. As noted by Bachrach et al. (2016), uninsured individuals who benefit from these services can receive coverage as part of the expansion group, which means federal funds are used for these services rather than state funds, which results in savings to the state. We determined the total savings to the state from replacing state funds with Medicaid funds for mental health and substance abuse treatments will equal approximately $9.5 million in 2024, based on appropriations for the state fiscal year. Included in this total are Medicaid matching funds, funds for substance abuse programs, and physician services at community mental health centers.

As with services for pregnant women discussed in the previous section, we assume relatively slow growth in these savings of 2.0 percent each year from 2025 through 2029. The average savings to the state from 2024 to 2029 under Medicaid expansion equal approximately $10.0 million. Henderson et al. (2022) estimate a similar value of an average of $9.5 million per year from 2023 through 2028. Although they do not assume Mississippi reduces spending on mental health programs following Medicaid expansion, Striar, Boozang, and Mann (2021b) estimate additional federal spending on these programs averages almost $20 million annually from 2023 through 2027.

Savings from health care costs for prisoners

Multiple studies of Medicaid expansion in different states note the potential for states to realize savings in their corrections budgets. The Medicaid program specifically excludes payments for medical care of any inmates housed in public prisons. However, Medicaid will provide payments for an inmate who receives care for a minimum of twenty-four hours at a medical facility outside of a state's correctional system. Thus, when a state participates in Medicaid expansion, it can supplement its budget for corrections by the total amount spent on inpatient medical care of inmates at offsite medical facilities. In the previous version of this study, we used appropriations for invoices for medical services for inmates as a basis for savings in Mississippi. Henderson et al. (2022) cite a 2021 report by the Performance Evaluation and Expenditure Review Committee that found the expenditures by the Mississippi Department of Corrections for medical care for prisoners in state fiscal year 2020 was $83.0 million. Approximately $24.3 million of this amount was for offsite medical care. We use the same process to inflate the value of Medicaid expenditures as discussed on page 7 to adjust the total cost of medical services for prisoners to reach a value for 2024 of $105.1 million. Following Henderson et al., we assume 20 percent of these costs are spent on offsite hospitalizations and that these costs will be reduced by half by transferring them to Medicaid. Finally, we multiply this number by 90 percent to reflect the portion of the expenditures the state is required to pay under Medicaid expansion. The estimated savings on offsite medical care for prisoners in 2024 equal $9.5 million. As with other savings discussed previously, we assume relatively slow growth of 2.0 percent each year from 2025 through 2029. The average savings to the state from 2024 to 2029 for medical care of prisoners under Medicaid expansion equal approximately $9.9 million per year. Henderson et al. estimate these annual savings equal an average of $8.8 million per year from 2023 through 2028, while Striar, Boozang, and Mann (2021b) estimate an average of $17.6 million in savings per year from 2023 through 2027. Becker (2019) cites the Manatt Health estimate that Alabama would save $12.2 million per year for inpatient care of prisoners under Medicaid expansion.

Insurance premium tax revenue

In their 2022 study Henderson et al. include an estimate of the increase in insurance premium tax revenues in Mississippi that will result from Medicaid expansion. Such an estimate was not included in the previous version of this study. While not savings per se, because the federal government pays 90 percent of the medical expenditures of new enrollees in the expansion group, the state will receive additional revenues from the insurance premium tax levied on these new health insurance policies. As

Henderson et al. note, only those individuals who are currently without health insurance coverage and move to the expansion group will generate additional insurance premium tax revenues. Those individuals currently enrolled in Medicaid, those who have third party coverage through an employer, and those who purchase coverage through the federal Marketplace already generate insurance premium tax revenues and the movement of any of these individuals to the expansion group will not result in additional tax revenues to the state. We assume the federal government pays 90 percent of the Medicaid expenditures for the group of new enrollees with no insurance as outlined in Table 2 for each year from 2024 through 2029. This amount is multiplied by 3.0 percent to determine the additional insurance premium tax revenues the state receives. In addition, we assume 60.3 percent of new enrollees with employer health insurance coverage had employers who self-insured, following Henderson et al., who cite KFF (2020). We multiply this number of new enrollees by 60.3 percent. We again assume the federal government pays 90 percent of the Medicaid expenditures for the group of new enrollees that previously had employer health insurance coverage. This amount is multiplied by 3.0 percent to determine the additional insurance premium tax revenues the state receives from coverage for new enrollees who had employers that self-insured. Summing across these two groups, we find the state receives an average of $37.1 million in additional insurance premium tax revenues per year from 2024 to 2029 following Medicaid expansion. Our estimates are in line with those of Henderson et al., who calculate average annual increases in premium tax revenues of just over $40 million from 2023 through 2028.

Savings from reductions in uncompensated care costs

Medicaid expansion could potentially reduce uncompensated care costs in Mississippi, which are substantial. According to the Mississippi Hospital Association, total uncompensated care costs in the state totaled $616 million in 2019 (Moore 2020). This amount is comparable to the values reported by MACPAC for federal fiscal years 2019 and 2020. According to MACPAC total hospital uncompensated care costs for Mississippi were $571 million in 2019 and $595 million in 2020. As a share of hospital operating expenses these costs in Mississippi are relatively high, amounting to 7.0 percent in 2019 and 7.1 percent in 2020, which ranked fourth among all states in both years. Notably, in 2019 and 2020 none of the other three states where uncompensated care costs were a higher share of hospital operating expenses than in Mississippi were Medicaid expansion states.

Ward (2020) observes, ". . . Medicaid expansion significantly reduces the amount of uncompensated care." He finds that Medicaid expansion reduced uncompensated care costs in Arkansas by an estimated $45 million in fiscal year 2021, equal to 24 percent of the total expected costs of expansion to the state in 2020. Bachrach et al. (2016) note in expansion states hospitals' uncompensated care costs were reduced by 21 percent in 2014. Furthermore, they estimate that in state fiscal year 2015 Medicaid expansion reduced uncompensated care costs in Arkansas by $17.2 million, in Kentucky by $11.8 million, and in Maryland by $13.6 million. Uncompensated care costs decreased 34 percent among hospitals in expansion states according to Blavin (2017). In a 2016 study Dranove, Garthwaite, and Ody estimate, based on the experience of states that expanded Medicaid, uncompensated care costs would be 30 percent less in non-expansion states if these states had expanded Medicaid during the same period. Finally, in a study specific to uncompensated care costs in Louisiana following Medicaid expansion, Callison et al. (2021) state: "On average, hospital uncompensated care costs fell by 33 percent in Louisiana after Medicaid expansion compared with costs for hospitals in non-expansion states." Based on this previous research, we conservatively assume uncompensated care costs in Mississippi would decline by an average of 25 percent per year following Medicaid expansion. In the previous version of this study, we estimated a value for *total* uncompensated care costs across *all* hospitals in the state. This estimate was based on information available at the time of the study, which did not differentiate across hospitals. In their 2022 study, Henderson et al. estimate uncompensated care costs across hospitals in Mississippi by ownership type. Following this approach, we access data on

uncompensated care costs for hospitals in Mississippi from the Healthcare Cost Report Information System of the Centers for Medicare and Medicaid Services. We determine that uncompensated care costs across all hospitals in the state were approximately $593 million in 2019, a number similar to the value reported by the Mississippi Hospital Association noted above. We find that the portion of all hospitals in the state that were state- or locally-owned in 2019 was just over 39 percent, a share slightly less than that found by Henderson et al. The amount of uncompensated care costs for these public hospitals in 2019 according to our calculations was approximately $233.2 million. This value compares to the estimate by Henderson et al. of $257.9 million. A reduction of 25 percent of these costs that we assume equals almost $58.3 million. We inflate this value according to the same process discussed on page 7 to get an estimate of the reduction in uncompensated care costs for public hospitals in the state in the first year of expansion in 2024. We assume these costs increase 2.0 percent per year from 2025 to 2029. Over the 2024 to 2029 period, the state would save an average of approximately $74.3 million per year in uncompensated care costs from Medicaid expansion. Henderson et al. estimate Medicaid expansion will reduce uncompensated care costs at state- and locally-owned hospitals in Mississippi by an average of $60.5 million per year from 2023 to 2028. We note that the estimated reductions in uncompensated care costs at public hospitals in the state are considerably less than the reductions in uncompensated costs estimated across all hospitals in the state reported in the previous version of this study.

Disproportionate share hospital payments

Related to uncompensated care costs are disproportionate share hospital (DSH) payments. These are payments that Medicaid requires states to make to hospitals that have a relatively large share of Medicaid and low-income patients. The federal government provides each state with an allotment for DSH payments each year, and the size of these allotments differs considerably across states. DSH payments are relevant in the context of Medicaid expansion because the ACA originally scheduled reductions of the total amount designated for the payments to states to begin in 2014. The ACA as designed expected all states to participate in Medicaid expansion, reducing the number of uninsured and the level of uncompensated care, thereby decreasing the amount spent on DSH payments. Once Medicaid expansion became optional for states, however, Congress repeatedly delayed the ACA's scheduled reduction in DSH payments. Current law stipulates the reductions in DSH allotments will begin in federal fiscal year 2024. Under a continuing resolution enacted in January 2024, the first of these reductions were delayed until March 9, 2024. Each year from 2024 to 2027, the total DSH allotment is scheduled to decrease by $8 billion, which according to MACPAC (2021) represents 58 percent of expected DSH allotments in 2024[8]. In Mississippi, the total combined DSH allotment in federal fiscal year 2021 was $215.4 million after adjustments for emergency coronavirus assistance. The federal government's share of this allotment was $180.8 million, or about 84 percent. According to MACPAC, this $180.8 million represented 30.6 percent of hospital uncompensated care costs in Mississippi in fiscal year 2018. MACPAC also reports in fiscal year 2024 Mississippi's expected combined DSH allotment is $247.4 million, with $192.4 million provided by the federal government. The expected reduction in the federal government's portion of the allotment in 2024 is $131.6 million, a decrease of 68.4 percent. Thus, as U.S. law is currently written, Mississippi and other states will experience considerable reductions in federal funds received for uncompensated care that could translate into decreases in funds for some hospitals, particularly those known as "safety net" hospitals that are legally required to treat any individual regardless of his or her insurance status or ability to pay. These reductions are scheduled to occur irrespective of the status of Medicaid expansion in a state and we do not incorporate DSH payment reductions in our analysis of the costs and savings of Medicaid expansion. However, we include

[8] Nevertheless, MACPAC notes that under current law no reductions in DSH allotments are scheduled after fiscal year 2027 and that higher, unreduced state DSH allotments will resume in fiscal year 2028.

the preceding discussion because as previously noted Medicaid expansion is expected to decrease uncompensated care costs, which could mitigate the impacts to the state and ultimately hospitals of any reductions in federal DSH allotments.

Table 6. Summary of estimated annual savings by source from Medicaid expansion in Mississippi.

	2024	2025	2026	2027	2028	2029
FMAP + 5%	$335,428,506	$345,491,362	*n/a*	*n/a*	*n/a*	*n/a*
Movement of disabled	$14,518,025	$15,423,434	$16,370,102	$17,359,688	$17,880,479	$18,416,893
Movement of pregnant women	$7,686,013	$8,165,347	$8,666,524	$9,190,423	$9,466,136	$9,750,120
Mental health and substance abuse programs	$9,520,267	$9,710,672	$9,904,886	$10,102,984	$10,305,043	$10,511,144
Inpatient care of prisoners	$9,455,164	$9,644,267	$9,837,152	$10,033,895	$10,234,573	$10,439,265
Insurance premium tax revenue	$35,068,301	$35,777,535	$36,569,595	$37,472,791	$38,360,952	$39,261,362
Reductions in uncompensated care	$70,705,262	$72,119,368	$73,561,755	$75,032,990	$76,533,650	$78,064,323
Total savings	$482,381,538	$496,331,985	$154,910,014	$159,192,771	$162,780,833	$166,443,107

Summary of savings

Table 6 summarizes the annual savings to the state from Medicaid expansion by source from 2024 to 2029 as estimated in this section. In the first two years of Medicaid expansion analyzed, 2024 and 2025, the FMAP rate on the traditional Medicaid population increases by 5 percentage points as discussed on page 9. This increase results in average savings of more than $340 million across both years. Total savings in 2024 are $482 million and in 2025 the total savings are $496 million. The annual savings from 2026 to 2029 range from approximately $155 million to $166 million. Significantly, almost half of the total savings to the state from Medicaid expansion in these years are derived from reductions in uncompensated care costs. Thus, the estimate of these reductions becomes the critical factor in how much savings the state realizes from expansion after the first two years. As we noted previously, the savings from the increased FMAP rate in the first two years alone could fund nearly three full years of Medicaid expansion costs based on our estimates. Based on the assumptions we make about both the costs and the savings of Medicaid expansion to the state, we conclude that over the 2024 to 2029 period total savings more than offset total costs. We do not explicitly analyze any years after 2029[9]. However, based on the trend in our estimates 2031 is the year we expect the sum of the total costs incurred beginning in 2024 will exceed the sum of the total savings gained beginning in 2024. In other words, we estimate that over the first seven years of Medicaid expansion the state more than "breaks even," assuming all savings are used to offset the costs of expansion. Through 2031, the cumulative costs beginning in 2024 exceed the cumulative savings beginning in 2024 by almost $42 million. Starting in

[9] The further out into the future we estimate costs and savings the less of a basis we have for the assumptions we make about Medicaid expansion, particularly regarding the FMAP rate and enrollment. Therefore, our estimates end in 2029, a point when we believe the assumptions we make when initiating expansion in 2024 remain a reasonable expectation of outcomes.

2032, we estimate total costs will exceed total savings by approximately $97 million based on trends. We expect the amount by which costs exceed savings to grow by roughly $1 million annually each year thereafter. However, this estimate is based on a continuation of the status quo in 2029, which is subject to change. Furthermore, this estimate does not reflect the economic impact of Medicaid expansion in Mississippi, discussed in the next section, which we expect will result in additional revenues to the state that could be used to partially offset these costs.

Economic impacts

The remaining portion of the report analyzes the expected impacts to economic output, employment, real personal income, and population if Mississippi enters the expanded Medicaid program. URC uses a dynamic fiscal and economic impact model known as Tax-PI to conduct an evaluation of the effects of Medicaid expansion. Tax-PI includes elements of input-output and general equilibrium models, among others, and is an appropriate tool to assess the effects of a potential policy change as it provides results at a statewide level. Tax-PI is calibrated specifically to the economic and fiscal environment in Mississippi. Regional Economic Models, Inc., (2021) claims Tax-PI "captures the direct, indirect, and induced fiscal and economic effects of taxation and other policy changes over multiple years." The direct effect is the change the user specifically enters into the model, while the indirect and induced effects are those forecast by the model that occur as a result of the direct effect. Tax-PI also provides results on an annual basis for a specified number of years into the future. Essentially the model will evaluate the economic and revenue effects from a policy change relative to a baseline scenario that assumes a continuation of current policies. Other studies of Medicaid expansion that use Tax-PI to estimate economic impacts include Ku and Brantley (2021) and Ward and Bridge (2019).

The economic impacts of Medicaid expansion in Mississippi result from the influx of revenues the state receives from the federal government for 90 percent of the costs of the Medicaid expansion population and, in the first two years of expansion, the 5-percentage point increase in the FMAP on the traditional Medicaid population. Economic impacts also result from the additional spending by the state for 10 percent of the cost of the Medicaid expansion population. The impacts result from the amount of additional expenditures as listed in row [R] of Table 2, less the expenditures for the group of enrollees moving from federal Marketplace coverage to Medicaid. The reason is the federal government already provides premium and cost-sharing subsidies for this coverage and will likely spend less to provide coverage for these individuals once they move from the federal Marketplace to Medicaid. Table 7 lists the annual changes to revenue from 2024 to 2029 by selected sources resulting from Medicaid expansion in the state. These increases in tax revenues occur because of the additional Medicaid spending in the health care sector and therefore are considered indirect effects. Firms and individuals receive income and purchase goods that generate tax revenues to the state. These purchases lead to other economic activities that continue throughout the Mississippi economy, generating additional tax revenues. The total indirect increases in revenues to the state each year from 2024 to 2029 due to Medicaid expansion are relatively modest as Table 7 indicates. Listed in the sixth column of Table 7, the largest annual increase in revenue of approximately $33.4 million occurs in 2029. The largest source of indirect additional revenue is the individual income tax, listed in the third row of Table 7, which accounts for approximately 40 percent of the total increase in revenues each year. While the values listed in Table 7 represent additional revenues to the state's general fund, we do not include them in the preceding section about savings. Unlike disabled Medicaid recipients or uncompensated care costs, we cannot attribute these increases in revenue to a particular source; rather, these additional revenues result from across-the-board increases in economic activity initiated by Medicaid expansion. Nevertheless, the increases in general fund revenue that begin in 2024 could be used to further defray the expenses associated with Medicaid expansion, further decreasing the annual net cost to the state.

Table 7. Summary of estimated changes in revenue by source from Medicaid expansion in Mississippi*.

Source	2024	2025	2026	2027	2028	2029
Sales tax	$4,662,574	$8,949,666	$9,469,777	$9,936,412	$10,264,315	$10,528,686
Individual income tax	$5,893,632	$11,795,561	$12,701,963	$13,160,950	$13,329,981	$13,344,036
Corporate income tax	$2,405,259	$4,646,665	$4,717,485	$4,722,627	$4,672,992	$4,600,488
Use tax	$669,678	$1,285,427	$1,360,130	$1,427,152	$1,474,248	$1,512,219
All other taxes	$1,572,701	$3,038,088	$3,209,124	$3,329,244	$3,393,030	$3,427,602
Total	$15,203,846	$29,715,405	$31,458,478	$32,576,384	$33,134,566	$33,413,031

*2017 dollars. URC calculations.

Table 8 lists the estimated changes in real GDP, employment, real personal income, and population in Mississippi due to Medicaid expansion according to the results of the Tax-PI model. The second row of Table 8 lists the changes in real GDP each year from 2024 to 2029 in 2017 dollars. Medicaid expansion increases the state's real GDP each year between about $764 million and $843 million. The largest increase occurs in 2027 and equals approximately 0.7 percent of Mississippi's total real GDP in 2023. The overall impact of Medicaid expansion on the state's economy is therefore positive. In one sense this impact is relatively modest; however, between 2017 and 2023 Mississippi real GDP grew an average of 0.7 percent per year. Therefore, the additional increases in real GDP that would occur due to Medicaid expansion would mark an improvement from the state's recent history. The third row of Table 8 lists the change in employment in the state each year from 2024 to 2029 due to the effects of the additional spending from Medicaid expansion. According to the results of the Tax-PI model, Mississippi would add an average of 11,719 jobs a year from Medicaid expansion. This number of jobs equals about 1.0 percent of total employment in the state in 2023. While a 1.0 percent increase in employment may appear relatively moderate, between 2013 and 2023 total nonfarm employment in Mississippi increased by an average of 0.5 percent per year. Thus, a 1.0 percent increase in employment each year from Medicaid expansion would represent a substantial increase from recent history in the state. The Tax-PI analysis indicates around 57.0 percent of the jobs created by the additional Medicaid spending are found in the Health Care and Social Assistance sector, roughly the same share found in the previous version of this study. An important caveat, however, is this estimate represents *potential* jobs. Many healthcare jobs in Mississippi are currently unfilled as patient needs in locations throughout the state—including some of the poorest areas—exceed the capacity of available medical professionals (Zhang et al. 2020). Thus, for the additional spending from Medicaid expansion to increase the number of jobs in the state by the estimate of the Tax-PI model, the supply of healthcare workers must necessarily increase from its current level by almost 5.0 percent per year between 2024 and 2029[10]. An increase in Medicaid enrollees in theory could attract additional medical personnel and facilities to the state if these enrollees are viewed as a sustainable source of patients.

Additionally, the results of the Tax-PI model find that the state's labor force participation rate increases 0.1 percentage point each year from 2024 to 2029 after entering Medicaid expansion. Many studies of the states that were among the first to enter Medicaid expansion found essentially no impact on labor force participation in these states in the years immediately following expansion (Buchmueller, Levy, and Valletta 2021; Kaestner et al 2017; Kandilov and Kandilov 2022; Leung and Mas 2018). A 2014 Congressional Budget Office analysis projected expanded Medicaid eligibility would reduce incentives to work, but that the impact on labor supply would be relatively modest. Some studies find increases in labor force participation among the lowest income groups—those with incomes below 138 percent of the federal poverty level—in states following Medicaid expansion (Callison and Sicilian 2018; Ward and

[10] Between 2018 and 2023, employment in the Health Care and Social Assistance sector in Mississippi grew an average of 0.9 percent per year according to the most recent data from the U.S. Bureau of Labor Statistics.

Bridge 2019). Relatedly, a study of non-elderly adult Healthy Michigan Plan (HMP) enrollees found that "Many low-income HMP enrollees reported improved health, ability to work, and job seeking after obtaining health insurance through Medicaid expansion" (Tipirneni et al 2019). Given labor force participation in Mississippi is among the lowest of all states, as well as the disproportionate number of the state's residents who live below the federal poverty level, the results from the Tax-PI model indicate Medicaid expansion could result in labor force impacts to the state along the lines of the findings of these latter studies.

The fourth row of Table 8 lists the change in real personal income in Mississippi each year from 2024 to 2029 due to the increase in spending from Medicaid expansion according to the results of the Tax-PI model. BEA defines personal income as "the income received by, or on behalf of, all persons from all sources." The effects of Medicaid expansion on real personal income in Mississippi are similar to those of real GDP. The additions to real personal income are larger each year from 2024 to 2029 and range from approximately $515 million to $624 million. The largest increase in 2029 represents 0.5 percent of total real personal income in Mississippi in 2022.

Table 8. Estimated changes in real GDP, employment, real personal income, and population from Medicaid expansion in Mississippi.

Category	2024	2025	2026	2027	2028	2029
Real GDP*	$763,958,068	$814,703,504	$837,293,198	$843,222,794	$837,137,190	$828,043,683
Employment	11,372	11,958	12,075	11,936	11,651	11,322
Real personal income*	$515,011,659	$541,301,546	$577,597,005	$600,214,863	$614,041,300	$623,902,959
Population	3,367	4,879	6,081	9,309	10,476	11,387

* 2017 dollars. URC calculations.

The fifth and final row of Table 8 lists the changes to the population of Mississippi according to the results of the Tax-PI model from the increased spending of Medicaid expansion. The additions to the population are larger each year from 2024 to 2029 and range from about 3,400 to 11,400 new residents. The largest increase of 11,400 residents in 2029 represents about 0.4 percent of the state's population in 2023. While the increases in population are not particularly large, they would represent an improvement compared to the state's recent history. According to the U.S. Census Bureau (2024), the population of Mississippi was lower in 2023 than in 2020, which was also lower than the state's population in 2010. The projected population increases largely stem from the additional jobs created by expansion as discussed previously, which means these gains also are primarily dependent on realizing an increase in the supply of workers.

In summary, the analysis by the Tax-PI model from REMI, Inc., finds that the economic impacts to Mississippi from entering Medicaid expansion are positive from 2024 to 2029. The forecasted annual increases in real GDP, real personal income, and population that result from the increased spending due to Medicaid expansion appear relatively modest in size; however, these increases would represent substantial improvements compared to the trends experienced by the state in recent years. The largest expected economic impact of Medicaid expansion in Mississippi arguably is on payroll employment, which is forecast to increase roughly 1.0 percent each year from 2024 to 2029. However, many of these forecasted jobs are in the health care sector and the state has been unable to meet the current demand for health care workers due to the limited number of individuals employed in this field. Thus, the realization of the increase in employment projected to occur in this sector following Medicaid expansion—as well as the full benefits of the program—is contingent on increasing the supply of health care workers in Mississippi. Current residents would either need to receive the necessary education and

training and then enter the medical field or health care workers from outside the state would need to move to Mississippi to expand the pool of available personnel.

Summary and Conclusions

This report presents a fiscal and economic analysis of Medicaid expansion in Mississippi under the Patient Protection and Affordable Care Act as well as the American Rescue Plan Act of 2021. While such an analysis requires multiple assumptions, where possible we attempt to clearly state these assumptions and provide references for the reasons behind them. Different assumptions that might be equally reasonable could lead to different results. Regardless, we attempt to keep estimates as conservative as possible throughout the analysis.

We find that Medicaid expansion in Mississippi would increase Medicaid enrollment in the state by approximately 241,000 to 249,000 individuals between 2024 and 2029. This additional population consists of individuals ages 19 to 64 with household incomes below 138 percent of the federal poverty level. The federal government covers 90 percent of the expenditures for the expansion population beginning in 2024 while Mississippi is responsible for the remaining 10 percent. We estimate the annual costs to the state from Medicaid expansion before considering any savings range from approximately $232 million to $260 million from 2024 to 2029. These costs include Mississippi's portion of Medicaid expenditures for the expansion group and the administrative costs the state incurs because of expansion.

Mississippi will be able to save funds from a variety of sources if the state enters Medicaid expansion according to our estimates. First, a provision of the American Rescue Plan increases the FMAP rate on traditional Medicaid by 5-percentage points in new expansion states during the first two years of expansion. We estimate this provision will save Mississippi around $335 million and $346 million in 2024 and 2025, respectively, if the state enters Medicaid expansion. Based on our cost estimates, Mississippi could fully fund nearly three years of expansion costs from the FMAP savings if state leaders chose to do so. Other more long-term sources of savings include the movement of disabled individuals from traditional Medicaid coverage to the expansion group, the movement of pregnant women from traditional Medicaid coverage to the expansion group, inpatient care of prisoners, and reductions in uncompensated care costs at public hospitals. We also include additional insurance premium tax revenue that results from expansion with these savings. We estimate the total annual savings beyond the two-year increase in the FMAP rate range from approximately $147 million to $166 million between 2024 and 2029. After the first two years of expansion, our analysis finds more than 40 percent of the total savings results from reductions in uncompensated care costs at public hospitals. Our investigation finds the most critical factor in determining the total savings to the state from Medicaid expansion after the first two years is how much uncompensated care costs will be reduced. Therefore, based on our estimates of the costs and savings associated with Medicaid expansion, Mississippi could enter Medicaid expansion in 2024 and incur little to no additional expenditures over more than the first seven years of expansion.

Based on trends, we estimate total costs will exceed total savings by approximately $98 million in 2032. However, this net estimate does not incorporate our projections of the changes to the state's general fund revenue that will occur following Medicaid expansion. The impacts on state revenues and the overall economy from Medicaid expansion in Mississippi are positive according to our assessment using the Tax-PI model. We estimate the additional annual increases in general fund revenues the state will receive between 2024 and 2029 due to Medicaid expansion range from approximately $15 million to $33 million, a relatively modest increase. The largest portion of these additional revenues will come from the increase in individual income tax revenues. The state could apply these additional revenues to further offset the costs of Medicaid expansion beginning in 2032. If the state chose to allocate the revenues for this purpose the annual net cost of Medicaid expansion to Mississippi would fall well below

the 10 percent share not covered by the federal government. Our finding is consistent with the general conclusion of Ward (2020), who states "the actual net price of expansion is well below the sticker price to states of 10 percent."

We estimate Medicaid expansion will increase the state's real GDP each year from 2024 to 2029 between about $764 million and $843 million, increases that equal about 0.7 percent of real GDP for Mississippi in 2023. The Tax-PI model estimates find Mississippi adds an average of 11,700 jobs a year from Medicaid expansion from 2024 to 2029. The average annual increase in jobs equals around 1.0 percent of total employment in the state in 2023. However, to realize these projected job gains the state must increase its supply of workers, including those in the Health Care and Social Assistance sector. The annual increases to real personal income in Mississippi that occur because of Medicaid expansion are similar to those for real GDP according to the Tax-PI model. These increases from 2024 to 2029 range from approximately $515 million to $624 million. The largest increase occurs in 2029 and represents 0.5 percent of total real personal income in Mississippi in 2022. Finally, the Tax-PI model estimates the population of the state would increase by about 3,400 to 11,400 new residents per year between 2024 and 2029 following Medicaid expansion. This largest increase equals about 0.4 percent of the state's population in 2023. These population increases are largely contingent on realizing the gains in employment mentioned previously.

Appendix

Table A.1 in the appendix collects the estimates of the primary impacts of Medicaid expansion in Mississippi from the studies referenced previously, including this study. Readers should keep in mind these studies were completed on various dates from 2020 to 2024 and these studies assume Medicaid expansion in the state begins or began on different dates. In addition, not all studies estimated all impacts, or some studies estimated impacts across all non-expansion states in the aggregate at the time of the analysis rather than individual states.

Table A.1. Estimates of effects of Medicaid expansion in Mississippi, selected studies.

	URC (2024)	Buettgens and Ramchandani (2022)	Henderson et al. (2022)	Ku and Brantley (2021)	Striar, Boozang, and Mann (2021b)	Simpson (2020)
Average expansion enrollment*	245,000	224,000	210,000	217,000	229,000	207,000
Average annual federal costs*	$1.77 billion	$1.51 billion†	$1.67 billion	$2.02 billion	$1.61 billion	$1.21 billion†
Average annual costs to state*	$245 million	$147 million†	$186 million	$226 million	$191 million	$177 million†
Savings from increased FMAP for two years	$681 million	N/A	$677 million	$622 million	$747 million	N/A
Other average annual savings to state*	$157 million	N/A	$130 million	N/A	$84 million	N/A
Average annual indirect revenues	$29 million	N/A	$55 million	$49 million	N/A	N/A

*average across a 4-6 year period, depending on the study, unless otherwise noted. †single-year estimate.

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